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7

June 26, 1924

Engineering News-Record

Steel Sheetpiling Used in
Salt Water Harbor Work,
Havana, Cuba

No other roof can be *Worth* as much

IF BUILDERS would pause to make a careful cost comparison they would find, as hundreds have found, that the architectural beauty of Federal Roof Tile is a luxury that costs nothing—that on the contrary it is the mark of inherent permanence without maintenance expense, uniformity of manufacture and correct design—qualities that make Federal Cement Tile the most economical of all roofs.

The comparisons made here are not visionary; they are supported by volumes of data in the files of the Federal Engineering Department—data that will convince you that no other roof, at any initial cost high or low, can be *worth* as much as Federal Cement Tile.

Let us show you how you can have a handsome roof at less cost than a disfiguring roof. Have you read the descriptive booklet, "Covered With Federal?"

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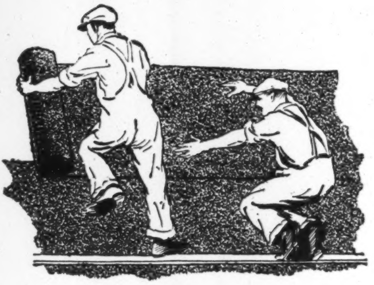
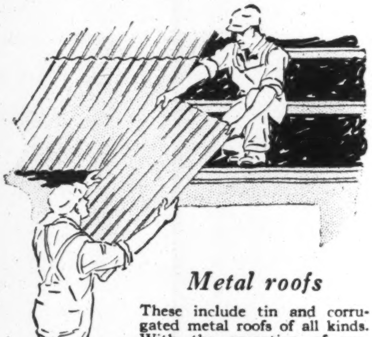
WHY—



The composition covered wood roof—

This includes tar or asphalt and composition coverings. None of these roofs is fireproof—all require periodic recovering, painting and frequent repairs—all are short lived and greatly increase insurance rates. Half of all fires start or spread on the wood roof—and fire insurance does not cover interrupted production.



Metal roofs

These include tin and corrugated metal roofs of all kinds. With the exception of prohibitive, non-corrosive roofs, all must be continually scraped and painted and in spite of this they almost invariably rust out in the joints and from underneath. Moreover, temperature changes open joints, cause rust, and excessive repairs.

Fire proof roofs—

These are either poured on the job or precast of fireproof material. It is an established fact that no material can rival the permanence of concrete, and concrete to be absolutely uniform must be precast under ideal conditions. There is nothing to burn about a Federal roof of precast concrete. It never requires covering when installed on pitched surfaces. Its life is measured in centuries. There are no repairs. It reduces insurance rates. Manufactured in the largest plant in the world, devoted exclusively to fireproof roofing, it stands on its record as the unrivalled roof.

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ENGINEERING NEWS-RECORD

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DEVOTED TO CIVIL ENGINEERING
AND CONTRACTING

Frank C. Wight
Editor

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For the Young Engineer

THE generous award made by John R. Freeman to the three engineering societies of which he has been president is especially directed to the younger engineers. Mr. Freeman's purpose is set forth in the letter to the societies reprinted in our news pages this week. He has in mind the starting of a fund, to which others may contribute and, during their lifetime, help to direct, the main purpose of which should be to encourage and assist toward greater professional knowledge those juniors in the profession whose preliminary education has been completed but who are so tied down by the necessities of earning a living as to prevent further studies or excursions which might yield large later dividends both personal and to the profession. These men Mr. Freeman would help. His is a good lead which others in the profession might well follow.

Visual Proof

COMMENDABLE enterprise has been displayed by the Niagara Falls Power Co. in the construction of the large-size model of Niagara Falls described on another page of this issue. Sooner or later more water will have to be diverted from the Falls. The demands of power make that certain. But the time has not yet come when the great cataract will be available as a scenic marvel only on Sundays and holidays, as a certain eminent scientist once prophesied. For years engineers have contended that proper, and feasible, remedial structures could be added above the Falls which would not only preserve the beauty of the spectacle with considerable less water than is now flowing but would tend to prevent that undue concentration in the Horseshoe of the Canadian Falls which is wearing back the rock there at the disturbing rate of 6 ft. per year. The model Niagara demonstrates this contention but it further permits experimentation on a large scale—which is most necessary. When the time comes—as it must come soon—for the two governments to take action toward greater draft and, consequently toward conservation of scenic grandeur, this model will well pay its rather high cost.

Road Materials Laboratories

TESTING laboratories in most of our state highway departments have been treated badly. Generally they have been denied quarters, equipment and personnel adequate to their needs. This is the situation reported by testing engineers of the Bureau of Public Roads who for two seasons have been visiting the testing laboratories used by the highway departments of the various states. Notable instances of good practice were found but these serve only to sharpen the contrast which the average laboratory practice presents. Enumerating their discoveries the Bureau experts conclude that "more thought for the welfare of laboratory operators, more careful arrangement of apparatus and a wiser selection of equipment would undoubtedly increase the efficiency of the average road materials laboratory many times over." As 55 laboratories in 45 states were visited the survey was certainly adequate for broad conclusions. Nor can the judgment of the examiners be impugned by anyone who has gone into many state road materials laboratories, and more often than not has had to dive into a dark basement or mount to a sweltering attic to make his visit. It is not all the fault of the road department engineers that the department testing laboratories are no better. Generally they have been denied the means for making them better. Indeed, coming from them demands for improvement are regarded as the routine bureau call for more money which it is a virtue to disregard. Here then is an opportunity for state engineering societies and associations of state highway contractors to do good work specifically within their power and range of influence.

Good News for the Rodman

WHEN Patrick E. Crowley, one time messenger boy on the Erie Railroad, succeeded Alfred H. Smith, who also started as a messenger boy, as president of the New York Central someone with a fondness for statistics looked up the records of the presidents and chairmen of the board of directors of the principal railroads of the country to see in what position these men started their railroad career. In the list produced the position of rodman predominates. Six of these men started as rodmen, and in addition one started as an axeman, one as an engineer of construction and one as an assistant in the engineer corps—which high-sounding title probably means rodman—making nine out of a total of twenty-eight. The names of these men are well known: Samuel Rea, S. M. Felton, W. B. Storey, E. J. Pearson, L. F. Loree, Julius Kruttschnitt, Howard Elliott, B. F. Bush and E. N. Brown. This study included only the men at the very top. If it had been carried down to include vice-presidents, general managers, and general superintendents the list of names of those who started their railroad careers in the engineering corps would be largely augmented. No one branch of the railroad field has a monopoly of the positions at the top. The rodman at the bottom need not feel that because there are few purely engineering positions at the top that the railroad field is a restricted one for him. The route that Felton and Rea and the others followed is still open. As "Pat" Crowley said, they got there by hard work.

Insurance or Prevention

COMMENTING on the half billion fire loss of America at the recent convention of the American Water Works Association, Franklin H. Wentworth, secretary National Fire Protection Association, exposed the fallacy of the popular notion that the insurance companies pay the loss. The loss falls on the entire country. Primarily it is borne by the owners of insured property but they charge it to expense and raise prices accordingly. If it be argued that fire losses fall on stockholders of the insurance companies the answer is twofold: (1) Many of the companies are mutual; (2) decreased insurance company dividends through fire losses mean less money for current expenditures or capital investment and by that amount curtail either the demand for goods or else added means of production. Property burned is property destroyed. We rely too much on insurance against loss, too little on loss prevention. This is as true of life, sickness, burglary, street and other accident, as of fire. More effort should be directed to prevention; better building laws and supervision; more adequate fire protection through fire and water departments; increased health protection, through pure water and milk and scores of other means; less exposure of property of all kinds to thieves and burglars; better planned streets and more adequately controlled traffic. Some of the efforts just named partake largely of insurance, and where that is the case there should be a getting back to first principles—prevention. Some of the needed reforms depend on municipal or state action, but most of them should begin at home.

Keeping Automobiles Off the Streets

HOW serious traffic congestion is becoming in the central districts of some of our cities is illustrated by a proposal under discussion in Philadelphia. The proposal, as discussed by General Butler, head of the police department, and a representative of the Chestnut St. Association, incredible as it may seem, is to put up a 10,000-car garage, with twenty floors above and three below street level. Unless the proposers of this scheme have some undisclosed method of getting cars in and out of such a mammoth structure, the congestion of traffic in and around it at rush hours will be far greater than anything now existing.

Fantastic as this idea seems to be it is fairly indicative of the lengths to which planners are going in order to remedy the killing obstruction of our city streets by the growing parking evil. This is not confined to our large cities; indeed, it is greater in the towns and middle-sized cities where the distance between home and business more readily permits the automobile for the office-going man and for the shopping woman. But it is evident that unless stagnation of traffic with its high charges on business and industry is to prevail the alternative is some kind of costly construction, such as street widening or opening, or huge garages, or else a prohibition against the needless use of the space using automobile in the busy streets. Ultimately, perhaps, we must come to the costly expenditure and will have to decide where that expenditure is to be made, but for the time being there is great opportunity in most of our cities for some sort of experiment in the prohibition of traffic. New York has already tried, with some success, to eliminate the cruising taxicab from its busiest streets. Will not some courageous city head experiment with some prohibitory regulation against needless automobiling? The standing empty motor and the large limousine carrying one or two passengers are selfish infringers on the common right to use the streets.

Moving Forward on the St. Lawrence

LARGE engineering projects move slowly toward their fruition. History shows that about twenty years elapse between the first considered engineering report on such an enterprise as the Catskill aqueduct or the Moffatt tunnel and the actual starting of construction. The intervening years mark the lagging progress of political and financial discussion, rather than of engineering planning, but in public work these are major considerations and have to be satisfied before engineering can begin to function. There is, therefore, nothing abnormal in the progress of the St. Lawrence waterway scheme. It has been before the American and Canadian public now for the best part of a decade, and the renewed interest occasioned by the appointment of two new national commissions shows that the curve of progress is tracing a normal course.

The visit of the American commission last week to the lakes and river and the initiation of contact between the engineering advisors of both commissions serves, however, to direct public attention once more to this huge public works project, the greatest in possible expenditure now being seriously considered anywhere in the world. For the barest essentials of engineering construction the estimates of three years ago were two hundred and fifty millions; and four times that sum will probably be required to cover the full extension of the power and navigation facilities the development would open. It is, therefore, one of the greatest engineering enterprises of all time and as such is worthy the consideration of every citizen on both sides the line, though the fact is that outside of the relatively few who have made propaganda for or against it, the ignorance regarding the proposal is widespread.

What are the essentials of this project and what are the complications which prevent its early initiation? The proposal is that a ship channel be constructed from the Great Lakes to the Gulf of the St. Lawrence, a channel capable of carrying ocean vessels, which means at least 25 ft. and possibly 30 ft. deep, and which will be where possible in the bed of the St. Lawrence River and where that is not feasible in locks and canals paralleling the rapids which mark that river and the Niagara River which connects Lakes Ontario and Erie. Inasmuch, however, as the river falls nearly 600 ft. from the lowest lake to the tide and has a remarkably uniform flow of around 240,000 sec.ft., there is involved also the possibility of the generation of millions of hydro-electric horsepower.

This is the physical problem. The political one is involved in the fact that all of the Great Lakes and a large part of the river are an international boundary between the United States and Canada, and that the outlet of the river to the ocean flows entirely through Canadian territory. To build a ship channel through and around this mighty river and to generate power from its falling waters is a tremendous, though by no means impossible, engineering problem, but to adjust the charges for the cost of such a development not only between the two nations involved, but also between the waterway and the power use is an economic and political problem of far greater difficulty.

The dual problem has been officially studied many times but the culminating study was made by a joint international board which reported three years ago, and which came to definite conclusions. So complicated are the issues, however, that neither country was prepared to enter negotiations based on the formal conclusions of the 1921 report, but appointed a new commission this year with instructions practically to duplicate the work of the earlier commission.

The problem before the present commissions—as stated to the American branch by the President—is first to decide whether the project should be undertaken now and, if so, to propose the fundamentals of international agreement on construction, finance and administration. These appear to be two separate problems but, in effect, the answer to the first depends on a satisfactory solution of the second. For the time being it may be assumed—to the horror, possibly, of the bourbons of New York City and Montreal and the Babbitts of Buffalo—that a deep channel to the lake ports will result in a considerable ocean-lake commerce which will benefit our inland territory and particularly the farmer, who is so sadly in need of benefit. It will take less of an effort to admit that power can be generated along the rapidly falling river so cheap and in such quantity as definitely to change the commercial balance of New York and New England.

But this is only the start of the problem. Who is going to pay for the work, the beneficiary of the commerce or the beneficiary of the power, the Canadian or the American; and in what proportion are to be divided the charges or determined the benefits? And this having been settled, who is going to pay for the harbor works necessary for the completely commercial utilization of the waterway and who is going to determine the ownership and control—whether public or private—of the power. These may appear to be generalities; indeed, the fault of the arguments for the St Lawrence development has been that they have been treated heretofore as generalities. The fact is that they are the crux of the situation and upon their settlement stands or falls the project. The commissions now starting work must consider them their most important duty and must prepare for their respective governments definite working plans of payment and operation distribution on which these governments can proceed to treaty arrangement.

It seems to be fairly obvious that it is the difficulty in settling these problems and of composing the sectional differences in both countries as well as the differences which exist between those, on both sides the line, who differ as to public or private control of power, which has led to what in less august circles would be called stalling on the St. Lawrence waterway. Both governments are reluctant to get down to the arduous work of treaty making, because a treaty now cannot deal in general terms but must particularize as to cost distribution and power control. Canada is burdened with debt; the watchword of Mr. Coolidge is economy. Ontario, through its publicly owned Hydro-Electric Power Commission wants St. Lawrence power and wants it immediately; New York is threatened with public ownership of power, and in any event claims the Niagara and other border waters. To cap the climax Chicago continues to stand on her professed rights to 10,000 sec.ft. out of the Great Lakes and remains, at least until the Supreme Court decision scheduled for next fall, both a thorn in the flesh of the United States and a red rag to wave before the Canadians. It is a most auspicious time to delay things with another official investigation.

But because this delay is now desirable the obligation upon the current commissions is doubly heavy. They must not only investigate and report on the physical and commercial possibilities of the project, but they must in very certain terms lay down the economic, diplomatic and financial solution so that the two governments will be presented with a complete program on which to proceed to frame the necessary treaty. Both commissions were appointed by existing governments. Each is headed by a strong man, who may be expected to influence his own administration. Provided the respective administrations remain in power, each in his own country, we may expect some immediate action as soon as the commissions report.

Engineering Supervision Needed

TWO FATAL railway accidents, reported upon recently, have again emphasized the necessity of frequent and careful inspection of all track, and particularly of main line track, by some one other than the regular track forces. Normally such inspection is left to the roadmaster, the division engineer making only such irregular inspection as his numerous other duties will permit. The danger of this practice is shown clearly by these two accidents and by similar ones which still occur at all too frequent intervals. In both cases the normal number of ties had been provided, the rail was of a good weight, and the ballast of fair quality. Superficial inspection—the motor car or observation platform kind—would have indicated that the track was O.K. But a closer inspection, made unfortunately after the accident had happened, revealed that although new ties had been put in, the rail had not been spiked to them, that too many of the other ties were decayed or deeply rail cut, that the gage was poor, many spikes loose or missing, and the superelevation irregular. Despite these facts, the roadmaster on one of the divisions concerned testified that he considered the track safe for schedule speeds.

The unfavorable financial condition of many of the railroads may be the cause but is no excuse for such conditions. The reason for such track lies in the general letdown of the morale of the maintenance forces as a result of the continual demand for economies through staff reduction and restricted expenditures. Nevertheless, it only takes a few men to keep track safe, at reduced speeds if necessary, and none of our railroads are too poor to provide the men for this purpose. If they are, they have no business to be operating trains.

What is needed on most railroads is that the maintenance forces be encouraged to make the best of what they have to work with through personal contact with the division officers responsible for their work, and stimulated to produce good track by the careful inspection of the same officers. Most roadmasters and track supervisors can do the greater part of this work effectively, although occasionally they do not, but whether they do or not, constant, independent inspection by some one with less of a personal interest in each subdivision is needed. This can best be done by the division engineers. Nothing will stimulate the interest of sectionmen in their section like having the division engineer walk over part or all of their section occasionally. Such inspection takes time; if the time is not available under the present conditions, then the conditions should be changed so that it will be. The safety of the public and employees is of first importance.

Steel Sheetpiling in Salt Water at Havana, Cuba

Submerged Sheeting for Wharf Is Cased in Concrete for 2 Ft. Below Water Level and Piles Are Painted—Rock Is Channeled to Receive Piles

IN ADOPTING steel piles for a recent permanent structure in the warm salt water of the harbor at Havana, Cuba, the decision was influenced largely by the very slight corrosion found in the steel of the U. S. battleship "Maine" after its wreck had been submerged for about thirteen years. The water in this harbor, which is of lower salinity than the open sea, has a temperature ranging from 72 to 86 deg. F., with an average of 81 deg.

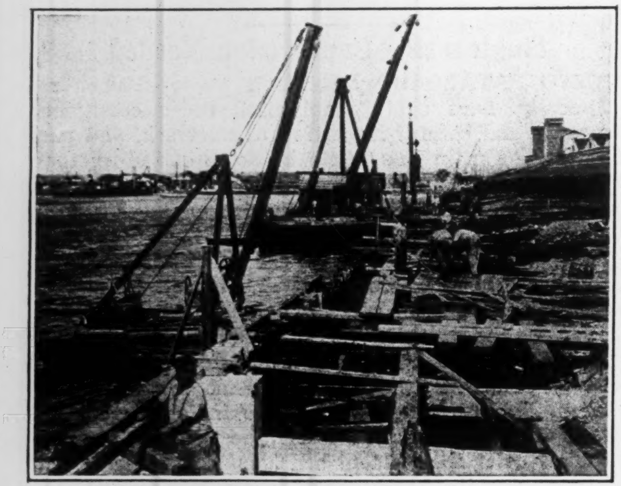


FIG. 1—BUILDING STEEL AND CONCRETE WHARF AT HAVANA, CUBA

The man in the left lower foreground is in front of one of the steel anchor piles and tierods cased in concrete. Beyond it the next anchor pile is bare, with shore end of its tierods concreted. The small floating derrick is placing forms for concrete wall enclosing top of steel sheeting. This sheeting is being driven by the large derrick boat, with steam hammer in suspended leads.

The new structure referred to, shown in Figs. 1 and 3, is a bulkhead for the wharf in front of the Regla warehouse of the United Railways of Havana. It consists of steel sheetpiling topped with a concrete wall which extends 2 ft. below the water line. All steel piling was given two coats of red oxide paint. The old wharf of timber piles and sheeting, with a small stone fill at front and back of the sheetpiling, had been badly damaged by the teredo, but recent ordinances of the sanitary department of the Cuban government prohibit any new construction in timber.

Design of Bulkhead—The general design and structural details of the new bulkhead are shown in Figs. 2 and 4. This structure, 500 ft. long, consists of a row of segments of vertical cylinders, 9 ft. 3 in. long on the chord, and with a middle ordinate of about 10 in., the curved faces being formed by interlocking steel sheetpiles. At each intersection of adjacent segments is placed a built-up steel anchor pile of I-section which interlocks with the sheeting. To these anchor piles are attached tierods which are anchored at their inshore ends to a continuous deadman consisting of a concrete wall in the solid ground behind the stone riprap fill of the bulkhead. These anchor piles are thus considered as vertical beams loaded along their entire length by the reactions from the pressures caused by the bulkhead filling and by a uniform live-load of 500 lb. per square foot on the fill. This bulkhead is designed for a dredged depth of 24 ft. of water, and the depth from water line to bottom of piling varies between 25 and 50 ft.

A 14-in. concrete wall 7 ft. deep and extending 2 ft. below the water line encloses the tops of the steel segments and the anchor piles. This wall, of 1:2:4 concrete, without any special ingredients to make it impermeable, is reinforced by longitudinal rods carried by short crossrods in holes in the piles, except that the bottom rods are suspended from a crossrod above

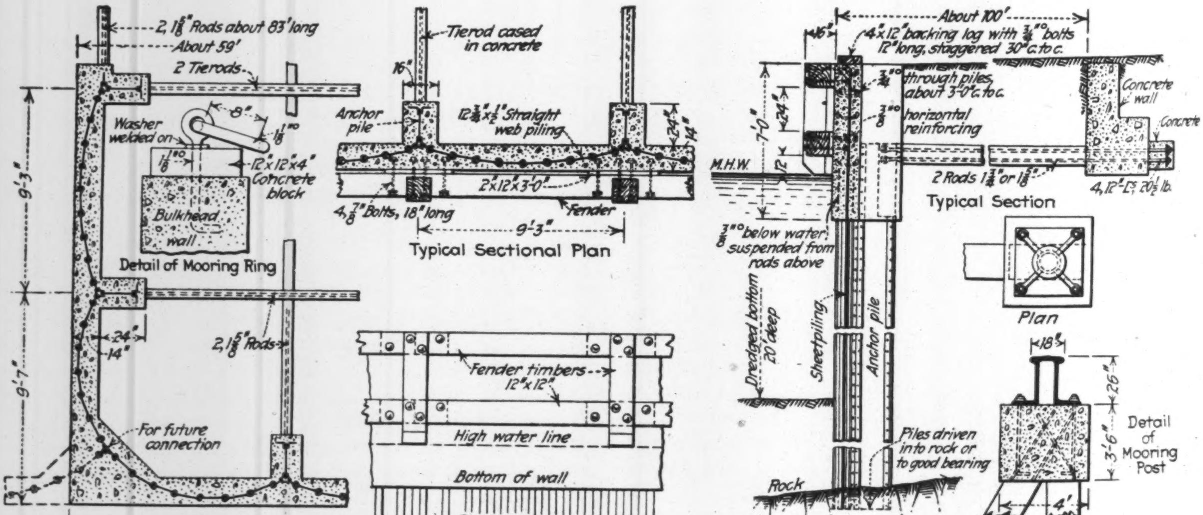

2, 1⅝" Rods about 83' long
About 59'
2 Tierods
Washer welded on
8"
1⅛"°
1⅛"°
12"x12"x4" Concrete block
Bulkhead wall
Detail of Mooring Ring
9'-3"
9'-7"
24"
14"
2, 1⅝" Rods
For future connection
9'-7"
9'-3"
Plan of Corner and Return
Tierod cased in concrete
16"
Anchor pile
12⅜"x½" Straight web piling
24"
14"
2"x12"x3'-0"
4, ⅞" Bolts, 18" long
Fender
9'-3"
Typical Sectional Plan
Fender timbers 12"x12"
High water line
Bottom of wall
Steel sheeting
Elevation
About 100'
16"
4"x12" backing log with ¾"° bolts 12" long, staggered 30" c. to c.
¾"° through piles, about 3'-0" c. to c.
⅜"° horizontal reinforcing
7'-0"
24"
12"
M.H.W.
Concrete wall
Concrete
2 Rods 1¾" or 1⅝"
4, 12"-[s, 20½ lb.
Typical Section
⅜"° below water; suspended from rods above
Dredged bottom 20' deep
Sheetpiling
Anchor pile
Piles driven into rock or to good bearing
Rock
Plan
18"
26"
3'-6"
4'
Detail of Mooring Post
Sec. Elevation

FIG. 2—STEEL AND CONCRETE BULKHEAD AT HAVANA

the water line. The tierods are also cased in concrete. On the top of the wall is a 4x12-in. string piece or backing log, and the face is protected by a fender of 12x12-in. timbers, as shown. Mooring rings are anchored into the wall, while behind the wall are mooring posts, each on a concrete block 48 in. square and 42 in. deep supported by two concrete piles.

Prior to preparing the design of this reconstruction an investigation of the site was made by means of test piles and borings, which indicated a layer of fairly hard rock at a depth of 25 to 55 ft. below the water, the latter depth existing at only a very short part of the length. On account of possible future dredging in front of the bulkhead, it was considered desirable to adopt a type of sheetpile which could be driven into the rock so as to obtain an anchorage on the lower end. It was found impracticable to obtain this penetration with concrete sheetpiles, and after a thorough investigation of different works executed in steel sheetpiling both in Cuba and along the Florida East Coast Ry. between Key West and the mainland, it was decided to use the type of bulkhead described above.

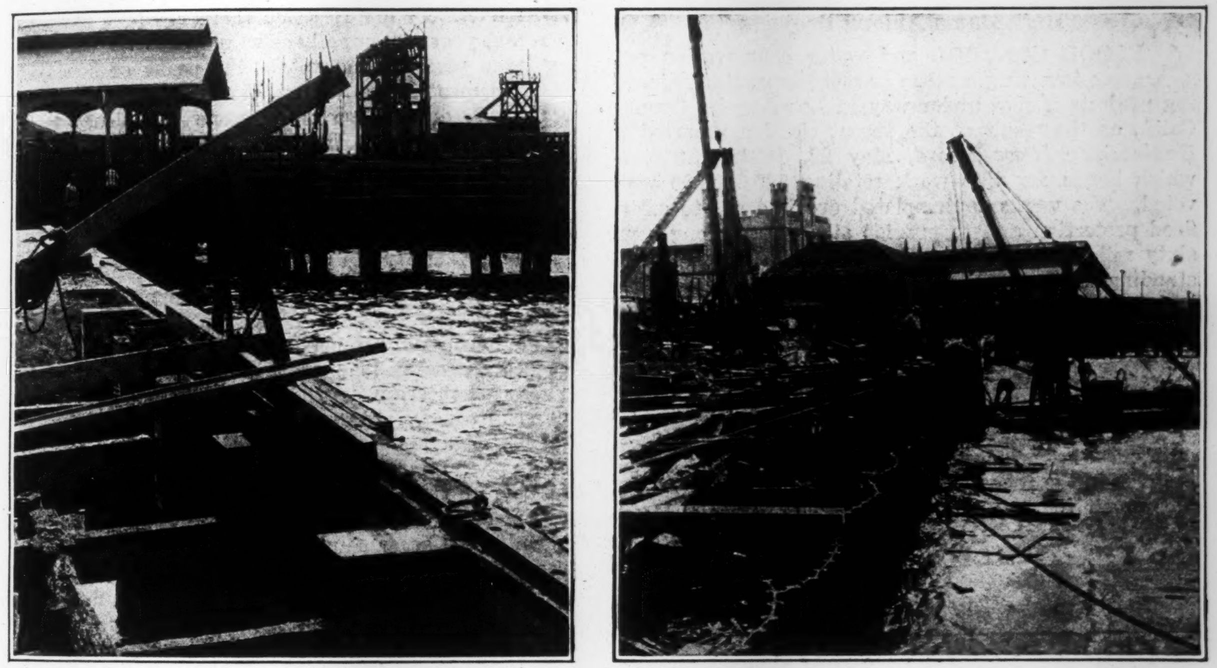


FIG. 3—BULKHEAD FOR UNITED RAILWAYS OF HAVANA

At right: segmental line of steel sheetpiling with steel plate anchor piles at intersections. At left: concrete wall encloses top of steel sheeting; anchor piles and tierods also cased. Improvised derrick for placing fender timbers. Wood string piece on top of wall, with concrete block under mooring ring.

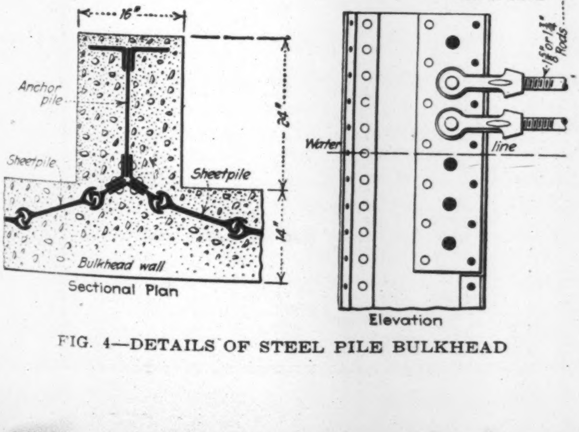


FIG. 4—DETAILS OF STEEL PILE BULKHEAD

Construction Methods and Plant—The construction plant consisted of a 15-ton floating derrick, which was used for driving all the steel sheetpiles, and a traveling stiff-leg derrick on land for driving the returns on each end and also the piling underneath the mooring bits. There was also a concrete mixer and the usual run of miscellaneous tools. The driving of the sheetpiles was done by a steam hammer, which succeeded in putting the piles down to the required penetration without any difficulty, except for one end where considerable penetration was required in the rock on account of possible future dredging. This hammer was slung from the derrick scow and worked in the usual type of steel hanging leads.

On the one end mentioned above it was necessary to penetrate from one foot up to a maximum of 14 ft. into the rock. It was found that the sheetpiles could not be driven to more than about 24 in., beyond which depth drilling was necessary. This drilling was done by a 5-in. well-drill bit, weighted with 5-in. steel shaft 20 ft. long and operated from the derrick scow through an 8-in. pipe set in position on the bottom. By means of this a channel was broken through the rock, in which it was found possible to drive down the piles.

Where the old wharf interfered with the new construction, it was demolished. Templets were set up along the line of the sheetpiling, and four or five sections of piles were set. The anchor or built-up piles were first driven, and then the intermediate sections of sheetpiling. After fastening the anchor rods, the stone fill behind the bulkhead was placed up to the level of the bottom of the concrete wall in order to allow the wall to take as much as possible of the thrust before the concrete was placed. This concrete was then poured in forms, the lower part being placed through a tremie. When the wall was complete the balance of the stone backfill was placed.

This bulkhead was designed and built by the Frederick Snare Corporation, contracting engineers, New York, under the direction of F. G. Sketch, chief engineer of the United Railways of Havana, Cuba.

Water Conservation Program for Los Angeles County

Bond Issue of $35,300,000 to Provide Flood Storage and Replenish Underground Sources—High Dams Among Projects

A FLOOD CONTROL and water conservation program involving a score or more separate engineering projects is now under way in Los Angeles County, Calif., as the result of the recent election reported in *Engineering News-Record*, May 22, 1924, p. 910, at which bonds for this work totaling $35,300,000 were voted. The works contemplated are laid out to afford flood protection and to provide storage all along some sixty miles of the San Gabriel foothills, but the outstanding feature and the most expensive item in the budget is the San Gabriel dam to be about 500 ft. high and to cost $25,000,000. Another phase of the work to which special interest will attach is the plan to replenish underground water storage basins that have been rapidly drawn down in recent years. An outline of the general flood control situation and a list of the works included in the recently approved budget is given in the following.

A precipitous range known as the San Gabriel Mountains, rising to heights of 8,000 and 9,000 ft., crosses Los Angeles County in an east and west direction and gives rise to floods that have periodically done great damage in the low plains to the south which the flood waters traverse on their way to the sea. The first flood protection measures were river channel rectification and the provision of flood channels supplemented by the construction of check dams in the mountains. After two serious floods in 1914 that caused damage amounting to $20,000,000 it was recognized that more effective protection was necessary and a flood control board was appointed. A review of the findings of this board and the flood control situation generally was published in two parts in *Engineering Record*, Aug. 14, 1915, p. 204 and Aug. 21, 1915, p. 232.

DAMS BUILT BY LOS ANGELES COUNTY FLOOD PROTECTION DISTRICT 1918-1924

Dam	Location	Reservoir Capacity Acre-Ft.	Over-all Height Ft.	Drainage Area Sq.Mi.	Cost of Project	Date Completed
Devil's Gate..	Arroyo Seco at Pasadena......	6,700	130	30	$406,000	1920
San Dimas....	Tributary to San Gabriel Ry.....	2,400	130	17	501,000	1922
Live Oak.....	North of La Verne	500	70	3	168,000	1922

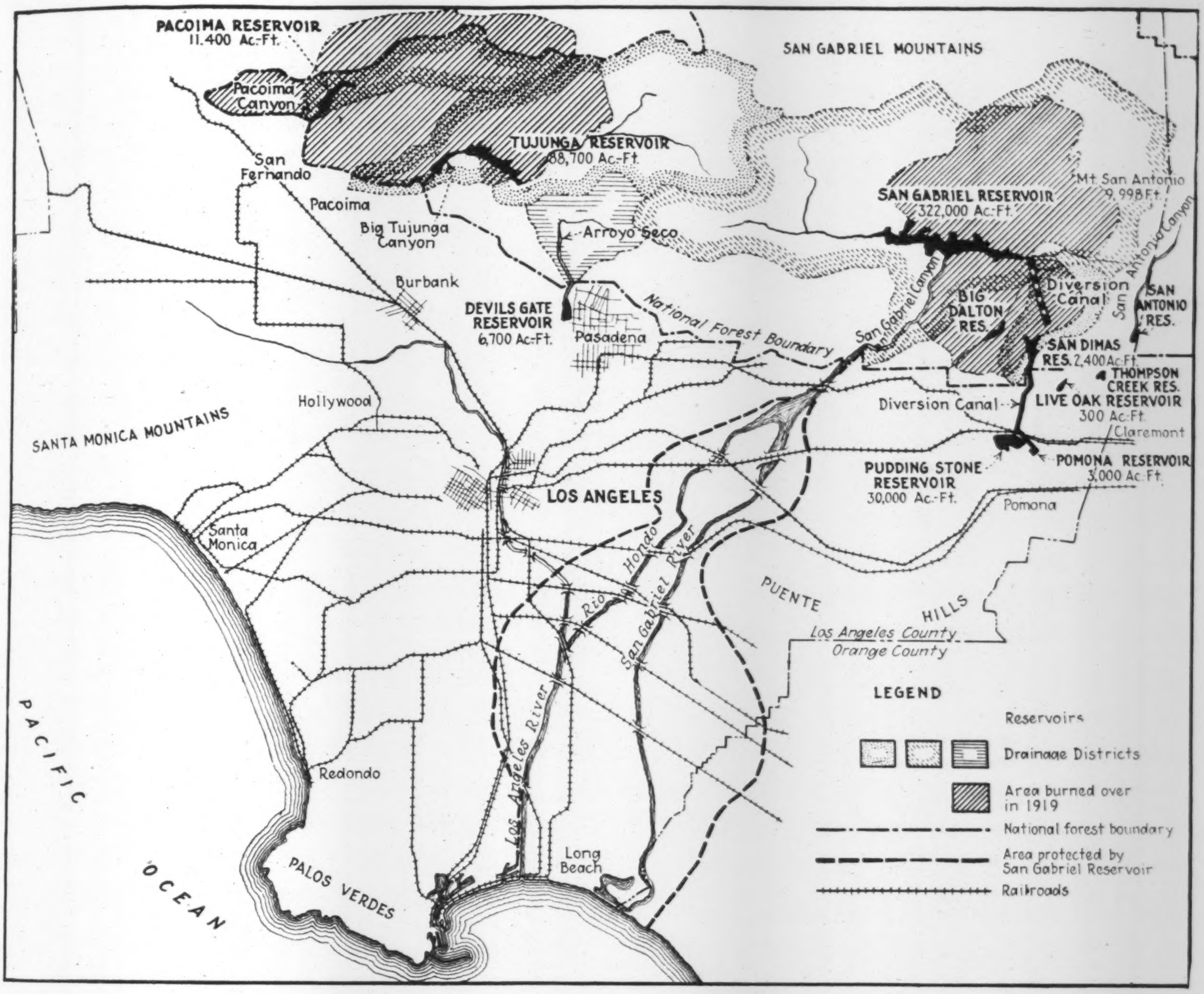
A minority report submitted by J. W. Reagan, one of the members of the board, was favorably received by county authorities and Mr. Reagan was made chief engineer for the Los Angeles County Flood Control District. Under his direction there has been developed in recent years a comprehensive program for constructing large reservoirs to retain the peaks of floods and to supplement these with other control and training works. Meantime work has gone ahead under Mr. Reagan's direction to the extent of the available funds. Since the first bond funds were available in 1918 a total of about $7,600,000 has been expended to date on county flood control work. This work has included the construction of several dams of considerable size as well as surveys and other studies for the larger and more extensive works involved in the program just approved.

The impounding dams for the reservoirs shown on the accompanying map are nearly all located near the mouths of the canyons through which the runoff from the basins above enters the valley. In the case of the Big Tujunga and the San Gabriel, suitable dam sites for the very large reservoirs were found only some distance up from the lower ends of the canyons. Even so, the drainage basins included in this program, as shown in the accompanying map, extend without break from the San Fernando Valley on the west to Claremont on the east and cut off the sources of all the floods that threaten the valleys below. A factor of the situation is that considerable portions of the mountainous area included in these drainage basins were burned over by forest fires in 1919 and the areas thus denuded are expected to increase the flood menace by hastening the runoff.

As the agricultural development of the valleys has increased and the towns are built up, the danger of floods has become a more serious matter because of the increased property value involved. There has been some conflict of opinion as to the management of the reservoirs because of the contrary requirements of flood

LOS ANGELES COUNTY FLOOD CONTROL PROJECTS APPROVED MAY 6, 1924

	Projects	Capacity Acre-Ft.	Cost	Type of Dam	Height, Ft.
1	Retarding dams, Pomona, San Antonio Canyon and spreading grounds		$450,000		
2	Thompson Creek reservoir	520	146,000	Two earth dams	72 and 30
3	Big Dalton reservoir	1,200	555,000	Multiple arch	155
4	San Gabriel reservoir (200 sq.mi. drainage)	200,000	25,000,000	Concrete, gravity arched in plan	500
5	Sawpit Canyon reservoir	350	241,000	Concrete, arched 200-ft. radius	140
6	Big Santa Anita reservoir	1,530	586,000	Concrete, constant angle arch	235
7	Sierra Madre canyon (small concrete and wire bound check dams)		150,000		
8	Eaton Canyon reservoir	1,033	603,000	Concrete, constant angle arch	220
9	Altadena storm drain		250,000		
10	Pickens canyon (one small arch and masonry or wire bound check dams)		100,000		
11	Verdugo wash, Sycamore canyon, Glendale and Los Angeles city (open concrete conduits)		450,000		
12	Wire bound dams in Dunsmuir and other canyons		150,000		
13	Haines canyon (wire bound rock check dams)		100,000		
14	Big Tujunga reservoir	14,000	1,600,000		
15	Pacoima reservoir and resort damage (30 sq.mi. drainage)	11,600	1,720,000	Concrete, constant angle arch	375
16	Work on lower Ballona creek		250,000		
17	Work at Virginia City at Long Beach		500,000		
18	Work upon the lower east San Gabriel River near Artesia		600,000		
19	Puddingstone reservoir and channel to San Dimas Wash	20,000	1,750,000	1 concrete 3 earth	170 20, 53 and 63
20	Incidental expenses		99,000		
	Total		$35,300,000		


PACOIMA RESERVOIR
11,400 Ac.-Ft.
Pacoima Canyon
SAN GABRIEL MOUNTAINS
TUJUNGA RESERVOIR
88,700 Ac.-Ft.
San Fernando
Pacoima
Big Tujunga Canyon
Arroyo Seco
SAN GABRIEL RESERVOIR
322,000 Ac.-Ft.
Mt. San Antonio
9,998 Ft.
San Antonio Canyon
Burbank
DEVILS GATE RESERVOIR
6,700 Ac.-Ft.
Pasadena
National Forest Boundary
San Gabriel Canyon
BIG DALTON RES.
Diversion Canal
SAN ANTONIO RES.
SAN DIMAS RES. 2,400 Ac.-Ft.
THOMPSON CREEK RES.
Diversion Canal
LIVE OAK RESERVOIR
300 Ac.-Ft.
Claremont
Hollywood
SANTA MONICA MOUNTAINS
PUDDING STONE RESERVOIR
30,000 Ac.-Ft.
POMONA RESERVOIR
3,000 Ac.-Ft.
LOS ANGELES
Pomona
Santa Monica
Rio Hondo
San Gabriel River
PUENTE HILLS
Los Angeles County
Orange County
LEGEND
Reservoirs
Drainage Districts
Area burned over in 1919
National forest boundary
Area protected by San Gabriel Reservoir
Railroads
PACIFIC OCEAN
Redondo
Los Angeles River
Long Beach
PALOS VERDES

RESERVOIRS AND DISTRICT PROTECTED BY FLOOD CONTROL PROGRAM OF LOS ANGELES COUNTY
Railroad crossings of the waterways indicate a large number of bridges involved.

protection and irrigation uses. Flood control purposes, of course, are best served by an empty reservoir so long as there is any likelihood of a heavy runoff that might need to be checked by storing the peak. Irrigation and water supply systems, on the other hand, are served best by always keeping the reservoir full when possible. This clash of interest has already been manifest in the Devil's Gate dam which by retaining and diverting water through subterranean reservoirs has materially augmented the water supply of the Pasadena water basin. The effect of the dam on this basin was discussed in *Engineering News-Record*, May 11, 1922, p. 771.

The replenishing of underground storage is an important feature of the flood control plans as now laid out. As an indication of how subterranean storage has been depleted, the flood district reports state that in the early nineties artesian wells flowed above ground on an area of about 177 square miles in the San Gabriel valley. The artesian plane in this valley has lowered until now artesian water can be brought above ground in an area of only about 28 square miles, and in areas formerly watered without pumping the artesian plane has steadily gone on down below ground level. Outside the artesian areas the water table has also steadily gone down as more wells have been sunk. The cost of pumping has correspondingly increased and areas that should have an underground supply are now practically without water.

The delta cones of several streams on which dams are planned have similar conditions and the same general policy is to be used in operating the several reservoirs, i.e., to give the maximum benefit to underground storage basins consistent with protection against dangerous floods. In the San Gabriel reservoir, for example, it is the plan to permit a continuous discharge at a regular rate throughout the winter rain period, this rate to be such that the gravel beds will be absorbing to capacity until filled. It is estimated that 500,000 acre-ft. can be handled through the reservoir in this way without wastage. The gravel constituting underground basins would then be filled after which the gates can be closed and the reservoir allowed to fill to capacity.

The flood control dams thus far built are those at Devil's Gate, at San Dimas, and the small dam at Live Oak Canyon. These and other chief features of the work done to date are given in an accompanying table.

For some time the Pacoima dam has been scheduled for construction next, and as all preliminary studies and designs for this structure have been completed it will probably be the first extensive work to get started under the new bond issue. Pacoima dam is to be a constant angle arch 375 ft. high, 108 ft. thick at the base and 8 ft. thick on top, forming a reservoir with a capacity of 11,600 acre-ft. Favorable reports on the Pacoima dam have been made by the chief engineer of the U. S. Bureau of Reclamation, by the California state engineer and by the city engineer of Los Angeles.

The San Gabriel reservoir, when filled, will form a lake 1,745 ft. above sea level, 8 miles long, with an area of 1,300 acres and a storage capacity of 200,000 acre-ft. The dam itself, which will be of record size, will have a maximum section 410 ft. wide on the base which will be embedded about 25 ft. in rock, making the base of the dam about 55 ft. below the bed of the stream. Cutoff walls at the center of the section and at the up and downstream faces will extend some 15 to 25 ft. deeper, making the total height of the structure from bottom of cutoff walls to top of parapet about 500 ft. It will be about 2,100 ft. long on top and will contain 2,500,000 cu.yd. of concrete.

Final details of design on this dam have not yet been worked out, the dimensions given above being only the approximations that most nearly fit the conditions developed in preliminary studies. Several rows of diamond drill borings which are being made 50 ft. apart across the dam site have shown very favorable foundation conditions. The maximum depth of gravel is about 60 ft.; below this solid granite has been found. At some points the drills have been driven as much as 70 ft. into the granite making a total of 130 ft. below river bed, without finding fissures or other indications of weakness or previous strata.

Most of the projects planned under this flood control and water conservation program can be constructed within a period of three to four years. The San Gabriel dam on which most of the preliminary work, such as surveys, foundation exploration, etc., has already been made, will require five or six years to build. Work is to be under way, according to Mr. Reagan, on as many of the projects as is practicable during the present season.

Rocker Pedestals to Resist Earthquake Shock

To protect buildings from earthquake damage, Mario Viscardini, of Milan, Italy, has developed the idea of making the superstructure of a building capable of yielding to the abrupt shock of earthquake movements, by the use of rocker pedestals in the lowest story of the columns. His proposal was recently set forth in *Ingegneria*, and has been put out in pamphlet form more recently (published by Stucchi Ceretti Co., Milan). In his typical design the lower story length of column has a large-radius spherical bearing similar to a turntable disk bearing near its lower end and another near its upper end, the two bearing surfaces being parts of the same sphere. Flange bolts connect this rocker length to the portions of column above and below, and normally hold the building stable; the bolted connection is intended to be weak enough to rupture under the displacement due to an earthquake shock. At wall bearings, a two-way roller bearing is used in place of the spherical support.

Classifying Asphalt Sands by Graphical Method

Triangular Diagrams Give Simple and Rapid Means of Classifying Sands and Proportioning Sheet Asphalt Mixture

By W. C. D. Haarman

Consulting Highway Engineer; Assistant Professor at University of the Dutch East Indies, and Member of the Board of the D.E.I. Road Congress, Bandoeng, Java

GRAPHICAL methods are of great value when a number of tests are to be compared at a glance. One of the best is the triangular diagram. This diagram has been used to classify chemically the igneous rocks but so far as the writer knows it has not been used to classify sands for sheet asphalt.

Clifford Richardson gives the ideal mixtures of sands for sheet asphalt as follows:

		Light Traffic	Heavy Traffic
Passing	100 and 80 mesh (coarse)	20	34
	50 and 40 mesh (medium)	25	43
	30, 20 and 10 mesh (fine)	35	23

These mixtures are indicated in the diagram by *L* and *H* and the composition can be seen quickly from the diagram.

The limits of variation of the compositions of coarse, medium and fine grains can also be introduced in the diagram. For example, the limits as prescribed by the Asphalt Association being fine 16-40 per cent, medium 30-60 per cent and coarse 12-50 per cent form the area inside the dotted line. Every sand or mixture of sands suitable for sheet asphalt within the limits set by the Asphalt Association must come into this area. If not, it cannot be used. The best mixes lie on the line *LH*.

The diagram is extraordinarily convenient for recording a great number of sands in a small space. In Fig. 1, the five sands of Table I of page 947, "American Highway Engineers' Handbook," are recorded. Not one of these sands lies inside the dotted area and also no single sand can be used but by mixing two or three a good mixture can be secured.

TABLE I—ANALYSES OF BEACH SANDS FROM AMERICAN LAKES

A correction has been made for the dust and the sand retained on the 10-mesh sieve; each of the three sizes has been calculated in per cents of their sum.

	A Lake Michigan P.C.		*B* Lake Michigan P.C.		*C* Lake Erie P.C.		*D* Lake Ontario P.C.		*E* Lake Pontchartrain P.C.	
Passing 200 mesh	1		10		1		2		0	
100	3	8	55	87	9	30	4	46	0	1
80	5		23		20		41		1	
50	31	52	6	11	39	60	39	47	25	75
40	20		4		20		7		50	
30	15	40	2	2	6	10	4	7	19	24
20	13		0		3		2		4	
10	12		0		1		1		1	
Retained on 10 mesh	0		0		1		0		0	

If a mix for light traffic is required it is necessary to mix sand *A* with sand *B*, which in the diagram is done by drawing the line *AB*. All the mixtures that can be made with these two sands are represented by the different points of the line *AB*. As *A* represents 100 per cent sand *A*, and *B* 100 per cent sand *B*, it is easy to see that a sand in the middle of *AB* will consist of equal parts sand *A* and sand *B*. The mixture *X* is one that lies close to the ideal mixture for light traffic.

TABLE II—REMIXTURE OF TWO SANDS IN TABLE I TO OBTAIN SAND SUITABLE FOR SHEET ASPHALT

	Parts for 5*A*	Parts for 1.1*B*	Total Parts	Per Cent	Per Cent of Total	Per Cent of Sand
Dust	5	11	16.0	2.6	2.6	....
Passing 100 mesh	15	60.5	75.5	12.4	20.7	21.2
80	25	25.3	50.3	8.3		
50	155	6.6	161.6	26.5	43.5	44.7
40	100	4.4	104.4	17.0		
30	75	2.2	77.2	12.7	33.2	34.1
20	65	0	65.0	10.7		
10	60	0	60.0	9.8		
Totals	500	110	610	100		

This mix is composed of *XB/AB* parts sand *A* and of *XA/AB* parts sand *B*. The dimensions can be obtained by measuring or by subtracting. The length of projection of *AB* on the fine sand scale is 87 — 8 = 79; *AX* measures 21 — 8 = 13; *BX* is 87 — 21 = 66. Thus to obtain mixture *X* take 66 parts of sand *A* and 13 of *B* or in practice 5 *A* and 1 *B*.

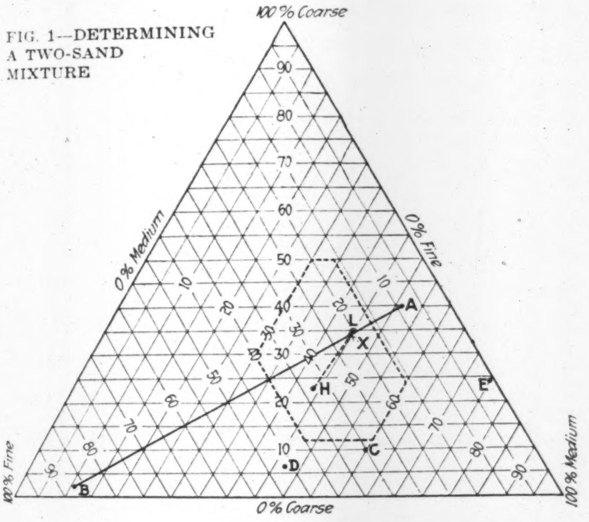


FIG. 1—DETERMINING A TWO-SAND MIXTURE

Sand *B* in nature contains 10 per cent dust; therefore about 110 per cent must be taken from the heap to get 100 per cent of the sand *B* from the diagram. The real mix in this case will be 5 *A* and 1.1 *B*.

Controlling this mix as shown by Table II gives a very satisfactory sand for light traffic.

To make a good mixture for heavy traffic it is necessary to blend three sands. If a heavy traffic mixture is to be made from sands *A*, *B* and *C*, two sands are mixed first, Fig. 2, and then to this mix the third is added. Sands *A* and *B* will make every sand of the line *AB*. If line *CH* is drawn until it crosses *AB*, it will be clear that this mix *Y* of *A* and *B* will make *H* by mixing *Y* with sand *C*. Mixture *Y* is composed of 35 — 8 = 27 parts *B*, and 52 parts *A*, or, simplified, 2 parts *A* and 1 part *B*. Mixture *H* can be obtained by mixing 13 parts *Y* and 4 parts *C*, or, simplified, 3 parts *Y* and 1 part *C*. The total mix *H* also consists of 2 parts *A* and 1 part *B* and of this mix taking 3 parts with 1 of *C*. Correcting *B* for 10 per cent dust the exact mixture will be as given by Table III.

TABLE III—REMIXTURE OF THREE SANDS OF TABLE I TO OBTAIN SAND SUITABLE FOR SHEET ASPHALT

	Parts for 2*A*	Parts for 1.1*B*	Parts for 1*C*	Total Parts	Per Cent	Per Cent of Total	Per Cent of Sand
Passing 200 mesh	2	11	1	14	3.4	3.4	....
100	6	60.5	9	75.5	18.4	31.9	33.0
80	10	25.3	20	55.3	13.5		
50	62	6.6	39	107.6	26.2	41.9	43.6
40	40	4.4	20	64.4	15.7		
30	30	22	6	38.2	9.3	22.6	23.4
20	26	0	3	29.0	7.2		
10	24	0	1	25.0	6.1		
Retained on 10 mesh	0	0	1	1.0	0.2	0.2	
Totals	200	110	100	410	100		

From the diagram it can immediately be seen that a good mixture cannot be made from three of the four sands *ACDE*. However it will be possible to make one that falls inside the area and may give sufficient results. With *A* and *B* and one of the three sands *C*, *D* or *E*, a heavy-traffic mixture can be made without difficulty. To be sure whether it is possible to make a fair mixture, either for light or for heavy traffic, of a number of sands, put them in the diagram and see if the point *L* or *H* lies inside the area formed by connecting them, in Fig. 2; for example, triangle *ABC*. If it does, a fair mixture can be made; if not, it is not to be made.

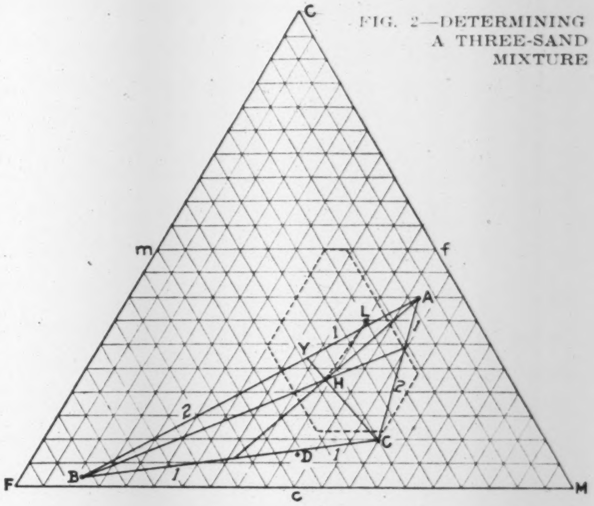


FIG. 2—DETERMINING A THREE-SAND MIXTURE

Comprehensive Highway Program of Panama

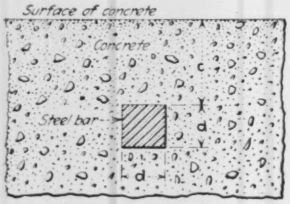
The National Congress of Panama in 1920 authorized a comprehensive highway construction program which has been greatly accelerated by the $4,500,000 government loan successfully placed in this market in 1923. Contract was given to the Compania Constructora de Panama for the Chorrera-Rio Tetita division of 55 kilometers, and to R. W. Hebard & Co. of New York for the Tetita-Anton division of 60 kilometers, which carries a large amount of heavy and difficult work including erection of 30 large steel bridges. The Araijan-Chorrera section is to be carried out jointly by the government of Panama and the Canal Zone authorities. With the completion in 1926 of the work now contracted, the Republic of Panama will have 350 kilometers of modern highway extending from the city of Panama west through the states of Panama, Cocle, Veraguas and Los Santos. The work is administered by a National Road Commission appointed by the president of the republic. R. K. West is chief engineer of the commission.

Should Reinforcement Embedment Vary with Size of Bar?

Examination Into Stresses Set Up By Temperature Changes in the Surface Areas of Reinforced Concrete

By A. S. Woodle, Jr.
Engineer of Plant, The Baldwin Locomotive Works, Philadelphia, Pa.

Much of the feeling of uncertainty which many engineers have today with regard to the general use of reinforced concrete, particularly on work exposed to the weather, is caused by the unsightly cracks and spalling which are only too frequently seen on structures from five to ten years old. It is generally recognized that disintegration of this kind is caused by corrosion of the steel reinforcing rods, the iron oxide formed by the corrosion occupying six or seven times as much space as the steel from which it is formed and thus cracking and pressing out the protecting shell of concrete. Specifications and inspection have of late years become very much more rigid than they formerly were in the matter of seeing that the steel bars are properly placed in the form and fastened in place so they cannot move during the operation of pouring. The matter of design covering the location of these rods in a concrete beam so they will not rust may be examined with possible profit.



ANALYSIS OF STRESSES IN CONCRETE EMBEDMENT

What causes the steel bars to corrode? It is well known that steel bars even if originally coated with rust, if kept covered with sound concrete will not only not corrode further, but will be cleaned of the original rust, the iron oxide disappearing, due probably to absorption of the oxygen by the lime in the cement, leaving the blue steel. The obvious inference is that corrosion cannot occur unless the concrete is cracked in some way, thus permitting access of the corroding influence of air and moisture to the steel.

The writer endeavors to show in the following analysis:

1. That owing to the slight difference between the coefficient of expansion of steel and that of 1:2:4 concrete there is a force acting under certain temperature conditions against the layer or "bridge" of concrete which protects the steel.
2. That this force is large enough in many cases to break the concrete "bridge" and cause cracks to appear.
3. That the force is a direct function of the dimensions and shape of the reinforcing bar.
4. That it is perfectly practicable to design the concrete protection or "bridge" strong enough to resist the expansive force due to any assumed temperature difference and thus protect the steel indefinitely as long as the assumed temperature difference is not exceeded.

It should be remarked at this point that this examination is intended to be qualitative in character rather than quantitative. It is not claimed that the mathematical analysis as far as it goes is exact. The whole purpose has been to bring out and state a reason for the fact that the cover of concrete over a steel rod is a direct function of the size of the rod, and that a cover which will adequately protect a sheet of expanded metal, for example, cannot be expected to protect a 6-in. I-beam.

In proceeding with the analysis the following assumptions are made:

1. Coefficient of expansion of steel...... 0.000006
Coefficient of expansion of concrete.. 0.0000055
and therefore excess of steel over concrete
= 0.0000005
2. Outside temperature difference.... 100 deg. F.
3. Temperature difference inside the concrete at a point near the surface............. 50 deg. F.

We may also assume that the bar of steel is sufficiently close to the surface of the concrete and the body of the concrete sufficiently thick so that the entire effect of the swelling of the steel due to temperature would be toward the near surface.

Now consider a steel bar d inches square with an amount of embedment (i.e. the distance of the steel from the surface of the concrete) to be c inches, as shown in diagram.

Then for the given temperature difference (50 deg.) we may design the embedment c so that the deflection in the small concrete "bridge" over the steel bar will not be sufficient to cause more than a safe tensile stress in the concrete.

The concrete "bridge" can be considered as a beam with supported ends, of depth c and unit width, with a uniformly distributed load of W lb.

Then the deflection y due to the load W will be $5Wd^3/384\,EI$.

If for E modulus of elasticity we use 2,000,000 and for I moment of inertia we use $c^3/12$ we have the equation

$$y = \frac{5Wd^3}{64{,}000{,}000\,c^3}$$

We also have for the deformation on account of temperature difference

$$y = 0.0000005 \times 50 \times d$$

Equating the two values of y

$$\frac{5Wd^3}{64{,}000{,}000\,c^3} = 0.0000005 \times 50 \times d$$

or

$$W = \frac{320\,c^3}{d^2} = \text{amount of load}$$

The maximum fiber stress in concrete beam due to load $W = M/S$ where M = bending moment = $Wd/8$; and S = Section Modulus = $c^2/6$.

$$\text{Therefore the fiber stress} = \frac{320\,c^3 \times d}{d^2 \times 8} \times \frac{6}{c^2} = \frac{240\,c}{d}$$

and if we put down 240 as the fiber stress, we have $c = d$. In practical design a factor of safety of say 2 would be recommended; that is make $c = 2d$.

In the case of a round bar, conditions would be somewhat different as the loading of the "bridge," which in this case would be arch shaped, would be of a fluid character, that is, normal to the intrados of the "arch" on purely radial lines and the exact analysis would develop a different set of equations, but it can be readily seen that the worst case is that of the square rod, so that there appears to be no need of going into the case of the round rod in any detail.

In view of the analysis so far made, the following conclusions are not unreasonable:

The amount of security against cracking of a concrete surface due to corrosion of the reinforcing bars varies directly as the diameter or square size of the rod.

The amount of embedment required varies directly as the diameter or square size of the rod. These calculations corroborated by experience having shown that 2 in. of cover over a 1-in. rod or ¼-in. cover over a ⅛-in. wire is needed to protect the steel, it is felt that this fact should be recognized and covered in greater detail than is now the case in standard specifications.

Wheel Guiding Flange Frogs for St. Louis Terminal

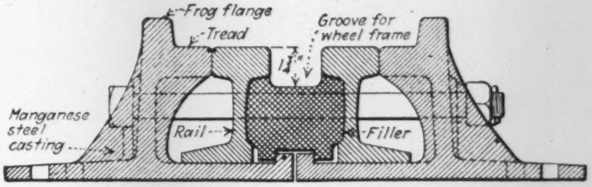
Eliminating Guard Rails in Heavy Traffic Yard Layouts Reduces Track Maintenance—Solid and Built-up Frogs

IN THE improvement of the complicated track layout of the Terminal Railroad Association of St. Louis, Mo., a conspicuous feature is the extensive use of flange frogs of the Graham type, with which each wheel passing through the frog is guided by its rim, or outer edge of the tread, engaging a rib or flange which projects above the level of the rail head. This arrangement is quite distinct from the ordinary construction, where each wheel passing through the frog is guided by means of the wheel on the opposite end of the axle, the back of the flange of this latter wheel engaging a guard rail adjacent to the track rail opposite the frog. Thus each flange frog eliminates the two guard rails and their attachments.

In the No. 7 solid manganese cast frog of this type, as made for the St. Louis installation and shown in Fig. 1, it will be seen that the flange is 1¼ in. high above the rail and 1¼ in. wide. At the throat, this flange flares away from the gage line of the frog, an arrangement which is said to give an easier entrance angle and less shock to the wheels in engaging the flange than would be the case if the frog flange was parallel with the gage line. Projections serving as tie-plates are formed on the base of the frog casting, and at both ends of the frog the connecting rails, of 100-lb. section, are supported by tie-plates.

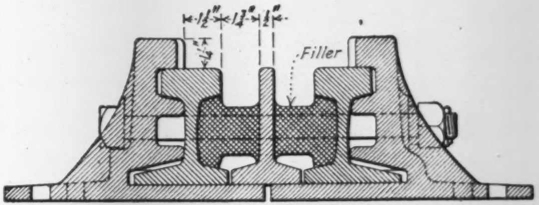
Another frog of the same type, but built up of rails and manganese steel castings is shown in Fig. 2. These frogs, which are used less extensively than the cast frogs, are designed for use where the flange frogs have to be fitted to existing layouts and rail joints, being made interchangeable with the ordinary type of frog. In this case, it will be noted that the flange castings form a continuous base for the rails, which are thus held up to their work, the whole structure being well bolted together.

Flange frogs are being applied largely in yard work and in other locations where switching movements are numerous. They are not so well adapted to main-line



Frog flange
Tread
Groove for wheel frame
1¼"
Manganese steel casting
Rail
Filler

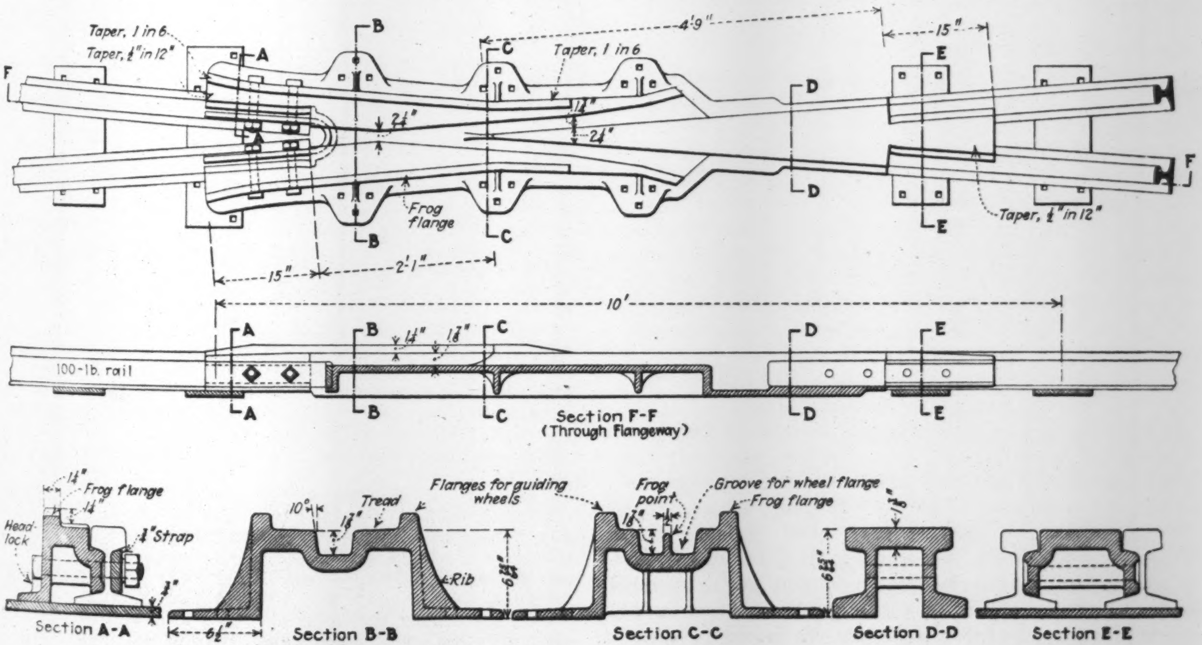
Section at Throat



1½"
1¼"
1⅛"
Filler

Section at Frog Point

FIG. 2—DETAILS OF BUILT-UP FLANGE FROG



Taper, 1 in 6
Taper, ¼" in 12"
F
A
B
C
Taper, 1 in 6
4'9"
15"
D
E
2¼"
1¼"
2¼"
Frog flange
Taper, ¼" in 12"
F
15"
2'1"
10'
1¼"
1⅛"
100-lb. rail
Section F-F (Through Flangeway)
1¼"
Frog flange
¼"
Head-lock
½" Strap
1"
6½"
Section A-A
Flanges for guiding wheels
10°
1⅛"
Tread
Rib
6⅛"
Section B-B
Frog point
1⅛"
Groove for wheel flange
Frog flange
6⅛"
Section C-C
1⅛"
Section D-D
Section E-E

FIG. 1—CAST-MANGANESE FLANGE FROGS FOR TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS

work, since main-track turnouts usually have spring-rail frogs to give smooth running. However, the makers consider the flange frog suitable for main-line crossovers used frequently for switching movements. This is indicated by the use of these frogs for practically all of the tracks of the St. Louis Union Station and terminal layout where passenger trains operate at considerable speed.

About three years ago a dozen of these flange frogs were installed by the Terminal Railroad Association in the track layout of the St. Louis union station, and they proved so satisfactory that this type was adopted for all frogs, except in high-speed main tracks. The flange frog is found to be much more satisfactory than the ordinary type of frog with guard rail; in fact, it is stated that when a frog of the flange type is installed it requires little if any more attention than an equivalent stretch of unbroken track. Furthermore, the engineer considers that the flange frog will materially reduce the liability of derailment and will also reduce the tie renewals now made necessary by damage due to continual respiking of guard rails, while it will eliminate the constant work and expense for adjusting guard rails to maintain proper width of flangeway. The flange frogs for this installation were made by the St. Louis Frog & Switch Co., under license from the American Flange Frog & Railway Improvement Co., which latter company owns the patents granted to John E. Graham and has given license to several manufacturers. The work of improving the yard layout is under the direction of H. J. Pfeifer, chief engineer of the Terminal Railroad Association of St. Louis.

Many Rivers Studied by Geological Survey

In addition to the notable work of the Birdseye party in surveying the Colorado River last year, other parties from the Geological Survey made similar studies on other rivers throughout the western states. Although the Colorado River survey was the most important and most hazardous, it was not the only one in which the parties met with difficulties and put up with much hardship in following river courses through rugged and almost inaccessible country. Three hundred miles of the Rogue River and its tributaries, on the Pacific slope in Oregon, were surveyed and 13 dam sites and 5 reservoir sites were mapped. Much of this territory could only be reached with pack trains and boats and part of it only on foot. A hundred miles of the Klamath River in Oregon and California were mapped, completing the survey of this river and its larger tributaries. Seven dam sites and two small reservoir sites were included in this work. A reconnaissance investigation was made of the power possibilities of the Smith, Trask, Nestucca, Nehalem and Wilson Rivers in western Oregon. The western tributaries of South Platte River from Denver to the Colorado-Wyoming line were mapped as well as the Sweetwater and Encampment Rivers, in Wyoming. In Colorado and Wyoming 460 miles of river surveys were made, 14 reservoir sites and 12 dam sites mapped. Over the line in Utah several small streams in the Uinta River Basin were mapped. Some of these streams were particularly rugged and required much difficult survey work. To the north, in Montana, a survey was made for a reservoir on the south fork of the Flathead River.

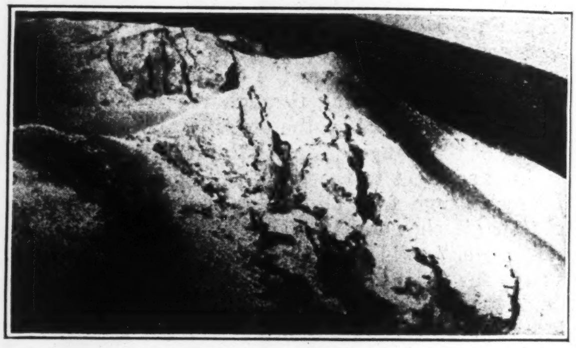
Sand Bed Studies at Montebello Filters, Baltimore

Further Discussion by Abel Wolman and S. T. Powell of Article March 27 by John R. Baylis with Rejoinder by Mr. Baylis

Sand Size Cause of Troubles

BY ABEL WOLMAN AND S. T. POWELL
Chief Engineer and Resident Engineer, Respectively, of Maryland State Department of Health

THE OBSERVATIONS of sand-bed conditions described by John R. Baylis in *Engineering News-Record*, March 27, p. 516, have been so brilliantly made and carefully described that little room is left for critical comment. It is interesting, however, to the present writers to inquire how the data published by Mr. Baylis led him to the polite, but rather firm, sweeping away of our hypothesis as to sand-bed shrinkage (*Engineering News-Record*, July 29, 1920, p. 210) in the following terms: "But the authors have not been able to prove the correctness of this theory" (p. 520). Mr. Baylis' conclusion as to the inadequacy of our explanation of the phenomena under discussion is especially striking, since every observation reported in his own contribution is additional, brilliant and accurate confirmation of our own earlier contentions. Can it be, therefore, that his logic, rather than his facts, lead him to the abandonment of our "theory" and the substitution therefor of another hypothesis, which is a direct resultant of our own suggestions?



FILTER 11 CRACKS ALTHOUGH ITS SAND IS COARSE

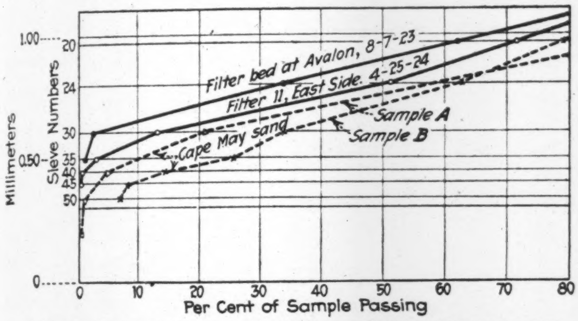
In our contribution of 1920, which incidentally included careful observations and measurements of the same beds now discussed by Mr. Baylis, we concluded that (1) sand-bed shrinkage occurred; (2) shrinkage was a function of size of sand (more particularly of specific surface area of sand); (3) shrinkage decreased abruptly in amount above a certain size of sand (when dealing with similar sands); (4) the use of larger size of sand eliminated shrinkage in beds where this phenomenon formerly occurred, without concomitant changes in any other characteristics involved in the operation of the plant. These are the hypotheses and facts presented by us.

What are the observations and statements of Mr. Baylis, which, to his mind, disprove the above conclusions? Extracts from his paper follow: (1) "The size, composition and other characteristics of the grains have little influence on the thickness of coating formed if there is no force tending to remove it, but the size has great effect on the settlement that will take place, and, due to abrasion in washing, greatly affects the amount of coating that will be retained on the grains" (p. 516). (2) "The thickest coating is usually found on the smaller grains" (p. 517). (3) "The smaller the sand grains the greater will be this tendency to adhere, due to the coating usually being thicker on the smaller grains" (p. 520). (4) "Practically all troubles from cracks and clogged places in filter beds, where the proper size sand has been used and there is an even distribution of wash-water, may be attributed to the gelatinous coating around the sand grains" (p. 521).

Mr. Baylis, therefore, discards our hypothesis that size of grain is responsible for shrinkage and cracks and substitutes his own; namely, that cracks and clogged places are due to the gelatinous coating around the sand grains, *a direct quantitative function of the size of grains* (italics ours). In other words, Mr. Baylis prefers to substitute for a cause, size of sand, a resultant, gelatinous coating, as a further cause for shrinkage. He has that right, of course, but adherence to good logic would demand that the primary cause of two secondary results should not be discarded because of the investigator's desire for a new hypothesis. After all, a new hypothesis requires more than a new statement of an old fact to warrant its complete acceptance.

Comparing Mr. Baylis' observations and statements with our own conclusions, we find little variation, if any, from our practical finding that the use of the proper size of sand will eliminate and prevent the troubles discussed. Fortunately, history after the publication of our first report amply confirms this hypothesis, since sand-bed shrinkage is negligible in most plants in Maryland, other than at Montebello, where a sand size according to the specifications noted below has been used.

The only real difference of opinion between Mr. Baylis and ourselves would probably reside in the selection of the proper size of sand to use. Unfortunately, we have no way of making a comparison of his conclusion with our specification, since nowhere in his paper does he specify the size of sand by standard methods of reporting, such as effective size and uniformity coefficient. A sand of "average diameter" of 0.6 mm. is not the same as a sand with an effective size of 0.6 mm. as Mr. Baylis may have assumed in his discussions. Just what is meant by a sand of diameter of 0.6 mm. it is difficult to interpret in terms of our usual specifications by Hazen's method, using effective size and uniformity coefficient as standard units.



COMPARISON OF SAND SIEVINGS UNDER DISCUSSION

Avalon filter sand collected near surface contained numerous mud balls and had characteristic clogged places around the side walls. No. 11 sand represents vertical section from top to bottom. The bed does not keep in good condition. Cape May A sand is analysis made with State Board of Health sieves. Cape May B sand is sample of Avalon sand furnished Mr. Armstrong by Mr. Wolman. It was sieved by Mr. Baylis.

These observations as to size of sand in use at Montebello are especially interesting, since it is our recollection that no single bed at this plant had, in earlier years, any sand in the upper 6 in. of the unit with an *effective size* much over 0.35 mm. by standard methods of sieving. Mr. Baylis' statement, therefore, that "no sand has been found that will not form this gelatinous coating when placed in the filter beds at the Montebello filters" is accurate as far as it goes, but this statement is not equivalent, as he implies, to the conclusion that no sand of effective size greater than 0.45 mm. will result in elimination of sand bed shrinkage and cracking. One obvious explanation of why gelatinous coating, of serious importance, has never been absent at Montebello may be that a large sand has never been used (i.e. effective size 0.45 mm., uniformity coefficient 1.5). (Sievings of sand in all the beds were given in the article as originally submitted to *Engineering News-Record*. Some met the above specifications yet Mr. Baylis reported that they clogged badly.—EDITOR.)

But, when all is said and done, the real test of any hypothesis is how it works. A number of beds in Maryland, at Takoma Park, Hyattsville, Sykesville, Westport, Westminster, etc., at one time or another, showed the symptoms described by Mr. Baylis. The replacement of fine sand in these beds by the sand specified below has resulted, *in every case*, in elimination of the practical difficulties of shrinkage and cracking, independent of season, temperature, raw water character, biological action, etc. As pointed out in our earlier study, these latter associated factors modify operation, as between the same sands, but do not assume practical import in the distinction between large and small sand, insofar as shrinkage and cracking go.

With these experiences in mind, it would appear wise to suggest the equipment of a unit with a sand having the following specifications, in use by this office for the past four years:

The sand shall be specially selected and screened, clean and siliceous, composed of hard, durable grains either sharp or round, substantially free from clay, loam, dust or other foreign matter and flat particles. It shall have an effective size of approximately 0.50 mm. and have a uniformity coefficient not greater than 1.75. No sand less than 0.45 mm. and more than 0.60 mm. in size shall be used.

Upon Mr. Baylis' suggestions as to devices for preventing gelatinous film, we have no comment to make, since these deal with questions of removal of effects and not elimination of causes. Their adoption is dependent upon economic considerations and the test of time, but has no relation to the hypothesis of original cause of shrinkage.

* * *

Coarse Sand Used, but Not Effective

BY JOHN R. BAYLIS
Principal Sanitary Chemist, Montebello Filters, Baltimore, Md.

THE ORIGINAL article by Wolman and Powell (*Engineering New-Record*, July 29, 1920) conveyed the impression that they attributed, to a considerable extent, the characteristics of the sand grains, other than size, as being responsible for shrinkage. That is, with two sands of equal size and surface area there may be considerable difference in the adsorption. Quoting from their article: "It is suggested also that the existence of patches of highly adsorptive sand, of either small size or unusually active surface, may be responsible for the formation of the objectionable and tenacious mud ball with which filter operators frequently are troubled." What does "unusually active surface" mean in the above sentence? By taking us to the "strange lands of ceramics and agriculture" it also conveys the impression that they believe syneresis to be the cause of the starting of cracks. That is, the beds are pulled together and not pushed. Others with whom the article was discussed interpreted it in the same manner. These authors have not proved an unusually active surface of the sand grains or syneresis to be responsible for shrinkage, neither does my article offer proof of this part of their article. The writer regrets that he was not more specific as to the theory not proved in their excellent presentation of shrinkage.

A record of the sievings of all the filter beds was included in the original article to the editor but it required too much space for publication. The sievings of filters 4 and 10 practically comply with the suggested specifications, yet there is serious clogging in these beds. Filter 11 was reconstructed last year, and the effective size is now greater than 0.55 mm. The photograph shows that it is also clogged and that cracks have formed. The article stated that coarse sand was an aid, but even with coarse sand beds will not remain in good order under our conditions. There were cracks and clogged places around the side walls when the sand grains were coated with lime in 1917 and 1918 with an effective size above 0.60 mm. The chart shows sieving of several samples of sand. A uniform sand of about 0.60 mm. means just what it says. This size was supposed to be the ideal, and it is to be understood that a deviation will have to be made in actual practice. It was not intended to be a specification, but an object to have in view when writing specifications.

Low Typhoid Death Rate in Australia

The typhoid death rate in Australia for the year 1922 was 4 per 100,000 according to the Official Year Book of the Commonwealth of Australia. The crude general death rate for the year was 9.21 per 1,000.

Rebuilding the First Budapest Suspension Bridge

Chains and Deck Renewed After Sixty-Five Years' Service — Heavier Eyebar Chains, Movable Saddles and Accessible Anchor Bars—Strengthening the Anchorage Piers

BY JOSEPH BEKE
Budapest, Hungary

THE OLDEST fixed bridge across the Danube at Budapest, the Széchenyi suspension bridge, was built in the period of 1839-1849 to the plans of W. T. Clark. After remaining in service unchanged for more than sixty-five years, it has now been rebuilt by complete renewal of the cables and suspended structure and reinforcement of the anchorages.

While the old structure excelled among the bridges built in the same period, not only for its beauty but also for its more highly developed construction (see "An Account with Illustrations of the Suspension Bridge Across the River Danube," by W. T. Clark, London, 1852-53), its capacity was inadequate for modern traffic needs. This fact, together with defects arising from the deficiency of bridge theory and design at that early time, resulted in various troubles. In the course of years many of the cast-iron floorbeams cracked. The anchorage of the cables and their support on the towers required much attention. The bridge was so flexible as to develop alarming oscillation and sway under heavy crowds or in strong winds. Eventually, reconstruction of the bridge became inevitable.

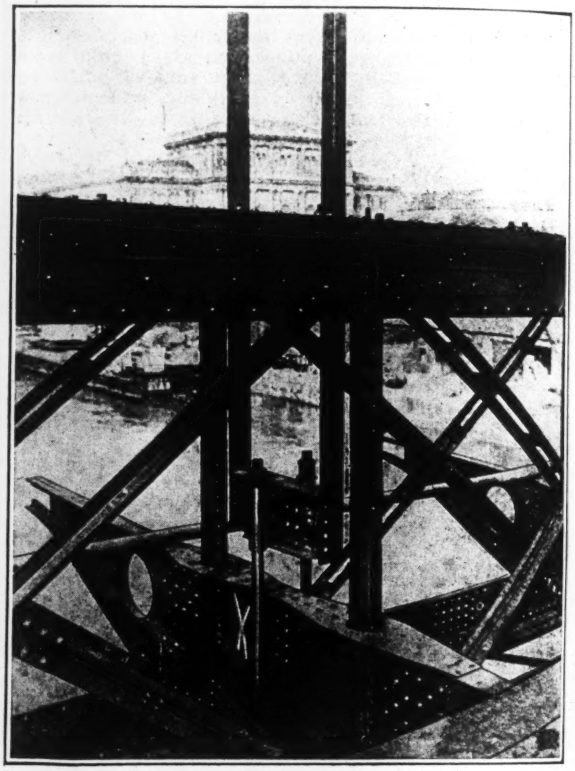
It was considered essential to maintain the original appearance of the bridge in the reconstruction. Many old traditions are connected with the bridge. Moreover, the structure had become virtually a part of the landscape, its beauty and that of the river and surroundings blending most harmoniously. Therefore, the principal form of the bridge was to be preserved and no visible alteration was to be produced in the towers and anchorages, which are of magnificent architecture and are in excellent preservation. As regards the superstructure, however, it was not practicable to retain (and merely strengthen) the suspension chains, trusses and floor, and their entire replacement was necessary. Except for towers and anchorages, therefore, a completely new structure was to be built, to outlines of the old bridge.

The main span of the bridge is 665 ft. center to center of piers; the side spans, from pier center to face of anchorage, are 288 ft. each; the length of the bridge between outer ends of anchorages is about 1,500 ft.

Just as in the old bridge, the new carrying members are two superimposed eyebar chains on either side of the roadway, with stiffening trusses suspended by hangers. The new hangers are suspension members made of two tees, with bolt hangers at the lower ends supporting the ends of the new floorbeams in flexible manner. The floorbeams are plate girders. A central system connects the bottom chords of the stiffening trusses.

The new floor was proportioned for a live-load of 26,400-lb. trucks. For the stiffening trusses and chains a uniform live-load of 82 lb. per square foot was adopted. It was unnecessary to provide for electric cars and very heavy trucks as these can cross by way of three other highway bridges elsewhere in the city, which have wider roadways. In the Széchenyi bridge the original width of the roadway could not be increased, as the suspended structure passes through the portals of the towers.

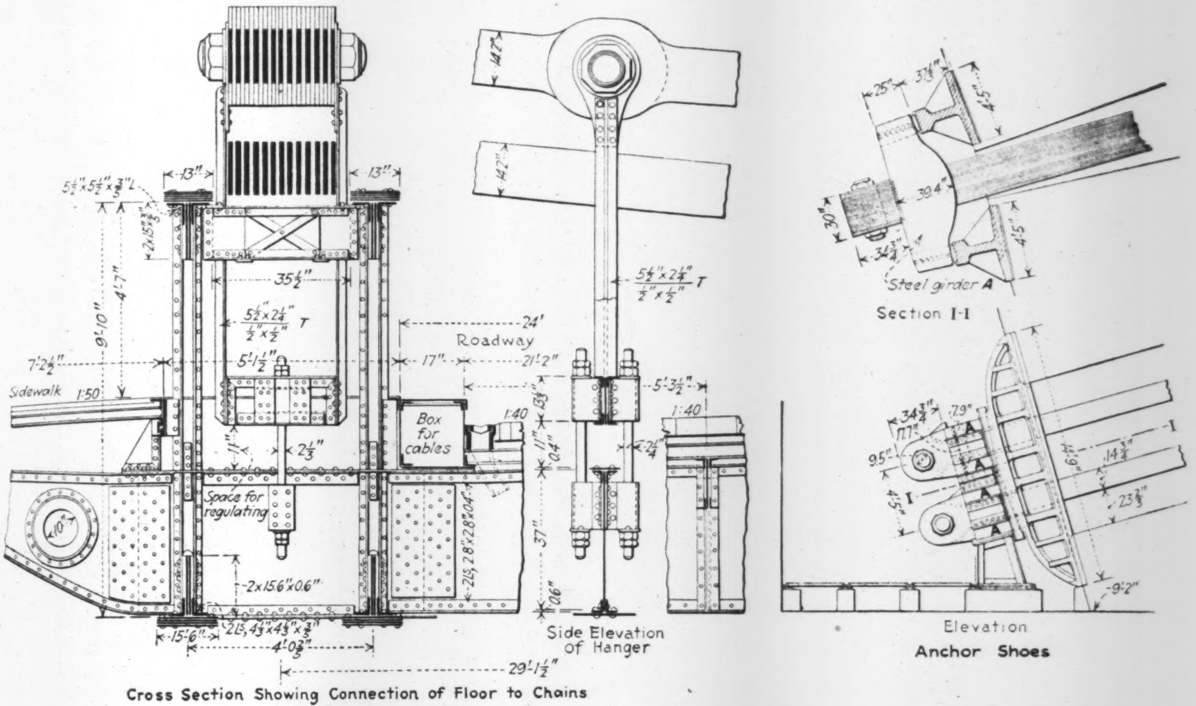
The suspension chains of the old bridge were of wrought iron, and the stiffening trusses of wood. In the new structure these parts and the lateral system are of high-carbon open-hearth steel, of ultimate strength 70,000 to 80,000 lb. per square inch and minimum elongation 20 per cent in 8 in. Other parts of the structure are of common (soft) steel, of ultimate strength 51,000 to 64,000 lb. per square inch (and corresponding minimum elongation 28 to 22 per cent), except that the tower and anchorage saddles are steel castings. Unit stresses of 20,000 lb. per square inch for the hard steel and 12,000 lb. for the soft steel were adopted for the proportioning. No impact allowance was made, although the general specifications for highway bridges for Hungary (1910) prescribe 40 per cent impact allowance for all live-loads and fix the unit stress for soft steel at 17,000 lb. per square inch.



FLOORBEAM HANGER OF RECONSTRUCTED BRIDGE

On account of the limitations imposed by the old structure as already mentioned, the new roadway width, including the curbs (within which cable ducts are inclosed) is only 24 ft.; the cables or suspension chains are spaced 29 ft. 1½ in. apart. On either side is a sidewalk 7 ft. 2½ in. wide (instead of 6 ft. as in the old bridge), carried on floorbeam cantilever extensions. Their iron railings are designed in imitation of the old wooden balustrades.

Little change was made in the general proportions



Cross Section Showing Connection of Floor to Chains

Side Elevation of Hanger

Section I-I

Elevation

Anchor Shoes

Independent Saddles of Upper and Lower Chains

Section A-B

Section C-D

Plan of Anchorage Reinforcement

Cross Section E-F

Forming the Chain Bars

Sidewalk 1:50
Roadway
24'
21'-2"
17"
Box for cables
1:40
Space for regulating
13"
35½"
9'-10"
4'-7"
7'-2½"
15'-6"
4'-0⅔"
29'-1½"
Steel girder A
Granite
Reinforced concrete
10'-9½"
14¼"
71"
4'-9"
6'-9"
57"
65"
C.L. of the old abutment
Old anchorage
Reinforced concrete dowels
Toll House
Pneumatic caissons to reinforce anchorage
42'8"
130'6"
Level of the bank +19' above 0 water
46'6"
36'9"
29'-1½"
Concrete
0 Water level
About -16'
-24'
Pneumatic caisson

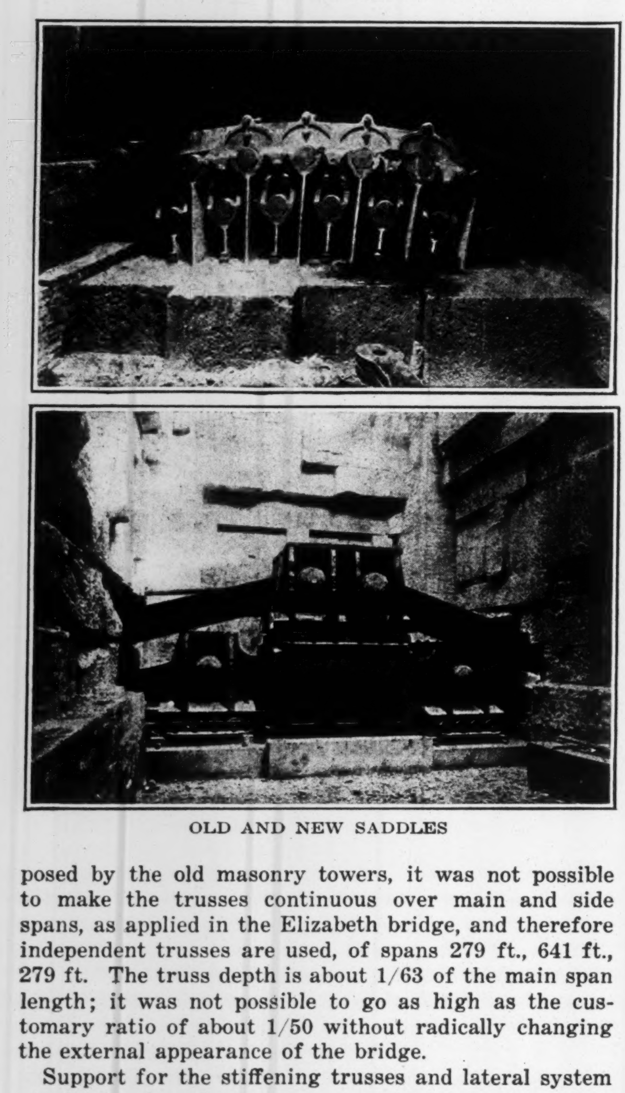
DETAILS OF RECONSTRUCTED SUSPENSION BRIDGE OVER THE DANUBE AT BUDAPEST

of the bridge. The sag of the chains in the main span is 78 ft. 7 in., or 1/13.7 of the span, nearly the same as that of the old chains. The new chains are of much larger section, however, each chain consisting of alternately 12 and 13 bars 14.8 x 1.4 in. (as compared with 10 and 11 bars, 10.25x1.028 to 1.245 in.). The cross-sectional area is thus increased by more than 60 per cent, and the strength still more on account of the higher quality of the metal. The pins connecting the eyebars are 9½ in. in diameter, while the old ones were 4½ in.

At the supports of the old chains on the towers there was no evidence that the saddles ever moved. The new saddles have been so detailed that it is believed that they will move under load and temperature variations without excessive resistance. Upper and lower chains have separate supports and move independently. At the front of the abutment, where the chains change direction as they enter the tunnel leading to the anchor bed plates, cast-steel rockers (supporting the two chains separately) make provision for horizontal movement due to stretch of the anchorage portion.

The new anchorage arrangement makes the anchor members accessible and distributes the load. In the old structure the anchor chains were almost inaccessible and therefore liable to injury by rust, and excessive load was thrown on the masonry at the edge of the chain tunnel. The arrangement now is similar to that in the Elizabeth bridge at Budapest, designed about twenty-five years ago. The design as originated there found later acceptance by other engineers, as in the competition for a highway bridge across the Rhine at Cologne, where one of the plans exhibits a close copy of that construction.

The stiffening trusses are quite similar in outline to the old wooden trusses. On account of the limits imposed by the old masonry towers, it was not possible to make the trusses continuous over main and side spans, as applied in the Elizabeth bridge, and therefore independent trusses are used, of spans 279 ft., 641 ft., 279 ft. The truss depth is about 1/63 of the main span length; it was not possible to go as high as the customary ratio of about 1/50 without radically changing the external appearance of the bridge.



OLD AND NEW SADDLES

Support for the stiffening trusses and lateral system at piers and anchorages was provided by cutting into the masonry; the old wooden trusses were not supported at these points.

Extensive foundation was necessary at the abutments, since increased sliding resistance had to be provided on account of the increased chain pull. To avoid changing the appearance of the anchorages this reinforcement had to be provided below river level; and as the river profile made it impracticable to build buttresses at the front of the anchorage, extensions of the foundations were built on either side of the anchorage, below ground level, bonded to the original anchorage foundations.

A line of pneumatic caissons was sunk along either side of the foundation and connected to it by means of reinforced-concrete extensions which are notched into vertical recesses cut in the old masonry. A weight of about 13,000 cu.yd. of concrete was thus added to each anchorage, to provide sliding resistance.

In carrying out this part of the work the caissons were sunk first, as the work here had to be carried below the level of the old anchorage footings. The concrete cap work was done under protection of the cofferdam formed by the caissons, after the joints between the caissons had been sealed by concrete keys sunk under pneumatic pressure. The whole foundation extension is so reinforced and joggled together as to insure the integral action of the mass.

In the demolition of the old superstructure and the erection of the new, fixed falsework was employed in all three spans. The main-span falsework contained three truss-span openings for navigation, each of 160 ft.

All falsework piles had to be removed before the breaking up of the ice in the Danube, and this limited the entire program to the short period March to December, 1914. This rapid construction was successfully accomplished. Floating falsework was used for all remaining work, including the erection of the stiffening trusses in the main span, done in the following year. In November, 1915, the new bridge was opened to traffic, after twenty-one months' interruption.

A serious accident interrupted the work during the erection of the chains. A scow that broke away from its moorings above the bridge one night floated downstream and, colliding with the falsework in one of the side spans, carried away a large part of this falsework, as well as a traveler supported on it and a large number of eyebars ready for erection in the chains. At about the same time (end of July, 1914) the war broke out, which made the completion of the work problematical even without the accident mentioned. In spite of both discouragements, however, by great effort and systematic organization of the work the erection was carried out according to program, and the time fixed for the removal of the falsework was met.

In October, 1915, a load test of the bridge was carried out, with satisfactory results. Under a load of about 1,000 tons equally distributed over the main span, the mid-span deflection was 13½ in. The deflection due to temperature increase was about ½ in. per degree centigrade. These results were closely in accord with the calculated values. Further, all important parts of the structure were carefully observed under the load test and no irregularity of action was noticed. No movement of the anchorages could be detected.

Although the relatively small depth of the stiffening trusses makes the calculated deflections of the bridge under partial loading rather considerable, the bridge proved satisfactorily stiff in practice under all traffic conditions and does not oscillate even in strong wind.

All material used in the reconstruction was produced in Hungary, except some granite which was obtained from Austria. The eyebars for the new chains were produced in the government steel works at Diósgyör; seventy-five years ago, the old wrought-iron chains had to be imported from England, being made by Howard & Ravenhill of Rotherhithe. All other parts of the structure were fabricated in the government machine works at Budapest, of material produced at the steel works of Diósgyör and Zólyombrezó.

The total weight of the new steel superstructure is 5,200 tons. The cost of rebuilding, including the reinforcement of the anchorages, amounted to about 6,500,000 k., equivalent to $1,300,000 at that time.

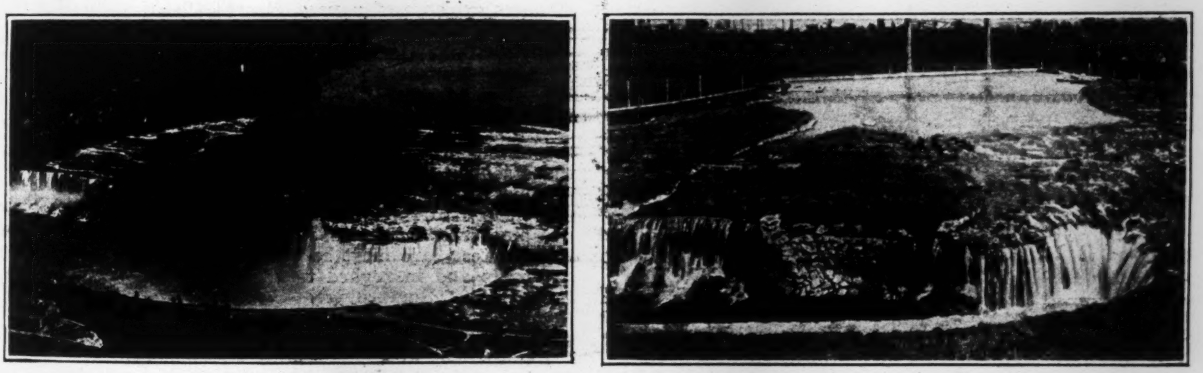
The work was designed and its execution directed by the Highway Bridge Department of the Hungarian Ministry of Commerce.

As in the case of the Elizabeth bridge, built in 1899 to 1900, the chains for the new bridge were cut from plates of the width of the head, a process described in the Journal of the Hungarian Society of Engineers and Architects (*Magyar Mérnök-és Epitész-Egylet Közlönye*) 1900, p. 49, and in the *Zeitschrift des Vereines deutscher Ingenieure*, 1920, p. 558.

Model of Niagara to Demonstrate Flow Control

Variations of Draft Simulate Power Use of Water and Show the Effect on Scenic Beauty of the Falls

IN ORDER to demonstrate the effect on the flow of water over Niagara Falls of the varying drafts for power purposes in use and proposed, the Niagara Falls Power Co., of Niagara Falls, N. Y., has built in its grounds near the falls a large size model of the falls which faithfully reproduces not only the topography but the flow of water down the Niagara River and over the cataract. The model is about 100x125 ft. in plan and on a horizontal scale of 1 to 100. The vertical scale is somewhat less than that in order that the perspective effect of a nearby spectator may be maintained. As shown in the accompanying view, the model is a remarkably exact copy of the natural falls especially in the appearance of the flow of the water over the cataract and in the upstream rapids.



VIEW OF NIAGARA FALLS AND OF MODEL TO DEMONSTRATE FLOW CONTROL

On left: Niagara Falls from a point in the air above the Canadian shore.

On right: The 100 x 125-ft. model of Niagara Falls from a point of similar vantage.

The object of this model is to demonstrate, first, the effect on the scenic quality of the falls by varying the draft of water above the falls for power purposes, and, second, to show the possibilities of remedial measures above the falls in the way of weirs or similar obstructions, the intention of which is to spread the flow of water over the brink in such manner as to increase the scenic qualities under lowered flow.

The model is filled with water from a pump which fills the reservoir simulating the Niagara River above the falls. In this section there are reproduced in exact scale the various power houses on either side of the river. These miniature power houses have outlets with gages to measure the flow through them so that the draft at each replica power house can be made equal to that which it now takes or which may be proposed under any scheme. A demonstration of the model consists in showing first the full flow of the river as it is at present and then the flow of the river under increased drafts through the various power houses. The effect of these increased drafts shows perceptibly in the amount of flow over the falls and more especially in the distribution of that flow. However, a second use of the model, as noted above, is to demonstrate the effect of remedial measures, so in the demonstration there are available miniature weirs and artificial islands which are placed in various positions above the brink of the Canadian Falls and also at the upper end of Goat Island and the diminished flow thereby distributed so as to be uniform across the entire brink.

The Niagara Falls Power Co. has built this model partly for demonstration purposes and partly for experimental purposes. They are not offering at the present time any solution of the problem of how best to distribute a diminished flow to increase scenic effect, but they offer the model to any one who has an idea of method of improvement so that the method may be tested out experimentally. The model was built under the direction of John L. Harper, vice-president and chief engineer of the power company, after the hydraulic calculations of Norman R. Gibson, of the company.

Health Board Would Penalize City

An attempt to collect a penalty of $20,500 from the city of Hull, Quebec, is being made by the Quebec Provincial Board of Health for the failure of the city named to install a mechanical water filtration plant as ordered by the board in 1916. The suit was begun in 1917. The city held that the expenditure ($170,000) was unwarranted, says *The Canadian Engineer*, "both from the city's financial condition and the fact that a system of water chlorination had been installed which was proving effective." The lower court ruled against the city. On appeal to the Court of Review of Montreal, the judgment of the lower court was sustained, but the city has "made no effort," says the authority quoted above, "either to meet the judgment or comply with the board's order to install the filtration plant."

Bituminous Macadam Roads For Heavy Traffic

Render Economical Service Under Traffic of 5,000 Vehicles a Day—Good Design, Construction and Maintenance Essential

By I. W. Patterson
Chief Engineer, Rhode Island State Board of Public Roads, Providence, R. I.

Rhode Island roads of bituminous macadam are carrying a traffic so heavy at an up-keep cost so low as to challenge the admiration of highway engineers. How is this excellent service being secured? An answer is indicated in this paper read at this year's Annual Conference on Highway Engineering, University of Michigan, Ann Arbor. The paper also discussed bituminous surface treatments but only the section on bituminous macadam is published. A previous important discussion concerning Rhode Island bituminous roads was published in "Engineering News-Record," Dec. 11-18, 1919, p. 976.—Editor.

THE PRACTICE of constructing and maintaining bituminous macadam pavements is extremely variable. In discussing pavements of this type, therefore, we must not presume that we are discussing a type of pavement which is standardized in construction and in maintenance to the extent to which many of the higher types are standardized. We find numerous instances of dismal failure of bituminous macadam pavements under comparatively light traffic. Upon the other hand, we find certain instances of the rendering of every economical service of pavements of this class under heavy traffic. In connection with a discussion of the traffic limitations of this class of pavement, therefore, the lack of standardization and the lack of uniformity in results secured present difficult problems.

COSTS OF BITUMINOUS MACADAM PAVEMENTS IN RHODE ISLAND

Year of Construction	Prevailing Width, Ft.	Average Cost Per Mile†	Average Maintenance Cost per Mile per Year††
1913	14	$7,660.27	$153.35
1915	18	8,417.65	112.82
1916	18	12,067.83	217.01
1917	18	17,207.83	186.85
1918	18	18,333.53	114.35
1919	18	18,616.07	103.04
1920	18	23,730.64	31.33

† Cost of pavement only, exclusive of costs of grading, foundation and drainage.
†† Cost of maintenance of pavement only.

Results with bituminous macadam in Rhode Island fail to disclose any definite relationship between volume of traffic and cost of maintenance. This would appear to indicate of course that features of design, construction and maintenance are of tremendous importance so far as service rendered by the pavements is concerned. In our attempt to determine the limitations of bituminous macadam upon our state highway system in Rhode Island, very frequently we are confronted by paradoxes such as the lowest maintenance costs upon the projects carrying the greatest traffic. This study, however, leads to the conclusion that bituminous macadam pavements are capable of standing very heavy traffic provided an intensive study of these pavements succeeds in eliminating a number of very common faults both in connection with construction and in connection with maintenance. The accompanying table showing costs of bituminous macadam pavements in Rhode Island is of interest.

Two of the sections built in 1913 were resurfacing projects over old macadam. These sections were replaced during 1923. Except for this replacement of two very cheap jobs, all of our bituminous macadam is carrying traffic successfully.

The bituminous macadam pavements of Rhode Island are called upon to carry traffic varying from approximately 1,000 vehicles of all classes per day to traffic of approximately 7,000 vehicles of all classes per day during seven months of each year. Since the state is primarily industrial throughout and since the population is dense, the traffic over the roads of course is heavy during the winter months. Snow removal upon all state roads is considered to be absolutely essential. Of this total traffic, motor trucks constitute from 200 to 600 vehicles per day, and this traffic varies little with the seasons.

As an indication that refinement of method of construction and maintenance perhaps is of the greatest importance in the case of bituminous macadam pavements, it is interesting to compare the costs of maintenance of the projects completed during very recent years with the costs of maintenance of the projects completed previously. For three years following 1916 the bituminous macadam pavements constructed during that year cost an average of $77.50 per mile per year for maintenance. The projects constructed during 1920 cost during the following three years for maintenance an average of **$31.33** per mile per year. Traffic over the roads of course increased greatly during the period from 1916 to 1920 and this illustration is offered of the possibilities afforded for the development of rational methods of construction of bituminous macadam pavements to the end that the very common faults of these pavements may be eliminated. The lower maintenance costs of the projects completed in 1920 we believe is attributable only to greater care in connection with the innumerable details of construction.

Maintenance Results—Questionable methods of maintenance also, we believe, account for a great deal of variation in results secured from the use of bituminous macadam pavements. It is the practice in Rhode Island to reduce the number of resealing operations to a minimum. Progressive corrugation of bituminous macadam pavements we believe is stimulated greatly by the application of excess of bitumen upon the surface. Therefore, local resealing only is resorted to until a large percentage of the total area displays evidence of a need for resealing. Several of the projects constructed in 1913 yet have not been resealed except locally. Under our plan of maintenance the materials and methods employed in original construction are adhered to strictly. This practice is followed because of our belief that it promotes the preservation of uniformity of the surface and thereby adds to the economical life of the pavement. We do not favor any plan of maintenance which tends toward lack of uniformity of surface.

Apparently we must consider that resealing of bituminous macadam surfaces is a necessity sooner or later. In planning such surface treatments, however, it appears that the greatest care must be taken in regard to selection of materials and in regard to the methods and amounts of application. Surface treatment of bituminous macadam pavements judiciously carried out appears to restore these pavements to their original condition very effectively.

Foundation weakness many times limits directly the service rendered by bituminous macadam pavements. The structural strength of such pavements is negligible, so it cannot be presumed that the pavements are capable of carrying traffic successfully over unstable subsoil without careful attention to the foundation problem. It is true, however, that these pavements are capable of withstanding without apparent serious damage considerable distortion due to frost action. For that reason it does not appear to be necessary in the design absolutely to eliminate all effect of frost action upon the pavement. So-called insulating layers of permeable material directly below the pavement have been found to be very effective over heavy, retentive subsoil.

It appears also to be essential to make a careful study of the problem of the correlation of the binder to the quality of crushed stone. Binders which produce excellent results with certain rock give mediocre or even poor results when combined with other types of rock. Research into this phase of bituminous macadam pavements perhaps would result in the elimination of much of the variation in results secured at present.

So far as results in Rhode Island are concerned, it appears that bituminous macadam pavements 18 ft. or 20 ft. in width will render economical service when subjected to traffic in excess of 5,000 vehicles per day. In order for pavements to carry that amount of traffic successfully, however, more attention to the details of design, construction and maintenance is necessary than is given in usual practice.

Evaluation of Pump Bids for Chicago's Largest Station

First Costs, Steam Consumption and Capital Charges Compared—Allowances Made for Variations in Size of Building

When the Western Ave. 320-m.g.d. compound turbine-driven centrifugal pumping station is completed in Chicago, it will be the last word in equipment. Contracts were let May 9 for four De Laval 50- to 80-m.g.d. units supplied with steam from four 600-hp. boilers having a 100 to 200 per cent overload rating and steam pressures of 315 lb. and 225 deg. superheat, a total temperature of 650 deg. Steam turbine and electric motor-driven centrifugal pumps, triple expansion, reciprocating and Diesel oil machines were considered, and their relative merits from a financial and continuous service point of view compared. After giving these various points due weight, it was concluded that steam turbine-driven centrifugal units would best meet the financial, operating and service conditions at this station.

Evaluation of the bids for the pumps for this station, as outlined by John Ericson, city engineer, in transmitting the canvass of bids to Col. A. A. Sprague, commissioner of public works, considered price bid, average yearly operating costs based on guaranteed duties, design and construction of the various parts of the units, past record of similar machinery, responsibility of bidders and relative cost of building.

BID COMPARISON OF 80-M.G.D. STEAM TURBINE-DRIVEN CENTRIFUGAL PUMPS FOR WESTERN AVE. STATION

Bidders	De Laval A Single Barrel Type	De Laval B Compound Type	Allis-Chalmers	Worthington
Price bid	$294,000	$334,760	$263,800	$305,753
Guaranteed steam consumption for each unit per hour, lb.	14,446	14,186	16,123	14,455
Excess steam per each unit, lb.	260	0	1,937	269
Value at $28.25 per lb. per unit	$7,345	0	$54,720	$7,599
Value of excess steam consumption, 3 units	$22,035	0	$164,161	$22,798
Comparative price	$316,035	$334,760	$427,961	$328,551

Four bids were received: DeLaval impulse type, with single barrel units, DeLaval impulse type, with compound units, Allis-Chalmers reaction type with single barrel units and Worthington impulse type with single barrel units.

The following is quoted from the report:

> While the prices bid in general govern acceptance of bids in the cases of ordinary contracts, in the case of machinery of this kind the situation, however, is different. The bidders are required to guarantee certain efficiencies of the respective machines they offer. In other words, they guarantee the number of pounds of steam that their units will require to perform the work in pumping a stipulated number of millions of gallons of water against stated heads under various carefully determined conditions at the particular station.
>
> As the capitalized value of each pound of steam, which is capable of close determination, amounts to a considerable sum of money, being in this case determined at $28.25 with the average price of coal assumed at $3.75 per ton including handling, it is evident that the guaranteed steam consumption in each case must be considered in connection with the price bid for the machinery.
>
> A different way to determine the relative value to the city of the various machines offered under the same conditions is to determine what the actual yearly comparative fixed and operating expenses will be to the city in each case, as far as there is any variation in these costs. This comparison is shown in the following tabulation:
>
> | Bidders | De Laval A | De Laval B | Allis-Chalmers | Worthington |
> |---|---|---|---|---|
> | Price bid | $294,000 | $334,760 | $263,800 | $305,753 |
> | Steam per hour per unit, lb. | 14,446 | 14,186 | 16,123 | 14,455 |
> | Interest on investment at 4½ per cent | $13,230 | $15,064 | $11,871 | $13,759 |
> | Sinking fund to liquidate capital in 20 years | $9,370 | $10,669 | $8,407 | $9,744 |
> | Cost of steam 21,720 turbine hr. | $94,130 | $92,436 | $105,057 | $94,189 |
> | Yearly expense | $116,730 | $118,169 | $125,335 | $117,692 |
> | Difference | 0 | $1,439 | $8,605 | $962 |
>
> Each bidder being a responsible concern and all offering machinery of recognized excellence and reputation, any particular value of one bidder's proposal over the other need not here be considered, except as between the two De Laval proposals, which will be referred to later. A careful estimate has been made of the cost of building required for each type of machinery offered, which is of varying length, and is as follows:
>
> | Bidders | De Laval A | De Laval B | Allis-Chalmers | Worthington |
> |---|---|---|---|---|
> | Relative cost of building | $514,428 | $486,280 | $561,910 | $561,910 |
> | Difference | 28,148 | 0 | 75,630 | 75,630 |
> | Comparative cost of machinery | 294,000 | 312,718 | 405,934 | 306,514 |
> | Total comparative cost | $322,148 | 312,718 | 481,564 | 434,054 |
> | Rank of bid | 2 | 1 | 4 | 3 |
>
> It is evident, therefore, when considering the cost of the building in connection with the evaluated cost of the machinery offered by the various bidders that proposal B of the De Laval Steam Turbine Co. proves to be the most advantageous to the city as to cost. This company is the lowest bidder whether the machinery alone is considered or the machinery in connection with the proposed building. Its proposal B, consisting of units with compound steam turbines as prime movers, offers machines that are of greater power, are better constructed, more rugged and compact, safer and more economical than those offered in its proposal A. The contract was in consequence awarded to the De Laval Steam Turbine Co. on its proposal B.

Stilling Chambers for Akron Sewage-Works

In place of separate units consisting of grit chambers, grease skimmers and fine screens at the new sewage-works for Akron, Ohio, it is proposed to use two stilling or relatively large detritus chambers with provision for sweeping the grease into a side chamber by revolving arms and for collecting the coarser settleable solids by a revolving arm, suction pipe, and centrifugal pumps, the arms at the bottom of the tank being similar to the revolving devices in the Dorr tank. A stilling effect in the tank will bring the lighter material like grease to the top, from which it will be swept into the bay. The sand, gravel, and liquid matter removed by the revolving arms and centrifugal pumps will be discharged into troughs similar to grit chambers. Here the sand and gravel will be deposited. The liquid matter will be passed through fine screens and into the Imhoff tanks. The grease and fine screenings will go to an incinerator and the sand and grit will be disposed of for filling. Preliminary studies indicate that a combined detention period of 15 min. during the maximum flow of 94 m.g.d. will be sufficient, and that only 6.6 m.g.d. will have to be passed through the grit troughs and fine screens. The 87.4 m.g.d. of sewage will be discharged through an opening midway down the side wall of the stilling tank into an effluent channel leading to the Imhoff tanks. For the foregoing information we are indebted to J. E. Root, sewerage engineer, Akron, Ohio, and Harrison P. Eddy, consulting engineer, Boston, the latter employed by the city of Akron in connection with the new sewage-works.

Classification and Definition of Earth Dam Types

Descriptions Based on Construction Methods and Materials Employed—Distinctive Features Retained

BY J. ALBERT HOLMES
Hydraulic Engineer, Chicago, Ill.

EARTH DAMS of many types have been and are being built by many methods in North, Central and South America and in Britain and the British possessions and Europe. As the various types and methods developed, distinctive names and terms were applied descriptive of some particular feature or manner of construction. Definitions of the earlier types were given by Schuyler and Bassell nearly twenty years ago and by Hageman more recently. At the present time there is a discussion going on as to the difference between two types of hydraulic-fill dams, one of which has been developed since Schuyler and Bassell gave their definitions, and, consequently, it seems opportune to attempt to define all the various types in a concise and descriptive manner.

In spite of the fact that none of the above engineers agreed in their classification of types and that types merge one into another, there are numerous distinctive examples of each type and it would seem well to retain and emphasize the distinction.

Th following descriptions are based on methods of construction and materials employed. A term in more or less common use is applied to each type and a concise definition given.

Of type 1, earthen, the Tabeaud dam in California is an excellent example of a homogeneous structure in which great care was taken to consolidate the material and with excellent results. It, however, has a puddle face for a portion of its height.

The Belle Fourche dam, South Dakota, is of this type and very compact. The usual method of consolidating is to place in thin layers then wet and roll. Another method often used when the material is suitable is to place in thicker layers and irrigate as at Mystic Lake dam in Montana and the diversion dam at Wichita Falls, Texas, and by dumping into a pool as at Marshall Lake dam in Colorado.

Type 2, puddle core, is the type used most extensively by British engineers, examples of which are the Yarrow, England; Llannefydd, Wales; and Dodder, Ireland. Of American dams, Druid Lake at Baltimore, Md., is an early example. Pilarcitos and San Andres, California, have puddle cores and the North Dike of the Wachusett, Mass., and Scituate, Rhode Island, dams have large rolled cores.

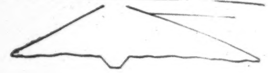
Type 3, masonry core, is represented by many New England dams, examples of which are the Sudbury, Mass., Reservoir 5 dam, the Croton Valley dams and more recently the Ashokan reservoir dikes in New York.

The Arrowhead dam in California, and Tieton in Washington have masonry cores. The embankments of these latter dams were placed by the semi-hydraulic method, the other dams have the earthen type, mainly homogeneous as in the Ashokan dikes.

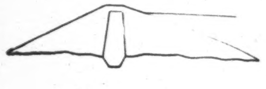
Type 4, puddle face, is often cited as the ideal arrangement of materials, i.e., the impervious portion on the water face, supported by pervious materials, but its use is infrequent. Monument Creek dam in Colorado is a good example of this type. Others are Spring Run dam 2 in Colorado and Lahontan in Nevada.

Type 5, rock and earth, is illustrated by the Avalon, New Mexico, dam, by the Milner dams in Idaho in which the earth was placed by the hydraulic-fill method, and the Sanches in Colorado, where the rock fill is backed by an earthen or rolled fill.

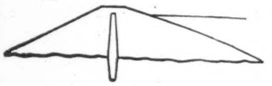
Type 1. Earthen. A dam in which the earth is homogeneous throughout.



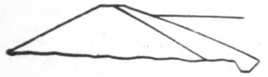
Type 2. Puddle Core. A dam having a puddled or rolled core of clay or selected material. The supporting dikes may or may not be similarly homogeneous or impervious.



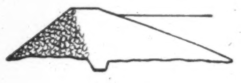
Type 3. Masonry Core. A dam having a core of stone, concrete or other masonry, sometimes supplemented by a timber or steel diaphragm. The supporting dikes may or may not be homogeneous or impervious.



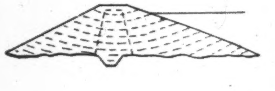
Type 4. Puddle Face. A dam having puddled clay or selected material on its waterface. The remainder of the structure may or may not be homogeneous or impervious.



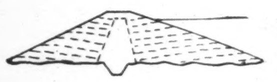
Type 5. Rock and Earth. A dam having a downstream portion of loose rock. The remainder of the structure may be homogeneous earth mass or an hydraulic or semi-hydraulic fill.



Type 6. Hydraulic-Fill. A dam in the construction of which earth, gravel and rock are transported to, segregated, placed and consolidated in the structure by the agency of water.



Type 7. Semi-Hydraulic-Fill. A dam in the construction of which earth, gravel and rock are transported to the structure in a dry condition and there segregated, placed and consolidated by the agency of water.



Type 6, hydraulic-fill. Four of the Necaxa, Mexico, dams are of this type, numerous dams in the western states, in the Miami Valley in Ohio, and the Quemahoning in Pennsylvania, are examples of hydraulic-fill structures in the eastern states. A more recent construction is the main dam at Wichita Falls, Tex.

By controlling the amount going in or by wasting a portion of the fine material, the extent and character of the core can be kept within certain limits. This is desirable and is being done in recent practice.

Of type 7, semi-hydraulic-fill, there are the Bumping Lake, Washington, dam; Willow River, Oregon; Henshaw, California; the great dams at Bridgewater, North Carolina, the Somerset in Vermont, and the high dam at Davis Bridge in Vermont. By this method the extent and character of the core is controlled by the amount of fine material removed by sluicing from the outer dikes.

Compensation of Practising Engineers: A Critical Study

Merits and Disadvantages of Various Systems of Payment for Service—Per Diem Basis for Purely Consulting Practice and Bonus and Penalty for Other Independent Work Recommended

By Clinton L. Bogert
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RECENT publication of an article wherein a member of the staff of one of our technical schools develops lengthy mathematical expressions for use in the design of a small-sized municipal structure revives the question of competition between men practising engineering as an avocation and those to whom it means sole income. This leads to the subsequent reflection on the barren monetary return to an engineer undertaking such a design on a fee basis if deprived of the clerical assistance of the senior class. The following paragraphs represent merely a thinking through of the fee situation, with the suggestion of adjusted remuneration, and the notes should not be interpreted as an attempt to upset any present practices among practising engineers.

Irrespective of titles, an engineer may receive his compensation in the form of a salary if the duration of the engagement warrants it, or a sum termed a "fee" if his engagement is intermittent or brief. In the first case he looks to an employer for his money; in the second, to a client. The distinction is barely perceptible. Many cities and corporations have men with the title of consulting engineer (*Engineering News-Record*, April 19, 1917, p. 138) on their pay-rolls, who get a salary in lieu of a fee.

Functions of the Engineer—The function of a consulting engineer as defined by Alvord is to apply his special knowledge to the review of plans prepared by the designing engineer, to expert testimony, original investigations and to valuations. Very few consulting engineers devote their whole time to purely consultant work; the functions of a practising engineer are performed when necessity arises. Our discussion concerns engineers in this capacity working on a fee.

The function of a practising engineer is the production of a safe structure, adequate for the service and at a minimum cost. His reputation will be, and his compensation should be, commensurate with his ability to fulfill this obligation. The ultimate question is, then, one of proper compensation. Let us strip the subject of useless verbiage, by assuming at the outset that the engineer is necessarily interested in earning a competence from his professional activities, and that all parties herein mentioned are free from dishonest proclivities. Corollary to this, we may add that of two designs, of equal safety and adequacy, the engineer would prefer to see that one executed which would yield him the greater financial return. To what expense is an engineer justified in going to produce for his client a structure costing less? The answer depends on the method of compensation. Cases are known to the writer wherein the value of the hours spent in reducing the cost of a structure was considerably greater than the saving.

Compensation by Percentage of Final Cost—Under a system of compensation by percentage of final cost, the engineer receives a stipulated percentage (*Engineering News-Record*, Nov. 11, 1920, p. 941, and April 21, 1921, p. 671) of the value of the construction work certified as done, or a percentage of the estimate of cost. The greater the cost of the work, the greater will be the compensation, although gradation in rates as the value of the work increases keeps this below a straight-line increase.

This form of compensation is common in the business world; and lawyers often base their fees on the amount involved. Its universal use is the chief commendation for it. The expression of the engineering cost as a percentage is a convenience in budget-making. A further advantage inherent in the percentage basis is the safeguard to the municipality since an engineer zealous for a return engagement and jealous of his good reputation will be anxious to keep costs within bounds which will not lead to the rejection of bids, or which cannot be effectively challenged in open meeting. Against these advantages, should be balanced six phases which lead to unfairness to one party or the other, and to possible disputes.

(A) *Incentive to Ultimate Economy Lacking*—The engineer has no high incentive to keep down costs to the last penny. The more time he devotes to computations beyond those necessary to satisfy himself as to the safety, adequacy and practicability of his design, the larger his overhead expenses are becoming, and, if he succeeds in cutting down the construction costs, the less return he is assuring himself. There is in such a proposition an element which is contrary to human nature.

(B) *Project Never Built*—A project never built is never a professional asset to an engineer; yet there are few drafting-room files of practising engineers which are not the morgues for many well-executed plans which never progressed beyond the blueprint stage. The compensation for these abandoned projects often is a matter of dispute, especially when the abandonment has been the subject of an election contest, and the bill for design is presented to the opponents of the project. If the engineer is astute enough to be working under a well-considered contract, he will receive some compensation for the plans. Since the cost of the report, plans and specifications constitutes the major expense to the engineer, the fee stipulated in the contract often barely requites him for his overhead, and he looks to the additional fee resulting from supervision of construction to balance his account. A contract should be so worded that the engineer is properly paid for plans of a dead project. A case is known wherein an engineer had to wait months for his fee because his contract provided for payment for designs on the basis of the "lowest bid price." Due to peculiar local conditions, no bids were received, and the contract was re-advertised; after the second opening of bids, the engineer was paid.

(C) *Compensation Disproportionate to the Work*—The designing engineer often has to spend a large amount of time on a small job. For instance, the designing expense is about the same for a 0.5-m.g.d. water-filtration plant as for a 1-m.g.d. plant. Yet the engineer's compensation for one is a great deal less than for the other. On a system of water pipe costing $50,000 the designing work occupies but a few hours, whereas on a filter plant costing the same amount a great deal more designing and more exhaustive specifications are required. Yet, on the percentage basis, his fee is the same for one as for the other. Again, on many projects an engineer can make use of standard details or revamp an old design. This procedure probably balances up for the inequalities of the situations outlined above.

(D) *Changes in Contract Requirements*—After a contract is let, a required change of route or other conditions may necessitate considerable modification of the drawings. If the engineer is not safeguarded by a clause in his contract, he will make such changes at a loss. Again, a state department of health may promulgate new rules subsequent to the beginning of the designs, requiring the engineer to scrap some work, through no fault of his own. Such exigencies can be taken care of in his contract.

(E) *Extra Work*—There is a chance for contention with the powers that be as to what shall be considered the cost when figuring the engineers' compensation. If extras creep into the work (a not unheard-of thing on small-town work), some councilman will object to including this in the total to form the basis for payment of the engineer, on the ground that the engineer may have allowed this extra to boost his own fee, ignoring the expense of supervising this extra work. It is petty but disturbing and happens even to the most dignified of engineers.

(F) *Tardy Completion of Work*—Engineers have had to chalk up a loss against a fee when the work is let to some incompetent contractor (sometimes chosen against the engineer's advice) who lets the work drag along interminably. During this prolonged period, the engineer's contract and pride in the job require him to keep an inspector on hand and to visit the work periodically himself. His limited fee is not destined to meet such conditions.

To sum up, there seem to be six factors (A to F) that militate against the percentage basis as being 100 per cent fair to either the municipality or the engineer. Many chances for strained relations are afforded. These always hurt public work. Some of these difficulties may be minimized by a carefully-worded working agreement; others are inherent in the system and can neither be eradicated nor removed. The worst difficulty is listed as (A). The scheme suggested under the bonus plan meets it squarely.

Per Diem Rate—The per diem basis for compensation is now in vogue for such purely consultant functions as expert testimony, valuations, original investigations and preliminary reports. For these, such a basis seems logical. But for reports and other engineering in connection with a construction project, it is of questionable merit. Under this system the engineer charges an agreed amount per day for his services, another for his assistants and a third charge for expenses. When a practising engineer is operating under this form of fee, he is spurred to produce for his client the best possible work for the least money, so that he may be in line for a return engagement.

Many points of friction with municipal councils are obvious when a practising engineer works under such an agreement. The charges for assistants are often open to argument. Councils fail to realize that a $200 draftsman costs an employer nearly $235 a month to employ, when there is prorated to him his share of the overhead expenses, including his vacation. Again, expense accounts may be disagreeably scrutinized by a hostile legislator, who will probably object to the inclusion of bills for such things as printing and blueprinting.

When engineers work on a per diem basis, they generally stipulate that a seven-hour day is intended. Oftentimes drawings and specifications have to be put out on short notice which involves overtime and the engineer legitimately counts every seven hours as a day. When a member of the town board discovers that on one calendar day the itemized bill calls for two days' pay, which is legitimate if fourteen hours were required on said day, a long discussion ensues.

When plans have to be approved by an administrative body, such as a river and harbor commission, modifications are often required after the drawings have been submitted for approval. Charges for this additional time afford opportunity for a member of the opposition to question the competency of the engineer.

Municipal ordinances often provide for the retaining of a consulting engineer at so much per day for a definite number of days per year, thereby safeguarding the budgetary requirements. Obviously, cases may arise where such a limit works an injustice to public work.

Theoretically, it would appear that the per diem fee for practising engineers has fewer disadvantages than the percentage system. Practically, it probably does not net so much in remuneration or it would long ago have superseded the commission system in all lines of business. Undoubtedly the latter is preferred in that costs can be expressed in percentage of the total, whereas with the per diem rate, the engineering expense may bear no established relation to the cost of the work.

The Flat Rate (Fixed Sum)—The flat rate (fixed sum) system has been applied to all sorts of engineering activities, even to expert testimony. It is financially advantageous to the municipality in that it can be readily budgeted. But, in the last analysis, this asset may turn to a debit, as any man, even an engineer, when he finds that he has the poor end of an agreement, is tempted to hedge and skimp. A flat rate is only fair to all concerned when the exact nature of the work and the time required to perform it, are known. The greatest objection to an engineer's doing business perpetually on the flat rate basis is that each assignment may involve renewed bickering with the council as to compensation. The element of bargaining—a disagreeable feature, and one that engineers should not have to resort to—is introduced as soon as the engineer deviates from his established schedule of rates.

Bonus and Penalty System—The word "bonus" has fallen into such disrepute that the writer hesitates to use it, but knows of no other word. By bonus he means the premium earned for expert fulfillment of the contract, as exemplified in some of the contracts of the Miami Conservancy District, or the North Jersey District Water Supply Commission (see *Engineering News-Record,* Nov. 4, 1920, p. 878). The writer would propose that the engineer enter into a contract to undertake the design and supervision on a percentage fee in accordance with the recognized schedules, but would at the same time agree that if, through his skill in office or field, the final cost of the work has been reduced from that first anticipated, he shall receive a bonus in recognition of his services in this regard. On the other hand, if his final designs result in a structure costing more than he had forecast in his first estimate, his fee would be proportionately decreased.

The bonus system might operate as follows: Suppose that the engineer's first estimate placed the cost of construction at $100,000 and he contracted to perform the services of design and supervision for 7 per cent. His fee would then be $7,000. By careful designing and the application of intricate original formulas such as are mentioned in the first paragraph of this article he is able to reduce the cost by $10,000. Then his bonus might be fixed at 7 per cent (or it might be placed at 14 per cent, or any other number) of the $10,000, or $700. On the other hand, if he did not take the necessary time in design to produce an economical structure, and the cost finally ran up to $10,000 in excess of the first estimate, he would be entitled to 7 per cent on the $100,000 but would be penalized 7 per cent of $10,000 or $700 on the excess cost. This bonus and penalty provision would tend to eliminate one of the great drawbacks of the percentage basis, discussed under A. The engineer would have a real incentive to get costs down to the practical minimum. Such a system will appeal to budget-makers as it will enable them to place a more definite value on engineering services than under any other system.

The objection might be raised that the engineer's bonus is figured from his estimate, and that he might put this high to play safe, and assure himself a bonus. The restraint on this procedure would lie in the fact that if the engineer did place an excessive estimate on the cost, the authorities would discard the project, and his own ends would be defeated.

Résumé—For purely consulting work—expert testimony, valuation, original investigations and reviewing drawings—a fee on the per diem basis should be most satisfactory to all concerned, especially when the contract stipulates the extent of the engagement. For the practising engineer, the modification of the percentage system by means of a bonus and penalty offers advantages over either the per diem or the flat rate. The bonus system inspires the engineer to produce the most economical structure consistent with the principles of good engineering.

It is true, however, that no system of fees will be satisfactory unless supplemented by a carefully-worded agreement between the engineer and the municipality, wherein the facts agreed to are set forth detailing the duties of the engineer and the items which shall be totaled in arriving at the basis of compensation. Such an understanding removes most of the objections to the bonus system, and together with it, should procure a working basis mutually satisfactory to the municipality and the practising engineer.

Water-Borne Typhoid at Ramsay, Mich.

THIRTY-SIX cases of typhoid fever occurring in the unincorporated village of Ramsay, Mich., early this year are attributed to the use of untreated, badly polluted river water. Ramsay is an unincorporated mining village of 1,800 persons, mostly foreigners who cannot readily speak English, located in Bessemer township, in the upper peninsula of Michigan. According to a short account of the epidemic by Dr. C. H. Benning, of the Michigan Department of Health, published in *Michigan Public Health,* April, 1924, "diarrhea has been extremely prevalent" in Ramsay for "several months" when in January a young man supposedly suffering from appendicitis was taken to a hospital in a neighboring town. The case was quickly diagnosed as typhoid. Thirty-five additional cases occurred in February and March. Dr. Benning and W. C. Hirn, assistant state sanitary engineer, were sent to Ramsay to take control measures. Within 36 hours an emergency chlorinating plant was installed and 12 hours later a temporary hospital with a capacity for 25 cases was in readiness. During the two weeks of state investigation and control 20 patients were admitted to the hospital, "thereby eliminating future contact cases." About 1,500 persons were inoculated against typhoid. Besides chlorinating the polluted water, a safe supply from the town of Wakefield was introduced in sections of the town previously supplied with the polluted water.

The nature of the water pollution that caused the outbreak is thus described by Dr. Benning:

> The houses are built on the sides of two hills facing each other, with a river running between them. Some of the houses have modern plumbing and the sewage from them enters the river. All the sewage from the school enters the Big Black River, 200 to 300 ft. above the location of the pumping station.
>
> The water supply of the town is varied: springs, wells, river water, and in one section of the town, piped spring water, which has been tested and found to be of good quality. The water supply of the school is piped from Wakefield, some four miles. The water there is under proper control and all tests up to the present have shown it to be of the best quality for drinking purposes. This in a large measure has prevented a widespread epidemic among the school children. The river water on every test has shown a high bacterial count.
>
> The two sections supplied with river water were the ones in which the typhoid occurred and to which it has been practically confined. This river water was piped in for fire protection by the mining company and at the request of the villagers connected with their houses for domestic use, but they were informed individually, by letter, that this water was unfit for drinking purposes. Unfortunately, as has been previously stated, a large proportion of the inhabitants are foreign born and with little or no knowledge of sanitation in even its crudest form. This warning was totally unheeded, as can be vouched for by the writer.

An English Terminal Hump Yard

Gravity switching for a freight terminal is an unusual arrangement adopted at the new East Side terminal of the Great Western Ry. at Bristol, England. The line from the hump serves fourteen parallel stub tracks, not by means of a ladder track but by several diverging tracks, each opening out into two or three of the body or stub tracks. A grade of 2 per cent leading up to the summit of the hump is followed by a descending grade of 3 per cent to the first set of switches and then 0.3 per cent to the parallel body tracks. For outbound movement, a double crossover enables cars to be moved on a surface track passing around the hump.

From Job and Office

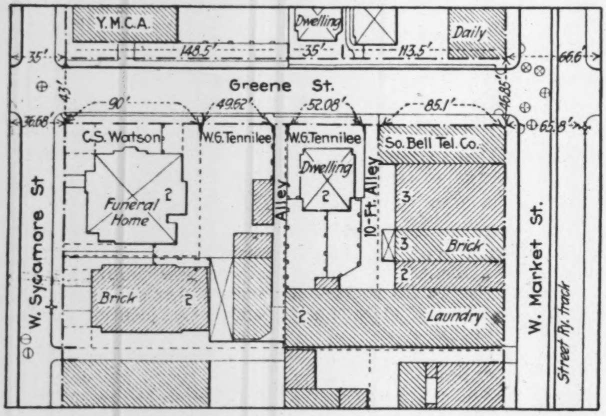
Hints That Cut Cost and Time For the Contractor and the Engineer

Some Notes on City Mapping

By O. W. Gatchell
Sanford, North Carolina

For mapping outline locations in congested city areas, a method using a field drawing board with direct plotting of all measurements as made with chaining equipment alone, without transit or plane table or notebook records, can, under certain conditions be used to good advantage.

Information usually required on city maps for tax and planning purposes comprises: (1) Legal locations, such as exact lot and block frontages, street widths between and co-ordinates of occupied block corners; and (2) outline locations of all buildings, street works and sidewalks and locations of interior property line fences. From legal locations, evasion of street ordinances and property not listed for taxation can be uncovered. Outline locations are necessary for city plan purposes, condemnation proceedings and fire regulations.



FIELD DETAILS PLOTTED FROM TAPE MEASUREMENTS

The original preparation of such city maps involves triangulation, traverse, location of features and office reduction. Concerning primary horizontal control as developed from a triangulation network, practice is well established. Field methods for breaking up the city area for map control are also standardized, with local considerations determining size of map sheet and degree of accuracy required for transit and steel tape traverse. It is for the final step of mapping outline locations in congested city areas that a choice of several field and office methods becomes necessary, particularly because this phase of work will determine the cost and speed of release of the completed map, besides influencing the amount of detail shown.

Under certain conditions a hard copy of the map sheet, finished as far as mapping outline locations is concerned, can be made to final scale directly in the field, a block at a time, using a field drawing board mounted on a tripod, together with steel and metallic tapes for chaining equipment. Details are drawn directly on the field sheet, thus avoiding entirely a mass of notebook sketches and records which would later have to be worked up cold in the office. No transit, plane-table attachment or stadia is used by this method, measurements on the ground around the sides of the block being tied in on the work of the block traverse party with additional ties to curb lines where found straight. The locations for block interiors are then tied to these outlying locations by chained intersections.

For the city map in question, no contours were run due to local reasons. On a scale of 50 ft. to 1 in. some sixty sheets 28x40 in. in size composed the finished map covering 5 sq.mi. of area.

The accompanying figure shows the procedure for chaining-in the outline locations on typical area. The field party began work on a block with the field sheet for that block tacked on the drawing board. Beginning at a corner, measurements were taken down one side of the block for about half the length. All locations of street works, manholes, sidewalks and the like were run between the fronts of buildings and the center of the street. Outlines of fronting structures were mapped and to these the backlying locations of fences, outbuildings and alleys were tied. To show the firmness with which outline locations can be held by chained intersections, some actual measurements for intersecting important control points are given in the figure in dotted lines. From known points on the block traverse lines such as abutting building corners and lot markers, measurements were made to either side along the traverse to the intersection (produced) of the main outlines of fronting structures, after which their offsets were run. Short checks between outlines are readily apparent from the figure and were chained to keep a constant check on plotting.

Plotting went along with chaining, being carried forward from the block traverse and curb lines which had been inked on the field sheet. The chief of party remained at the board and plotted the measurements as called, placing the board so as to direct the two chainmen with fewest possible moves. An example of putting sight rod and chain to work that ordinarily would take a transit is shown by the tie line run down the 10-ft. alley where a right angle was turned with the chain off the marked traverse line. Chainmen then lined in as they measured out on the tie line to the various intersections (produced) of building and fence lines, thus checking the locations as chained direct.

Mapping of outline locations was preceded by the basic work of block and sheet traverse parties who worked by the usual transit and notebook methods. Legal locations thus obtained, such as exact frontages dimensioned in the figure, corner offsets and curb lines, were all inked in on the field sheet and used by the outline party as stated. Where block corners could not be occupied the block traverse was run in on the closest offset line giving clear observation. The map sheet traverse bounded in normal cases an area three blocks square and thus controlled 15 to 20 block traverses. Only occasionally could a sheet traverse side serve as a side for one or more of the bounded block traverses, because of the necessity of securing a firm sheet figure. Allowable closure errors were 1:40,000 and 1:20,000 for sheet and block traverses, respectively. All traverse corners were referenced, certain sheet traverse corners being monumented for triangulation purposes. Different stages of work in mapping locations by the above methods were:

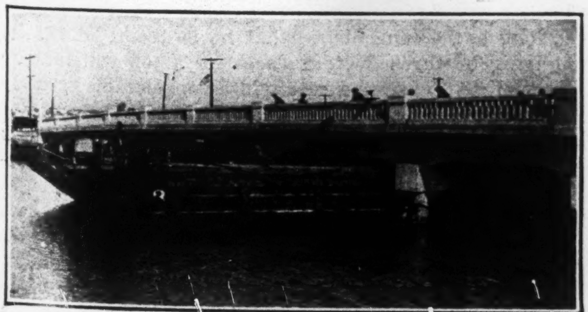
Place	Stage	Average Time
Field	Ran map sheet traverse	1 Week
Courthouse	Examined plots and corner lot deeds	....
Field	Ran each block traverse	1 Day
Office	Plotted sheet and block traverses on master hard copy sheet, obtaining separate block field sheets therefrom by pricking through	After Field Hours
Field	Mapped outline locations on each block sheet	1 Day
Office	Adjusted lot frontages; on master tracing penciled traverses from master sheet, furnishing orientation for inking block sheet locations directly on tracing	1 Week

One map sheet covering 15 blocks (lap deducted) mapped and traced by engineer and 2 chainmen in 7 weeks.

Examination of this schedule shows that the office work, due to the direct field plotting method, consisted mainly of tracing. The methods described were developed by the writer while assistant engineer with F. T. Miller, consulting engineer, Greensboro, N. C. The writer would be glad to hear from others who have found similar methods useful for the direct plotting of city details. The method, in immediate conjunction with transit, should be found of value on transmission line and highway location for mapping right-of-way features, the general statement being that on survey work, where the use of a plane table is precluded, the mapping of those details for which scaled values are acceptable will go faster, be cheaper, and in the end more accurate, the more that direct field plotting replaces the customary notebook transcription of such details.

Tidal Power Lifts Concrete Bridge Span

ENGINEERS of the California State Highway Commission recently employed the ocean tide to assist them in removing a concrete bridge span 46 ft. long, weighing 168 tons, to permit a large dredge to enter the west channel of Alamitos Bay, in Los Angeles County. The bridge had been constructed with the possibility of its opening in view, and, when the city of Long Beach decided to do some dredging in connection with a new park project, permission was sought to open the bridge.



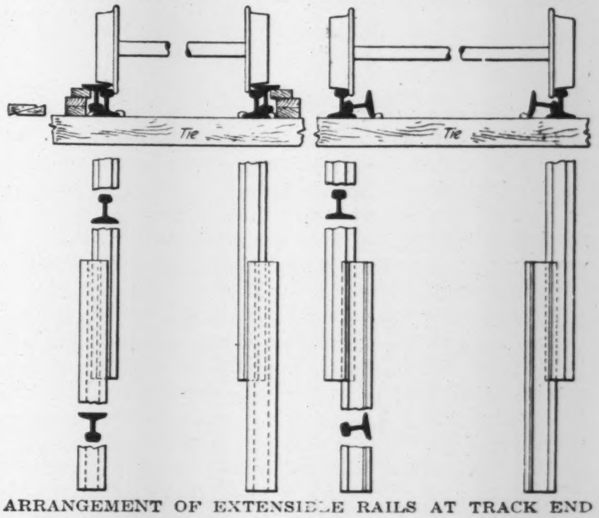
CONCRETE SPAN LIFTED BY TIDAL EFFORT

In lifting the bridge span, a barge 30 ft. x 104 ft. x 9 ft. deep with a draft of 2 ft. 6 in. was used. It was placed in position at low tide and 12x12-in. timber blocking was placed on the deck of the barge longitudinally to distribute the load and secure the necessary lift. Seven parallel lines of timbers were used, giving 49½ sq.ft. of bearing surface under the five girders, equivalent to a pressure of 3.4 tons per square foot on the blocking. The barge measurements showed a theoretical submergence of 21 in. due to the load of 168 tons. The actual lifting commenced at 23 in. submergence, the difference being required apparently to break the bond of the ¾-in. elastite expansion joint at each end of the span. Less than 10 min. was consumed in floating out the barge, no tugboat being required, and making fast alongside the bridge. As soon as the dredge had been taken through the bridge, the tug towing it returned, was made fast to the barge holding the span and towed it back to position. Exactly five hours after traffic was diverted from the bridge it was resumed.

The work was done by the United Dredging Co. under the direction of L. M. Ransom, assistant division engineer, at a cost of about $500.

Adjustable Rail Lengths for Track at Tunnel Heading

IN TUNNELS mucked by hand and hence where a slick sheet is used, the muck car can be run off the end of the track onto the slick sheet and thus brought as close to the muck pile as desired. Where mechanical equipment is used for mucking, however, slick sheets are not required and larger muck cars are employed thus making it impracticable or at least troublesome to get the cars closer to the face than the end of the track.



ARRANGEMENT OF EXTENSIBLE RAILS AT TRACK END

A means of overcoming this difficulty without the use of special short track sections and one which is extensively used in western tunnel work requires only two loose rails of standard length and section which are used as extensions to be slid out from the ends of the track. These additional rails are used either bottom up or lying on their side, as shown in the accompanying illustration. The side position is preferred because a considerable length of rail in this position may be laid on the tunnel floor without blocking or ties and is stable enough to carry safely cars of 6-cu.yd. capacity. In this side position the extensible rail becomes a groove or flange-bearing support for the wheel, the flange resting on the rail web and being kept from running off on either side by rail base and head, respectively. As the work advances the rail can be slid ahead until it has been extended for one full rail length, when the track can be brought up.

From Job and Office

Hints that Cut Cost and Time

Some Remarks on Column Footings

By David C. Coyle
Gunvald Aus Co., Engineers, New York

The method of computing steel slabs for column bases dates back to the days before two-way floor slabs had demonstrated their remarkable strength and stiffness. Where there is no interference from the building law, I suggest the following method of computing these plates as more economical than the Carnegie formula and at the same time conservative. The Carnegie formula is rational for a rectangular plate with the column assumed as a uniform load on a rectangular area in the middle of the plate. According to this formula, $t = \sqrt{\frac{3W\ (A - a)}{64{,}000B}}$, in which A and a are the lengths of the slab and column rectangles, and B is the width of the slab. This formula is derived from the equation

$$M = \frac{W(A - a)}{8}$$

I propose to show that the uneven distribution of the load under an ordinary H column justifies the use of an equation $M = \frac{W(A - a)}{10}$

Consider as an example a 14-in. Bethlehem column of 228.5 lb. per foot, carrying a load of 870,000 lb. We will suppose that the allowable pressure on the concrete by the Joint Committee formula is 1,100 lb. per square inch, and that a convenient depth for the concrete footing gives a required perimeter of 120 in. for punching shear. We should then have a 28x32 plate with 970 lb. pressure. As this plate takes its load it will of course dish slightly, so that the pressure between the milled end of the column and the plate will vary from a minimum at the center of the column to a maximum at the tips of the flanges. Assume that the four outstanding legs of the column have a uniform pressure of 20,000 lb. per square inch on an area sufficient to carry the load, while the inner part of the column has no pressure. Such a condition would be quite safe, and it would occur, approximately, before the plate could fail.

In the sketch, one leg of the column is shown with the shaded area carrying 217,000 lb. at 20,000 lb. per square inch, the area being 11 sq.in. The bending moment in this plate is then

$$435{,}000 \times (7 - 4\tfrac{1}{2}) = 1{,}080{,}000 \text{ in.-lb.}$$

which is $\frac{1}{10.8}\ 870{,}000(28 - 14.62)$, or $\frac{W(l - a)}{10.8}$

This moment has been figured with no regard to the two-way dishing action as it affects the strength of the slab; the method is the same as that used in deriving the Carnegie formula, except that uniform pressure is figured under the slab, but not under the column.

This example, in which the column has a unit-stress of 13,000 lb., represents the worst case, as columns usually go; often the unit-stress is less, seldom much more. It seems evident therefore that the thickness of the plate, instead of being figured from a bending moment of $\frac{1}{8}W(A - a)$, can be safely figured for $\frac{1}{10}W(A - a)$ in the direction of the flanges.

In the direction of the web the bending moment under the flange is very nearly that of a cantilever $8\frac{1}{4}$ in. long.

$$M = 870 \times \frac{8\frac{1}{4}}{34} \times \frac{8\frac{1}{4}}{2} = 925{,}000$$

$$\text{which is } \frac{870 \times (32 - 16)}{16} \text{ or } \frac{W(l - a)}{16}$$

The bending moment per inch width is

$$\frac{1{,}080{,}000}{32} = 33{,}700 \text{ or } \frac{925{,}000}{28} = 33{,}000$$

The corresponding formulas for thickness of slab are, with steel at 16,000:

for bending around axis parallel to web:

$$M = \frac{W\ (l - a)}{10},\ t = \sqrt{\frac{W\ (A - a)}{26{,}700\ B}}, A \text{ being less than } B.$$

for bending around axis parallel to flanges:

$$M = \frac{W(B - b)^2}{8\ A},\ t = (B - b)\sqrt{\frac{W}{21{,}300\ AB}}$$

The plate used above as an example, if figured by the Carnegie formula, would be a square plate 30x30 in., and

$$t = \sqrt{\frac{870(30 - 14.62) \times 3}{64. \times 30}} = 4.56 \text{ in.}$$

Figured by the proposed method we get

$$t = \sqrt{\frac{870(28 - 14.62)}{29.3 \times 32}} = 3.5 \text{ in.}$$

or

$$t = 16\ \sqrt{\frac{870}{21.3 \times 28 \times 32}} = 3.46 \text{ in.}$$

Figured by the "triangular" formula $\frac{W(A - a)}{12}$ we should get, for a 30x30 plate:

$$t = \sqrt{\frac{870(30 - 14.62)}{32 \times 30}} = 3.75 \text{ in.}$$

The conclusion is that one can safely make a plate 4 in. longer than its width, for 14-in. columns, and figure the thickness for the short dimension at $\frac{W}{10}(A - a)$, and similarly for other sizes of columns, so long as he remembers what he is about. A careful figuring of three or four cases on a job will indicate the method to use and result in a considerable economy of slab steel.

Footing Reinforcement—Another matter in which the standard practice is unsatisfactory is the computation of concrete footings for heavy pressures, such as occur on hardpan or rock. The smaller footings have to be so deep, in order to get the required bond in the steel, that it seems absurd to use any steel at all.

Consider a load of 200,000 lb. at a pressure of 10 tons, requiring a footing 3 ft. 2 in. square. Assume a 12x16-in. bearing plate. The bending is then, by the usual "triangular" formula,

$$\tfrac{1}{12} \times 200{,}000(38 - 12) = 430{,}000 \text{ in.-lb.}$$

If $d = 24$ in., 1.3 sq.in. of steel are required. But for bond the case is not so good. We allow 100 lb.

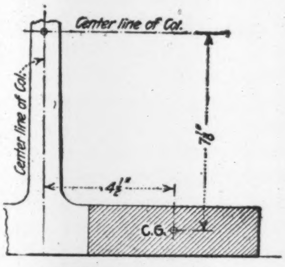
From Job and Office

For Contractor and Engineer

per sq.in. bond stress for deformed bars, plus 50 per cent for hooked ends, less 25 per cent because the bars are crossed, and use the formula $\Sigma_o = \frac{shear}{jdc}$ The shear $\frac{200 - 26}{4} = 44{,}000$ at one edge of the plate, and *jd* is 21 in., so that

$$\Sigma_o = \frac{44{,}000}{21 \times 150 \times \frac{3}{4}} = 18.5 \text{ in.}$$

total periphery of one band of bars. Thus, for the bond we should need ten ½-in. squars bars, which would be twice as much steel as required for bending. Three expedients are suggested for avoiding this anomaly.



ASSUMED BEARING OF COLUMN FLANGE

(1) Suppose that we use a footing 24 in. deep over all, and figure the friction on the rock as carrying the tension; 50 per cent is a conservative coefficient. Then consider the tension acting across a plane cutting through the center of the footing. As above noted we require 1.3 sq.in. of steel at 16,000 lb. per sq.in. or 21,000 lb. tension. Each half of the footing is therefore subjected to 21,000 lb. drag toward the center. At right angles to this section is another with a similar drag, making a resultant friction of $2 \times 21{,}000 \times \sqrt{2} = 60{,}000$ total for the whole footing.

At 50 per cent coefficient we should get a total friction for the whole footing of 100,000 lb., which is ample. The fact that stepped footings in brick were used for many years before the introduction of concrete, and that, though these footings had little if any tensile strength across the bottom, they seldom failed even on fairly soft soils, indicates that it is not unreasonable to depend on friction, *i.e.*, on a ring of sloping reactions on the rock or hardpan.

The required tension above noted was 1.3 sq.in. at 16,000 lb. or 21,000 lb.

(2) Suppose that we round the bottom of the footing so as to get a slope of 30 deg. at the edges. The friction would be negligible, and the pressure can be assumed to be nearly normal to the bottom surface, and all the lines of pressure would go through the bearing plate, so there would be no tension in the concrete at all. This extremely simple method, which would cost less for rock excavation and concrete and be easier to do in the field, has the fatal defect that it smacks of radicalism, and would inexpressibly shock any good conservative contractor or hundred per cent building inspector who might see it on a drawing. It will only serve where the contractor is intelligent and there is no building law.

(3) For small footings in clay or similar material, where the friction is uncertain, and vertical pressure only is desirable, the steel figured as necessary for bending can be inserted in the form of a square ring around the edge of the footing. No bond then need be figured, as the footing is a miniature dome with its tension ring. This method I believe was patented about thirty years ago, in which case it is free of royalty now.

As footings are designed under, for instance, the New York law, we have an unnecessarily high safety factor in the steel slabs, and we have in the concrete mat a set of rods with a high theoretical bond stress and an actual stress of probably zero in bond and tension. These points illustrate the fact that, where there is no rigid building law, it is possible to effect a considerable improvement in the design of footings without exceeding the conservative unit stresses.

Chart Aids Estimate and Design of Spiral Concrete Columns

By Jacob Feld

With Barney-Ahlers Construction Corporation, New York City

THE CHART shown herewith is an original one which I have found useful in estimating and designing spiral reinforced-concrete columns. It saves a considerable part of the work required in "taking off steel" and in determining the weight of spirals for ordering. Its use is as follows:

Starting with the diameter of the spiral or the column core at the top of the sheet and following a vertical line down to the proper oblique line corresponding to the pitch of the spiral, the scale on the right gives the length of spiral in inches per inch height of column, and the first scale on the left gives the same in feet and decimals of a foot. The weight of the spiral per inch height of column is given for nine different sizes, including all the usual ones.

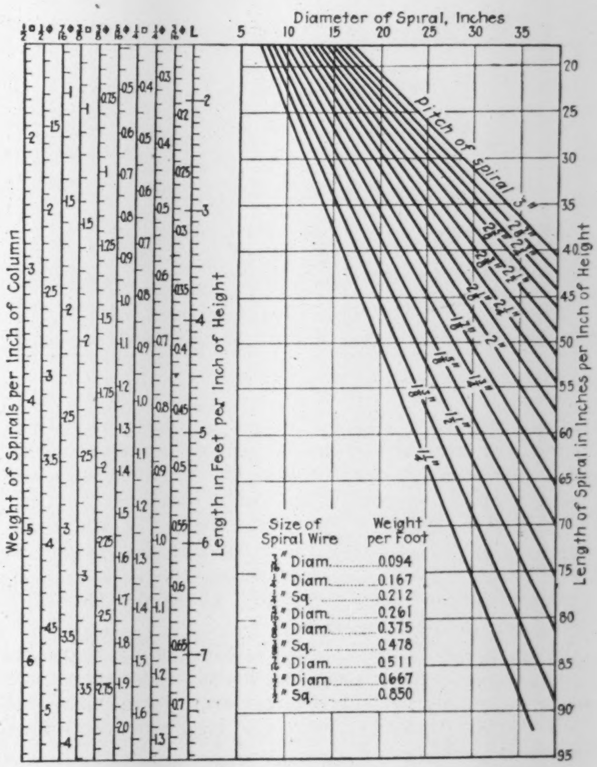


CHART FOR DESIGNING SPIRAL CONCRETE COLUMNS

From Job and Office

Hints that Cut Cost and Time

Movable Form for Circular Bins

By Nathan M. Kaplan

Contracting Engineer, Keeley Bros. Contracting Co., East St. Louis, Ill.

IN THE construction by the Illinois Glass Co., of Alton, Ill., of its Bridgeton, N. J., plant, an interesting feature was developed in building the sixteen circular reinforced-concrete bins forming the batch-handling plant. Each one of these bins has a diameter of 26 ft. and a height of 36 ft. with a wall thickness of 6 in. The bins are arranged eight to a unit, in two batteries of four bins each. Bins are fed from overhead conveyors, four of them emptying from a point near the bottom in the side of each bin, the other four emptying directly through a hole in the base. The latter four are dead storage and the first four live storage, and from them dry materials are taken, properly proportioned, and conveyed to the furnaces to be melted and made into glass.

In concreting these bins the usual sliding forms supported on green concrete were not used. The type used consisted of an inner and outer sectional form, circular in shape, about 8 ft. long and supported on each end by a 4x4-in. stilt. The end of each panel was fastened to an iron rack, as shown herewith. Each section was about 4 ft. in height. Inasmuch as the racks actually supported the form and they in turn were carried on the stilts, all the weight of the forms was carried therefore by the stilts and not by any of the concrete. Four bins were poured in one operation, although the contractor found that all eight could easily have been handled together.

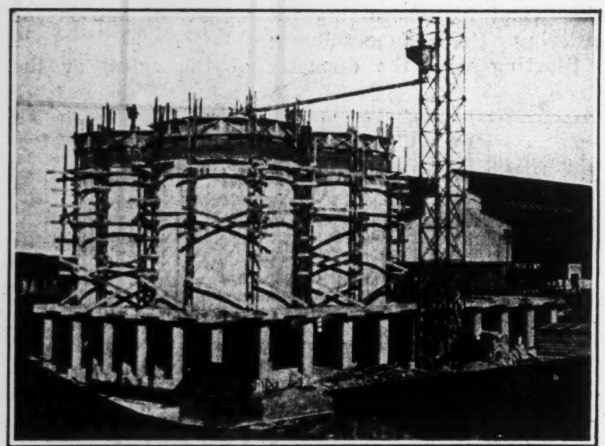


FIG. 1—MOVING FORMS SUPPORTED ON STILTS

Work was accurately timed and not more than two rings poured every twenty-four hours. This speed naturally was obtained only in very warm weather. The limit during December was one ring in twenty-four hours.

As the forms were 4 ft. in height and as it took eight pours to pour eight bins, the concrete was given actually that much time in which to set to carry its own weight and stand the moving of the form.

At the time the first form was set on the base, the stilts, or 4x4s, were set two at each junction point, inside and out, about 6 in. apart. At the height of the top of the iron rack a notch was cut in each 4x4 and the ratchet jack inserted in these notches. To keep the form from spreading and to hold the stilt in position, a 2x4 batten was nailed to the 4x4 and a clamp fastened to it as shown. Since the clamps were placed only below the forms, no interference with the movement or concreting was offered. Men stationed at the jacks operated them all in unison, raising the form evenly.

Continuous concreting is possible, but in that event the forms should be raised an inch or two, the steel placed and the form filled. As the weather did not permit the concrete to set sufficiently at the time the job was poured, a form was raised to total height, first on the inside, the steel placed, and then the outside form jacked up into position. When the form is raised its full height, the ratchet is taken out, new slots for it cut in the 4x4s and the operation repeated. The forms consisted of 2x12s cut to an arc on a band saw, and 1x4-in. sheathing nailed to it vertically.

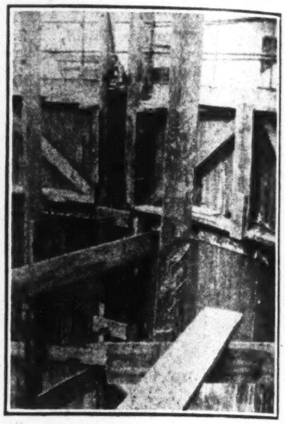


FIG. 2—FORM DETAILS FROM BIN INTERIOR

The Bridgeton development of the Illinois Glass Co. replaced the old plant of the Cumberland Glass Co., whose property the former organization acquired. It was decided to do away with the old plant and house the new factory in a group of modern buildings, the construction herein comprising part of that development.

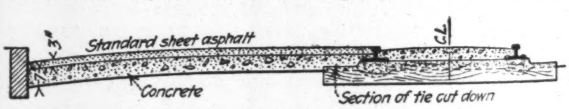
The bins were designed by the general contractors, Keeley Bros. Contracting Co., of East St. Louis, Ill., and the supporting structure was designed by the Illinois Glass Co.

Section for Surface-Car Concrete Street

By C. Perry Prann

City Engineer, Meriden, Conn.

DESIGN of a satisfactory pavement section consisting of a 3-in. asphalt top on a 7-in. concrete base in a street where a traction company maintains a single track line was solved in Meriden, Conn., in the manner herein explained. In this particular instance the street car rail had a height of 5 in. and ordinarily the other specifications would permit of only 2 in. of concrete being placed on top of the ties.



RECESSED TIE GIVES ADDED PAVEMENT THICKNESS

The traction company had been asked to replace the 5-in. rails with 7- or 9-in. rails, but because the rails had been down only about three years, the traction company deemed it impossible to make replacements so soon. Therefore, resort to other means was necessary. After the grading was done and previous to placement of the

From Job and Office

For Contractor and Engineer

pavement, a 2-in. cut was made at either end of the ties outside of the rails, 3 in. from the spikes. The upper 2-in. section, from the cuts to the ends, was then taken off with an adze. The concrete base and the area between the rails were then laid simultaneously and the sections from rail to curb later covered with standard sheet asphalt consisting of 1½ in. of binder and 1½ in. of wearing surface.

As is shown in the diagram, the cutting away of the sections at the ends of the ties gave additional space for the cencrete over the ties and, though it may have weakened the ties to some extent, this weakness was more than compensated for by the additional strength of the concrete base at these points.

Building 3,000 Ft. of Spring Wells Sewer in Record Time

HEAVY earth-handling equipment, steel forms, a mounted mixer fed by industrial cars from a material yard on a siding and day and night work enabled a contractor on the new Spring Wells (Mich.) concrete sewer to complete 3,000 ft. of 13½ x 18-ft. five-center arch section from the middle of August, 1923, to the middle of November. The sewer was laid in a trench averaging 27 ft. in depth and has reinforcing in the bottom only. The thickness at the crown is 12 in., and at the base 18 in. The soil is of heavy, hard yellow clay underlaid with stiff blue clay containing little moisture.

BASE FOR BELLMOUTH CONNECTION TO 13½ X 18-FT. SEWER

Small pump in sewer (at right) on sand bags discharged small seepage through hose into old brick sewer at lower left of picture. The building mixer shown in the photograph is not the paving mixer used on the straight-away run of sewer. It is fed in the same way, however, from dump cars running on a small section of the mounted elevated truck.

Two ¾-yd. steam shovels, one working ahead of the other, dug a trench 50 ft. wide and 8 ft. deep. The surplus dirt was loaded on trucks on either bank and disposed of within a mile circle. For digging the remainder of the trench a dragline, mounted on skids and rollers, was equipped with a 75-ft. boom and 2½-yd. bucket which permitted disposing of the excavated material at a sufficient distance from the edge of the trench to eliminate the danger of slides. Back-filling was done with a steam dragline mounted on skids and rollers and equipped with a 2-yd. bucket.

Forms consisted of 120 ft. of telescopic steel forms with traveling conveyor for moving 30-ft. sections at a time; the forms were furnished on lease only. For outside forms sectional wood panels were made up of ⅞-in. matched lumber, 15 ft. in length fastened to 2 x 6-in. ribs cut to conform with the outside shape of the sewer. The forms were moved and set up by the night crew and were in place ready for the day crew to pour concrete continuously all day. Arch sections were poured in the morning while the dragline was excavating the bottom of the next section.

For concreting, a 1-yd. paving mixer was mounted on a self-propelled running gear. The track was made up of 80-lb. rails laid on the edge of the trench so that the mixer could discharge by chute directly into the forms. The mixer was charged by dump cars running on an elevated platform, 2 ft. high and 100 ft. long.

The material yard was located ½ mile away from the work alongside a 15-car siding. A 25-ton locomotime crane equipped with a 1½-yd. bucket unloaded the railroad cars and rehandled the material into a storage bin of 100-cu.yd. capacity. The bin was elevated to permit the industrial equipment to pass underneath. For transporting material to the mixer over the 24-in. gage track, two 4-ton locomotives and fifty 40-cu.ft. cars were used.

The work was carried out under the general direction of Clarence W. Hubbell, consulting engineer, by Raymond A. Mercier, contractor.

Job and Office Notes

In Order to Insure Steady Progress with the annual program for road construction, the Wisconsin State Highway Commission schedules the monthly progress desired, as follows: by June 1, 8 per cent; in June, 15; July, 25; August, 23; September, 20, and in October, 9 per cent. Thus 71 per cent of the work should be completed before September.

"Owing to the Fact That All the prepared expansion joints that I have used in concrete pavement allow the filler to be forced out forming a ridge on the pavement, I do not consider them a success, although they do take care of the expansion," writes Albert H. Tompkins, consulting engineer of Americus, Ga. "To eliminate these ridges I have tried different kinds of wood joints. As an experiment I placed blocks of wood in steel vises. The only one that expanded back to its original dimension was a cypress board.

"In January, 1923, I constructed a gage so that the expansion and contraction in concrete pavement could be measured, at the same time placing a ½-in. cypress board in a vise with a like gage; this vise and board were exposed to the weather the same as the concrete. The contraction and expansion of the concrete was checked twice a day and the vise was set to correspond. At the end of the sixty-second day the board was removed and within twenty-four hours it had expanded to its original ½ in. At the time that the board was removed it was compressed to less than ¼ in.

"At this time I was constructing a street parallel to one in which prepared joints were used and being confident that the cypress boards would give satisfaction I used them.

"I rode over this street a few days ago and did not experience the bumps caused by the ridges where prepared joints were used. I also found this street free of cracks, where another street constructed ten days before had developed several. Cypress decays very slowly but it is better to creosote the boards before placing."

Letters to the Editor

This department aims to be a forum for the discussion of the views of engineers and contractors. The range of interest should be as wide as possible. Contributors are, therefore, asked to make their letters short.

To the Embryo Engineer

Sir—I have read with much interest your editorial entitled "To An Embryo Engineer," in your June 5 issue, and congratulate you particularly on that part of your editorial which reads as follows:

"What you have been studying is not overly important in itself; it will have value only as you apply it." And again: "You need not carry this modesty to the degree of humility, for the promised inheritance of the earth has as yet not been realized."

I have had great pleasure in talking to the embryo engineer, and have found that he is generally over modest, and has seemed to be gratified when I directed his attention to the fact that he is equipped to accomplish, and if he fails, he is to blame. I believe Henry Ward Beecher is credited with saying that if we did one half of what we are able to do, we would astonish the world.

Your editorial seems to be confined to suggestions on all strictly technical achievement. I should have been glad if you had gone further and impressed upon the embryo engineer the importance of his conduct toward his fellow men and the necessity of coupling a knowledge of affairs with knowledge of engineering. Probably all of these embryo engineers have read Hamlet, and are familiar with the precepts given by Polonius to his son. It may be, however, that these precepts do not continue in their memory, and I feel that at least certain of them should constantly be kept in mind, not only by engineers but all men. I refer particularly to the following:

"Give thy thoughts no tongue, nor any unproportioned thought his act. . . . Give every man thine ear, but few thy voice. Take each man's censure, but reserve thy judgment."

And most important of all: "This above all—to thine own-self be true, and it must follow, as the night the day, thou canst not then be false to any man."

Charles Hansel,
Consulting Engineer.

New York City, June 20.

Costs and Rates of Painting Steel

Sir—In your issue of May 22, I note a letter from A. H. Sabin referring to my article on Sandblasting and Painting Steel Bridges, which was published in your issue of May 1. The criticism does not refer to the data on sandblasting but only to the data on painting given in Table I. Mr. Sabin says that the paint used was too cheap, that three coats should have been used, that the labor costs are too low, and that a man cannot put on as much paint as was shown in the table.

As to the paint used, Mr. Sabin quotes costs to prove it was of inferior grade. In this he assumes 1923 prices. The table referred to a portion of the work done in 1922, for which the paint was contracted in 1921 and delivered as needed. The table is arranged in such detail that price changes are easily taken care of by a simple substitution in the "material" column.

An additional factor is that the old paint was removed only where necessary, but it should have been added that where the steel was exposed it was "spotted" with red lead. This was charged under first coat. The steel was therefore given three coats where exposed and two over old paint which was not entirely removed.

The $1 for application is the correct figure to use, as I am making a comparison with my own figures, which were for application only.

Mr. Sabin considers our labor costs too low. Our painters were paid 62.5c. as stated. They are now getting 70c. The table showed that 65,000 sq.ft. were painted two coats for a labor cost of $1,174, or 1.8c. per square foot. Mr. Sabin submits some costs from a contractor which he considers very good. For two-coat work they give a labor cost of $1 for painting one ton. Assuming 200 sq.ft. to the ton, an average figure, we get from Mr. Sabin's data a labor cost of 0.5c. per square foot.

The table is so arranged, also, that any one can substitute his own labor rate. I have been commended by officials of the American Bridge Co., the Reading Ry., and others for my analysis of sandblasting costs.

Mr. Sabin objects that a man cannot put on 1.3 to 1.5 gallons per day without using a brush wider than 4½ in. or diluting the paint. Our painters are getting this result with a 3½ in. brush. On this point let us again analyze the contractor's costs which Mr. Sabin submits. For the cost of painting one ton he gives, paint $1.75, labor $1. His paint averaged $3.50 per gallon. We will assume labor at 70c. It follows that one ton required 0.5 gal. and 1.43 labor-hours, or a painter spread 2.8 gallons in one day. A higher labor rate would increase this. Was benzine used in the paint, or was it put on with a broom, or was the contractor not telling all he knew about costs in his business?

F. G. Schworm,
Assistant Engineer, Bureau of
Highways of Philadelphia.

Philadelphia, June 1, 1924.

Lead Joints in Water-Pipe Plugs

Sir—I have read with interest the article on Testing of Holding Power of Lead Joints in Water Pipe Plugs, in your issue of May 15, p. 867.

It has been my practice to use a lead ring in place of oakum to seal the bottom of the bell, when placing plugs. This ring is made from small lead pipe flattened to size and driven in against the bead and then calked the same as the poured joint. The joint is then poured like other joints and calked again. This gives a joint in which the tendency to burst due to the wedging of the lead by the bear is removed from the extreme end of the fitting.

Although I have made an attempt to burst a fitting by heavy calking of the bottom lead ring, I have been unable to do so; but I know of many incidents where an ordinary poured joint has been burst by unskillful calking.

I conclude from the article that the pressure given at the time initial slipping takes place is approximately the pressure at which pipe without beads would pull apart unless restrained by other means.

S. P. Baird,
The Jennings-Lawrence Co.

Columbus, Ohio, June 16.

Land Drainage Decision in Wisconsin

Although the state of Wisconsin has failed to carry out its agreement to drain certain swamp lands, a recent decision of the State Supreme Court seems to support this neglect by nullifying the agreement, according to the following item in the quarterly report of the State Department of Engineering:

An important decision of the Supreme Court, in the case of Crawford County Levee and Drainage District No. 1, holds that the State Railroad Commission has not the constitutional authority to permit a drainage district to modify the flow in a navigable stream, or to improve its channel for drainage purposes even though the agricultural benefits would be great. The decision is based on the ordinance of 1787 which required the Northwest Territory to hold its navigable waters in trust for the people of all the states. This is thought to nullify the obligation which the state assumed when it accepted about 2,000,000 acres of swamp land from the federal government under the act of October, 1850, and promised to expend for drainage the money received from the sale of these lands. Since then the swamp land fund has been absorbed, but the lands have not been drained.

News of the Week

CURRENT EVENTS IN THE CIVIL ENGINEERING AND CONTRACTING FIELDS

Freeman's Research Offers Are Extended

Mechanical Engineers and Boston Society Also Given Gifts of $25,000 Each

In addition to the $25,000 endowment given the American Society of Civil Engineers for research, particularly in the field of hydraulics, John R. Freeman, past-president of the society, has offered like sums each to the American Society of Mechanical Engineers and the Boston Society of Civil Engineers. The gifts are made, Mr. Freeman explains, "because of a lively and grateful remembrance of the encouragement" which association with members of all three societies inspired. Mr. Freeman had provided in his will the making available of these trust funds, but before leaving for Europe recently he decided to make the money immediately available.

In making his offer to the Am. Soc. C. E. Mr. Freeman wrote in a telegram delivered at the Pasadena meeting of the society to John H. Dunlap, secretary, that aside from scientific research, the fund might be diverted to the use of those willing to make translations of important engineering documents, or in the publication of professional papers and memoirs that, save for the provision of a few hundred dollars, might otherwise go unpublished.

OPPORTUNITIES OFFERED

In clarifying his idea as to what the fund could accomplish Mr. Freeman says:

"I know of a case now, where an autobiography of one of our most inspiring scientists and educators is held back because no publisher has been found to take the risk. Again, a scientific memoir to which one of our most eminent American engineers had given many months was not finished at his death, lacking only some tabulations and a few insertions. It would have been forever lost had not his executors been prevailed upon to contribute a few hundred dollars for the employment of an extremely capable young engineer who willingly did what was necessary to prepare the manuscript for publication.

"Prof. Herbert Engels, long at the head of the hydraulic laboratory of the Technical High School at Dresden, has published in German a monumental work on water structures of which there is no English translation. The writer found that the publisher was ready to undertake this under promise of a very moderate share in underwriting the possible loss.

"For still another illustration—Brown University is custodian for the carefully selected library on river and harbor hydraulics and structures, accumulated by our past-president, Elmer E. Corthell. This has never been thoroughly examined, arranged or indexed. Doubtless some modest contribution extended over two or three summer vacation periods would induce competent engineering talent to go through this and dig out much that is valuable . . . , making information available . . . that would serve as a monument to Corthell, while instructing the student who does this work."

Mr. Freeman also expresses the hope that "others among the older engineers who have found in engineering 'joy in work' . . . will join a committee thus self-appointed" for building up a substantial fund for purposes of aiding principally the young engineer though the entire profession would benefit by it.

Engineers Given Honorary Degrees

Honorary degrees in engineering conferred by colleges and universities during the last two weeks included the following: A Doctor of Engineering degree, University of Michigan, conferred upon Orville Wright, pioneer inventor of heavier-than-air flying machines; Doctor of Engineering, Princeton University, upon Frank Calvin Roberts, an engineer of note on construction of high buildings, bridges, docks, power plants, water-works, steel works and rolling mills.

Rutgers College conferred upon George H. Blakeley, director and manager of the structural steel department of the Bethlehem Steel Bridge Corp., the degree of Doctor of Science. The University of Pennsylvania conferred the same degree, Doctor of Science, on Ambrose Swasey, noted engineer and manufacturer of Cleveland, Ohio, and the founder of Engineering Foundation.

Contractor Wins $902,896 Suit From City of New York

Damages aggregating $902,896 due the Litchfield Construction Co. from the City of New York were awarded recently by a jury in Justice Lydon's part of the Supreme Court, N. Y. The suit, which was brought to trial May 13, asked for $1,400,000 damages, which counsel for the construction company said had been caused by delay and alterations in the original contract for building sections of the Seventh Avenue, Brooklyn, subway.

Much extra construction was necessary and a great deal of extra time was consumed, the company charged, in complying with the varying demands of the city authorities. During the trial a huge model of the section of the subway from Fifty-first Street to Fifty-ninth Street in Brooklyn stood in the court room. It was referred to frequently during the month's trial.

Barge Canal Improvement Estimated at $25,200,000

High Figure Represents Widening and Deepening Channel To Make Available Two Lake Routes

An estimate made public by Dwight B. La Du, New York State engineer, shows that the probable cost of the project of widening and deepening the Barge Canal connecting the Hudson River with Lake Erie at Buffalo and including a connection with Lake Ontario from Three Rivers on Oneida River near Syracuse to Oswego would cost approximately $25,200,000, which would make available two routes to the Great Lakes. To enlarge the canal from Oswego to the Hudson, making but one route to the Great Lakes available, would cost about $8,500,000.

The original design and construction of the Barge Canal contemplated a future enlargement if the necessity arose. The structures in the land sections of the Barge Canal in the western part of the state are located in such a manner that no extensive changes of bridges would be required to increase the width of the canal to 110 ft. while the eastern portion of the canal is located principally in lakes and rivers where the minimum width is 200 ft.

Evidence of the necessity for this improvement is the newly constructed motor ships now operating between Duluth and New York via the Barge Canal. These ships have a width of 38 ft. and it is difficult for them to navigate and pass each other in the 75-ft. land sections of the canal. It is proposed to excavate these sections to such a width that no difficulty will be encountered. No work can of course be undertaken without legislative authorization and appropriation.

Mr. La Du is also preparing estimates to show the cost of an American canal to connect Lake Erie with Lake Ontario. Such a canal would leave Lake Erie at Buffalo and follow a semi-circular route to the Niagara River below the Falls at Lewiston. Mr. La Du points out that such a route would provide both navigation and power development possibilities.

Maddock Out For Governor

Thomas Maddock, state highway engineer of Arizona from 1919 to 1922, is a candidate for the Republican nomination for governor of that state. Mr. Maddock won a wide reputation as a road builder, the period of his administration being an era of extensive highway construction in Arizona. His administration was subject to violent political attacks after his retirement, but these failed to undermine his professional standing and popularity among his lay friends.

St. Lawrence Commission Inspects River

The full personnel of the United States St. Lawrence Commission, headed by Secretary of Commerce Herbert Hoover, made an inspection of the St. Lawrence River from June 13 to 17. The commission, together with its engineering advisors, assembled at Niagara Falls, N. Y., inspected the power developments, and moved over to the other side of the river where it made similar inspection of the developments of the Ontario Hydro-Electric Power Commission and the construction under way on the new Welland Canal. It then went across to Toronto, visited the harbor work there, and passed on down the river in a two-day trip, terminating at Montreal. Some members of Canada's National Advisory Committee on the St. Lawrence Waterways Project met the American committee informally, but there was no joint session of the two committees. The engineers of both committees, however, were together for most of the trip and made informal examinations of the various sites for structures along the route.

The American commission consists of Herbert Hoover, chairman; W. C. Breed, New York; James P. Goodrich, Winchester, Ind.; James E. Davidson, Bay City, Mich.; Charles L. Allen, Worcester, Mass.; James R. Howard, Chicago; James D. Noonan, St. Louis; Stephen B. Davis of the Department of Commerce, counsel; and Charles P. Craig of Duluth, executive secretary. The engineers consist of Brig. Gen. Edgar Jadwin, Col. William Kelly, and Lieut. Col. G. P. Pillsbury, all of the Corps of Engineers. Col. Pillsbury was not present on the trip because of assignment to another important service at that time. The engineers of the Canadian commission are D. W. McLachlan, asst. chief engineer, Dominion Department of Railways and Canals; O. O. Lefebvre, chief engineer of the Quebec Streams Commission, and Brig. Gen. C. H. Mitchell of Toronto, consulting engineer. Paul Clapp, of the Department of Commerce, is Mr. Hoover's engineering representative.

St. Louis Studies Rapid Transit

A subway or some other system of rapid transit for St. Louis, Mo., is to be considered by a special committee of seven members of the St. Louis Board of Aldermen. This committee will determine on ways and means of conducting a survey to ascertain the city's transportation problems with an idea of correcting them with rapid transit. The Civitan Club has asked the city to appropriate $20,000 for such a survey. Tentative plans for an underground loop in the central business district calls for an expenditure of $25,000,000. This is the first definite step taken by the city administration toward obtaining rapid transit for the city.

SECRETARY HOOVER INSPECTS THE WELLAND CANAL WORK

From left to right: Secretary Hoover, Alex. Grant, chief engineer of the Welland canal work, Mr. Allen and Governor Goodrich, of the U. S. St. Lawrence Commission.

Taylor Assumes Corps Direction

Direction of the Corps of Engineers of the War Department was placed in the hands of Major General Harry Taylor at noon June 18. Major General Lansing H. Beach, the retiring Chief of Engineers, has made no plans for the future. By way of vacation, he will spend the summer in California. While past the retirement age, Gen. Beach enjoys the best of health and may be expected to participate actively in engineering matters.

Miles Cannon Out; Kreutzer Succeeds Him

George C. Kreutzer, of California, has been appointed director of farm economics for the Reclamation Service. He succeeds Miles Cannon, as a result of the civil service examination. Mr. Kreutzer received the highest rating among a number of candidates for the place. He has been serving as superintendent of the Durham project in California.

Reports from the West are to the effect that there is to be a change also in the Bureau's director of finance. D. W. Davis was assigned to that position on being superseded as Commissioner of Reclamation by Dr. Elwood Mead. It is stated that he will retire from the Bureau of Reclamation to accept a place with the Bureau of Internal Revenue in the Treasury Department.

Further Study of Flood Prevention at Cumberland Advised

Following the unusual floods on the Potomac River in March and May of this year, an engineering committee of seven members was created by the city authorities of Cumberland, Md., to advise the city on flood control measures. This committee held a conference in Cumberland on May 15 and since then has formulated a brief report with recommendations for further study. The commission advises that the city employ a consulting engineer to make field surveys, preliminary plans and estimates for flood control at Cumberland, and to suggest methods of meeting the cost of the work. The committee also suggests that two consulting engineers in addition be appointed to co-operate with the engineer who makes the detailed studies in the formulation of a report.

The engineering commission consisted of the following: G. H. Friend, representing H. R. Pratt, chief engineer, Western Maryland R.R.; H. A. Lane, chief engineer, Baltimore & Ohio R.R.; Earl Stimson, chief engineer, maintenance, Baltimore & Ohio R.R.; L. T. Downey, representing J. N. Mackall, Maryland Roads Commission; R. L. Rizer, city engineer, Cumberland, Md.; E. S. Tisdale, chief engineer, West Virginia State Board of Health; Abel Wolman, chairman, chief engineer, Maryland State Department of Health. This commission is to continue as an advisory and steering body for this work, by request of the authorities of the city of Cumberland.

THE ENGINEER ADVISORS TO THE ST. LAWRENCE COMMISSIONS

From left to right, Mr. Lefebvre, Mr. McLachlan and Gen. Mitchell of the Canadian Staff and Gen. Jadwin and Col. Kelly, of the American staff. Col. Pillsbury was not present on the trip down the St. Lawrence, being detained on other Corps duty.

Boston Water-Supply To Be Investigated Again

Three Commissioners to be Appointed Soon Will Consider Possible Reduction of Water Consumption

Three commissioners are to be appointed by the governor of Massachusetts, in accordance with an act passed at the recent session of the legislature, "to study further the water-supply needs of the metropolitan district and other communities which may require water from the metropolitan system, and of the city of Worcester." One of the commissioners is to be a citizen of Boston, one a citizen of Worcester, and one a citizen of Hampden, Franklin or Hampshire County — counties from which it has been proposed to develop an additional water supply from the Ware and Swift Rivers. Salaries of $6,000 a year for the chairman and $5,000 a year for the other two members are authorized by the act.

The commission is directed to consider possible reduction of water consumption in the metropolitan district "through further prevention of waste or otherwise"; the possibility of "utilizing to a greater extent the watershed tributary to the Wachusett reservoir." The commission is also directed to review "the findings and recommendations" of the joint board that reported on the metropolitan water supply in 1922" (see *Engineering News-Record*, March 2, 1922, p. 360) to study the Ware and Swift River projects, and "other feasible sources of water supply, including water purified by filtration"; to consider how soon the metropolitan district and other municipalities referred to in the act need to be provided with additional water, and in what quantity, and in what order in point of initial and subsequent developments; and finally "to determine the best method of increasing the water supply of the city of Worcester." Subsidiary to the main investigations of the commission will be the determination of the best method of apportioning the cost of an additional water supply among the various municipalities benefited. The act directs the State Department of Health and the Metropolitan District Commission to supply the new commission "with all information in their possession" which it may require for the purposes of the proposed investigation.

May Employ Consultant

The commission is given authority to "employ as consultant a disinterested engineer of acknowledged professional standing, qualified as an expert on water-supply matters," together with other engineering and clerical help. Subject to appropriation by the legislature, the commission is authorized to expend in its studies $100,000, on approval by the governor and council, but of this not over $30,000 is to be available during the current fiscal year. The money already mentioned is to be provided by the state, but is to be collected from the metropolitan water district and the city of Worcester in proportions to be determined by the commission.

Finally, the report of the commission and of its consulting engineer, together with plans and estimates, must be submitted not later than Dec. 1, 1925. The life of the commission will terminate with the filing of the report.

Reclamation Project Authorized on a New Basis

In the last days of the just concluded session of Congress, both the Senate and House passed a bill authorizing construction of the San Carlos irrigation project in Arizona. During consideration of this bill emphasis was placed on the new form of arrangement under which this project is to be constructed, and on the merit of the undertaking. Representative Snyder, of New York, characterized it as the first businesslike irrigation project ever brought into the House. Representative Cramton, of Michigan, among other things, said: "The time has come when we must refuse to appropriate for reclamation projects except on a strictly business basis. In this case, for the first time since I have been following reclamation projects, a bill has been presented on such a basis. This bill provides for the payment of interest upon the money expended by the Government in the work of construction. It provides for the payment of operation and maintenance charges in advance, as is the case on private projects. It is located in a region where they make a success of irrigation by reason of climatic and other conditions."

Collapse of Building Caused by Old Floor Alteration

Early in June an old three-story brick building with timber floors, on 7th and League Sts., Philadelphia, collapsed, under rather unusual circumstances. The second floor failed by the breaking of a main joist, due partly to overloading and partly to the weakening effect of alterations made a long time ago. The breaking of the floor joists kicked out the side wall, so that the entire building was wrecked.

The building was 60 or 70 years old, and originally had floor framing of 3x7-in. joists (on a span of about 16 ft.) regularly spaced. Many years ago, apparently about fifty years, the central portion of the second floor had been cut out, on a width of about 8 ft., for a length of five or six joist spaces, and 3x7 trimmer beams had been put in to carry the ends of the original joists and intermediate lengths of joists. The header beams into which the trimmers framed were not strengthened by doubling, and the floor thus was greatly weakened. In recent years the building was used as a store, and the second floor was piled full of potato sacks and produce. The beams sagged under this continued loading, until finally one of the header joists broke. The alterations in the floor were made long before the city bureau of building inspection functioned. The facts were brought out by the investigation of the accident made by the bureau after the collapse.

California Utilities Face Serious Power Shortage

Unprecedented Dry Year and Increase In Load Force Edison System To Cut Usage 25 P.C.

Special Correspondence

Due to an unprecedented dry year and a tremendous increase in load California electric utilities are faced with the most serious situation in their history. The Southern California Edison Co., on account of the extent of the territory it serves, has found it physically impossible to meet the demands for power and has ordered a 25 per cent curtailment of power usage over its entire system effective June 16. This order comes as a result of a conference between executives and engineers of all southern California electric utilities and representatives of the state railroad commission.

Testimony at the hearing brought out the fact that there would be a shortage of 126,000,000 kw.-hr. on the Edison system during the last six months of the year which would require a curtailment of approximately 20 per cent. Other utilities represented at the hearing showed that they would be able to meet the demands for power on their own systems and in the case of several of the companies they would be able to sell power to the Edison company to help relieve the situation.

A unanimous request was made by the utilities represented for the appointment of a power administrator to assist in an equitable distribution of the power available. The name of J. G. Butler, former chief of the division of water rights of the state department of public works, who acted as power administrator during the shortage of 1920, has been suggested for the position. Unnecessary employment of energy for flood lighting, display lighting, etc., will be discontinued first. Industrial consumers will be asked to reduce their energy consumption.

Lindenthal to Examine Plans for Portland Bridges

Multnomah County, Ore., has retained Gustav Lindenthal, of New York, as consulting engineer to examine the plans for the Burnside, Ross Island, and Sellwood bridges, which are involved in the recent indictment of former county commissioners, engineers and contractors for bribery in connection with the engineering retainers and the construction contracts for these bridges. Notice of these actions appeared in the issues of May 15, p. 873, June 12, p. 1036 and June 19 p. 1074. The new county commissioners, in a public statement, say that the case relating to the engineering work involves two phases, "the possibility of corruption at the time the contract was made and that of engineering relative to the adequacy, efficiency and integrity of the structures planned by the engineers." The first is a question for the court, and the second is to be determined by the present investigation. It is said that doubt has arisen in the minds of many of the citizens as to the ability of the engineers to carry out successfully the commission given them.

General Contract System Upheld by Federal Government

The general contract system of doing public work construction is vindicated and the theory that greatest economy is promoted through the separate contract system under which individual agreements would be made between owners and those handling distinct installations such as plumbing, heating equipment, electrical fixtures and wiring, etc., has been rejected by the Interdepartmental Board of Contracts and Adjustments of the federal government. This agency is one created by General Dawes when he was head of the Bureau of the Budget. The bureau has adopted a resolution which has the effect of refusing to abolish the general contract system from federal construction operation. The resolution was adopted by the board in answer to a request for adoption of the separate contract procedure made by a joint committee of the National Association of Master Plumbers, the Heating and Piping Contractors National Association, and the Association of Electragists International. Selection of the form of contract to be executed is therefore left with officials making them.

The claims made by this committee in favor of the separate contract system were replied to in a brief filed with the Board by the Associated General Contractors in America, it being through this brief that a case for the general contract system was established.

In coming to its decision the board laid particular emphasis on the fact that should the separate contract system obtain it would "take away from the government any advantage which it might otherwise secure from the utilization of the general contractors organization" and it would "tend to delay performance and give rise to claims for delays of one contractor by another and create difficulties which are largely avoided when the work is performed under one contract."

Northern New York Utilities to Develop Two Sites

The Northern New York Utilities, Inc., Watertown, has made application to the New York Public Service Commission for authority to develop power at the Soft Maple site on Beaver River and the Sewall's Island site on the Black River at Watertown. The estimated cost of the Soft Maple development is $2,370,000 and of the Sewall's Island development $340,000.

At the Soft Maple site an earth-fill diversion dam, about 65 ft. high, will be built. The main dam will also be an earth-fill dam and will be about 120 ft. high. About 20,000 hp. will be developed in two units operating at a minimum head of 117 ft. Provision will be made for an additional unit as a future extension.

The Sewall's Island project will develop the fall in the south channel of Black River in Watertown, where a concrete flume about 445 ft. long will lead to a power house containing two units each with a capacity of 1,250 hp.

Hoover Traffic Committees Organized for Study

Study of the extent to which traffic laws and rules, speed limits, signal systems for police and drivers, pedestrian facilities, one-way streets, illumination, road marking, and similar factors influencing highway safety was begun last week by a special committee invited by Secretary of Commerce Hoover to undertake this survey and analysis as a part of a movement initiated to improve street and highway safety. In this movement a number of national organizations are co-operating with Secretary Hoover.

The findings of this committee, headed by Major Roy F. Britton, president of the Automobile Club of Missouri, and the conclusions which they reach will be presented as part of a widespread program before a conference in the fall to which all organizations engaged in promotion of greater safety will be invited. From this coming conference it is hoped that steps may be taken to reduce the growing toll of deaths and accidents on streets and highways, and to develop greater uniformity of action on the part of the various states, both through state and municipal governmental and non-governmental organizations.

Reforestation Bill Praised by Lumber Company

What is called by the lumbering industry the most forward step in practical forestry yet made is the McNary-Clarke reforestation bill passed by the Senate just prior to adjournment. The bill had previously passed the house. In effect, the bill proposes appropriation of susbtantial amounts for cooperation by the federal government with the states and timber land owners in the protection of forest lands from fire; in the reform of present systems of forest taxation; in the popularizing of reforestation by specific aids to the establishment of farm wood lots; and in practical timber conservation by enlarged research and experimentation.

The sum of $2,500,000 is made available for federal aid, for fire prevention and suppression, and for the study of forest perpetuation and the taxation of forest lands. Sums of $100,000 each are provided for the procurement, production and distribution of forest trees and plants for the purpose of establishing wind breaks, shelter belts and farm wood lots upon denuded or non-forested lands and for assisting owners of farms in establishing, improving and renewing wood lots, shelter belts, wind breaks, and other valuable forest growth, and in growing and renewing useful timber crops.

Extension of national forest areas is provided by authorization given the Secretary of Agriculture to purchase such cut-over or denuded lands within watersheds of navigable streams as may be necessary to the regulation of the flow of such streams, and in authorization given the President to set aside, within boundaries of government reservations other than national parks, reservations considered valuable for the production of timber.

Random Lines

Now, Who's an Engineer?

Sir—Perhaps we, who would arrogate to ourselves the right to use the title "engineer," had better look to see if our claim can be substantiated.

We like to feel that, because we are technical men, we alone are properly described by the term "engineer," with such modifications as we, and we only think appropriate as, for instance, civil, mechanical, electrical, sanitary, and a few others.

And so, in "Random Lines," each week the editor of *Engineering News-Record* takes a poke at all those other upstarts who dare to style themselves "clothes-pressing engineers," "shoe-shining engineers," or "what-not engineers."

Yet, like the rest of us, this same editor is a technical man and, if asked to define a term and prove the authority for his definition, would undoubtedly refer to the dictionary, than which there can be no higher authority.

And here's what my dictionary, a 1924 model of Webster's New International, says:

"*Engineer* (n) — One who carries through an enterprise by skillful or artful contrivance; an efficient manager.

"*Engineer* (v.t.)—To use contrivance and effort for; to guide the course of; to manage; as, to *engineer* a bill through Congress.

"*Engineering* (n) — Maneuvering; contriving."

If I remember correctly, I have heard of a Tony, the bootblack, who was such an efficient manager that he amassed a million dollars. Some engineer, even if he never claimed the title.

Political engineering is suggested by the second definition above. While few of them might be able to show diplomas, there must be a sufficient number of men who are qualified by experience or achievements right now to organize the Am. Soc. P. E.

And, if you knew some plumbers as well as I do, you'd have to admit that their work was well within the limits of the third definition.

You might withhold the "sanitary" but you couldn't help calling it engineering.

Oh for a name that we can copyright and keep to ourselves! C. F. D.

The dictionary, of course, does not make the language; it merely records usage. And the fact that *Engineering News-Record* has been able to collect over one hundred examples of this distasteful usage testifies to the reliability of the dictionary makers.

* * *

Following the Dictionary

Crime Engineer Is Sentenced—Los Angeles, June 16.—Pleading guilty to a charge of engineering the $200,000 Providence Loan Company robbery here some months ago, Ivy McCarty was today sentenced to San Quentin for from one year to life.—From the San Francisco *Journal*.

Engineering Societies

Calendar

Annual Meetings

AMERICAN SOCIETY FOR TESTING MATERIALS, Philadelphia, Pa.; Annual Meeting, Atlantic City, N. J., June 23-28, 1924.

SOCIETY FOR THE PROMOTION OF ENGINEERING EDUCATION, University of Pittsburgh; Annual Meeting, Boulder, Colo., June 25-28.

NEW ENGLAND WATER WORKS ASSOCIATION, Boston, Mass.; Annual Meeting, Rochester, N. Y.; Sept. 30 to Oct. 3.

AMERICAN SOCIETY FOR MUNICIPAL IMPROVEMENTS, St. Petersburgh, Fla.; Annual Convention, Boston, Mass., Sept. 29-Oct. 3, 1924.

The Seattle Chapter, Associated General Contractors of America, recently elected the following officers: president, G. J. Keiburtz; vice-president, J. S. Christie; secretary, George Teufel; treasurer, Alfred Carlson.

A Dallas, Texas, Chapter of the Associated General Contractors has been organized by the general contractors of that city. The officers are: president, L. W. Hickey; vice-presidents, Owen Hughes and W. H. Maclay; secretary, H. H. Crane; treasurer, Arch Munn.

Western Washington Society will be the new name of the present Seattle Section of the American Society of Civil Engineers, provided that approval is obtained from the Board of Direction of the association. The local membership at its April meeting voted in favor of the change.

Personal Notes

Major Charles A. Browne, formerly state highway engineer of Florida, has been engaged as county engineer of De Soto County, Florida, and will devote one day per week to the work, keeping a registered engineer on the job the rest of the time; the construction program involves the expenditure of $500,000.

Major Wallace W. Kirby, Corps of Engineers, has returned to duty as director of the Bureau of Engraving and Printing, for a six-months' period; he had previously served in that capacity but was removed under a ruling of the Controller General that army officers could not serve in civilian capacities without special authorization of Congress, and the reinstatement is made under provisions of a congressional resolution approved May 31, 1924.

Fred G. Simmons has been made manager of the Contractors' Association of Northern California, with headquarters in San Francisco, succeeding Herbert Nunn, who resigned recently. Mr. Simmons, who was state engineer of Oklahoma during 1923, began his professional career in 1889 in the employ of the Denver Tramway Co. in charge of tracks and paving. For fifteen years he was engineer of way and structures for the Milwaukee Electric Railway & Light Co. and in 1912 was appointed commissioner of public works in Milwaukee. A later period of five years was given to private practice as consulting engineer. Mr. Simmons is a past president of the American Electric Railway Association.

U. F. Brown, for the past twenty-eight years city clerk of Yreka, California, has been appointed city manager of that city. The office was created under an ordinance recently passed by the city trustees.

L. W. Moore, for the past year city engineer of Lompoc, California, has been appointed city engineer of San Luis Obispo, California, and will have charge of an extensive street paving program.

H. F. Stimm, civil engineer, has opened offices in Ellicott Square, Buffalo, to engage in the design, construction and maintenance of railroad sidings and industrial tracks.

Ray S. Goddard, for fourteen years construction engineer for the Illinois Glass Co. on work at its various plants, has resigned, effective July 1, and will take up a new line of work in September.

T. C. Shuler, recently resident engineer for the Wichita County, Texas, Water Improvement District 1, has become assistant engineer on dam construction, presumably at the Trinity River reservoir, for the City of Dallas Water-Works Improvement District.

George E. Catlin, Jr., until recently located at Champaign, Ill., in the service of the Illinois Department of Public Works and Buildings, has removed to Peoria, Ill., to work as junior engineer in the Illinois Division of Highways.

John G. Stupp who was for some time chief engineer of the St. Louis Structural Steel Co., St. Louis, Mo., has accepted the position of chief draftsman for the Blaw-Knox Co.

C. H. Windham, city manager of Long Beach, Calif., has acceded to demands of citizens and city council and withdrawn his resignation which was to have become effective July 1; he has also refused a salary increase. He had planned to enter the services of a Southern California steamship company.

Charles E. Grunsky, San Francisco consulting engineer, and president of the Am. Soc. C. E., has resigned as engineer in charge of the Gordon Valley water project, for the city of Vallejo.

Alexander Gray, chief engineer of the Canadian Public Works Department at the St. John, N. B., branch office, has returned from a tour of English, Irish, Welsh and Scotch ports, where he studied port conditions and dock construction with a view to using new methods in dock construction in Canada. H. F. Bennett, an assistant engineer to Mr. Gray, has been transferred to the Halifax branch of the Canadian Public Works Department. F. G. Goodspeed, another assistant in the St. John branch, has been transferred to the headquarters in Ottawa. Both are now at their new posts.

W. M. Bosworth, Tacoma, Wash., has been appointed city engineer of Tacoma, to succeed C. E. Putnam, resigned. Mr. Bosworth was connected with the city engineer's office.

J. W. Price, for four years building inspector at Anaheim, California, has been appointed city manager of that city, succeeding O. E. Steward, resigned. The building and engineering departments of the city will be combined under one head, operating under the city engineer. E. P. Hapgood is city engineer, recently appointed, due to the resignation of Clyde D. Butler.

L. F. Gates, city engineer of Huntington Beach, California, has resigned and plans to enter the service of the federal government.

Obituary

Guien Victor Barril, an engineer of the Canal Zone, who went to Panama with the Canal Commission in 1904, died recently at his home in Balboa Heights, after a short illness. He was born in New York City in 1879 and graduated from St. Francis Xavier College there. He was one of the pioneer engineers of the Panama Canal, and at one time was chief engineer of the Panama Construction Co., then building a 50-km. section of the Panama national highways. He also was engineer on construction work on a Brazilian railway.

Max A. Schumacher, secretary-treasurer of the John A. Schumacher Co., general contractors, Indianapolis, Ind., died recently at his home in that city from pneumonia, aged 50 years. The company has constructed many of the largest buildings in Indianapolis.

Albert Carr, for many years consulting engineer of the Interborough Rapid Transit Co. of New York City, died June 19 at his home in East Orange, N. J., in his 65th year. Mr. Carr built about 75 miles of underground electric lines for the Metropolitan Street Railway Co., New York, surveyed and designed the Brooklyn and Union Elevated Railroads, built the Columbus Ave. cable road, part of the Lenox Avenue subway, and supervised subway construction from City Hall to Grand Central for the Rapid Transit Commission. An extended biographhy will appear in a later issue.

E. C. Tollinger, U. S. assistant engineer in the Third Mississippi River Commission District, died June 18 at Vicksburgh, Miss., aged 79 years. He was a native of Pennsylvania and, after Civil War service and some railroad work, entered the federal engineers' service in 1879 on work on the Tennessee River at Chattanooga, whence he was transferred in 1882 to Mississippi River work. He was active in levee construction in the lower Yazoo and upper Tensas districts.

From the Manufacturer's Point of View

A Point of Contact
Between Maker and User of
Construction Equipment and Materials

Machines at Work in Open-Air Road Show

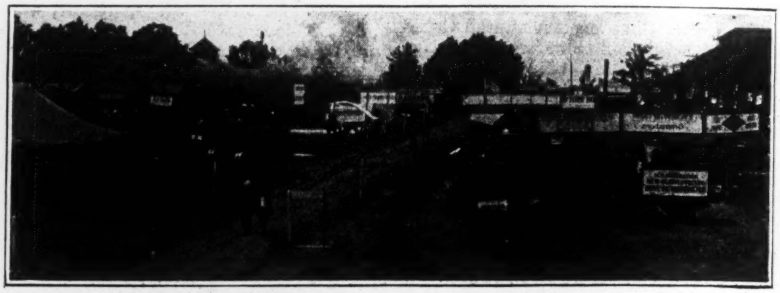
Latin-American Delegates See American Construction Equipment in Operation at Greensboro, N. C.

ONE hundred or more manufacturers of road-building machinery and materials participated in the Open-Air Road Building and Maintenance Demonstration held at Greensboro, N. C., June 3-7, under the auspices of the American Road Builders' Association for the benefit of the visiting delegation of 37 prominent Latin-American engineers and highway officials constituting the Pan-American Highway Commission, now touring this country. The show, which was managed by Charles M. Upham, state highway engineer of North Carolina, was staged on the local fair grounds and differed from former indoor exhibits in that the equipment could be shown in actual operation. This applied to such machines as power shovels, concrete mixers, trench excavators, road graders, tractors and trucks. In addition to demonstrations of machines at the fair grounds, other equipment was inspected on work under contract for the North Carolina Highway Commission, represented by Frank Page, chairman, who conducted the party of distinguished visitors to points of engineering interest throughout the state.

Preliminary announcements that short sections of roads of various types would be constructed during the exhibition, just as if the work were a contractor's job, were hardly borne out. However, enough of the motions were gone through to indicate clearly what the methods were and to permit an easy visualization of those that were omitted. Many of the exhibits of accessories, such as culverts, were arranged to simulate actual conditions of installation.

Tractors Haul Graders—Several types of graders and scrapers, attached as trailers behind different models of tractors, were hauled back and forth and made to move the earth as if engaged in highway maintenance. One exhibit in particular reproduced closely construction operations and included the formation of side ditches by means of a back-sloper attachment on the grader. Approximately 100 yd. of earth road were built during the four days.

Another exhibit which, from the educational standpoint, could do justice to itself only by practical demonstration, was a ditcher combined with a conveyor for discharging at one side of the trench the earth deposited on it by the excavating buckets.



Machinery at Open-Air Road Show in North Carolina

Power shovels with various sizes of dipper were in more or less continuous operation. One was engaged in loading a truck with dumping body which carried the earth a short distance before discharging it and returning for another load. A shovel mounted on crawler treads was the center of an admiring group.

The subgrade and the equipment for forming it received attention in the exhibit of another manufacturer. In order to show its product to advantage, this manufacturer staked in position a few lengths of steel side forms upon which were mounted and operated a machine for finishing the subgrade to specified shape. In addition, there were displayed on the forms a finishing machine operated by gasoline engine and a hand-operated machine for belting the concrete surface to final smoothness.

Many concrete mixers were installed and revolved under power.

Gravel Plant—Gravel screening and storage plants were operated on real materials, thus enabling the observer to appreciate the several steps involved from crusher to final separation in the bins. One model in miniature of an entire stationary plant included the crusher and all other pertinent accessories and was operated with small pebbles.

Compressors were operated to deliver air to drills which worked on large blocks of stone. Their application and the application of other air-driven tools was fully demonstrated.

Build Concrete Road—One of the more spectacular demonstrations of the show was the building of a 50-ft. length of concrete road 18 ft. wide at the entrance to the Greensboro fair grounds. A feature of this construction was the use of high alumina cement, named Lumnite, which has the property of attaining hardness in a remarkably short time. The pavement construction was finished at 2 p.m., Wednesday, June 4, and the first traffic passed over it at 9:30 a.m. Thursday, 19½ hr. afterward. The vehicles included a 10-ton caterpillar tractor, a 15-ton oil tank truck, and a 16-ton water flusher, none of which damaged the slab.

In the line of auxiliary equipment or accessories there were several types of culvert made of corrugated iron, concrete and hollow tile.

Bituminous surfacing equipment was represented by a large and complete asphalt plant.

The Pan-American Highway Commis-

LUMNITE CEMENT

Demonstration Section of Concrete Road, Built of Quick Hardening Cement, Carries Traffic 19½ Hours After Completion, at Greensboro (N. C.) Road Show sion, with its 37 delegates, represents 19 of the 20 republics of Latin America. This commission devoted the first of its four weeks of road inspection and analysis in the United States to a study of conditions in North Carolina. The visitors displayed particular interest in a compact, lightweight equipment developed by the North Carolina State Highway Commission for making test borings at proposed bridge sites.

Latin-American Delegates See Tractor-Hauled Grader

Exhibitors at Open-Air Road Show, Greensboro, N. C., June 3-7, 1924

- Acme Road Mchy. Co.
- Adams & Co., J. D.
- American Casting Co.
- American Gas Accumulator Co.
- American Tar Prod. Co.
- Asheboro Wheelb'w. Co.
- Asphalt Association.
- Asphalt Pavement Retreading Co.
- Atlas Lumnite Cemt. Co.
- Austin-Western Rd. Mch'y. Co.
- Autocar Sales Co.
- Barber-Greene Co.
- Black & Decker Co.
- Blaw-Knox Co.
- Buda Co.
- Buhl Company
- Bureau Public Roads.
- Carolina Steel & Iron Co.
- Carey Co., Philip-Lockland.
- Celite Products Co.
- Cleveland Tractor Co.
- Contr's. and Eng'rs' Monthly.
- Corbitt Motor Truck Co.
- Craven, E. F.:
  - Lakewood Eng'g Co.
  - Best Tractors, Inc.
  - Watson Wagon Co.
- Dillon Supply Co.
- Dixie Metal Culvert Co.
- Earnest Bros.
- East Iron & Machine Co.
- Etnyre & Co., E. D.
- General Equipment Co.
- General Motors Tr'k.
- General Utilities Co.
- Gilbert Mfg. Co.
- Gerlinger Electric Steel Casting Co.
- Godwin, W. S., Co.
- Gray Concrete Co.
- Greene, S. J.
- Gurley, W. & L. E., Co.
- Hall-Warford Co.
- Haiss Mfg. Co., Geo.
- Heltzel Steel Form & Iron Co.
- Hibbard-Tree Pub. Co.
- Hinkley Motors, Inc.
- Hvass & Co., Chas.
- Highway Maintainer Co.
- Ingersoll-Rand Co.
- International Motor Co.
- Indiana Truck Corp.
- Manufacturers Record.
- Marchant Calculating Co.
- McMyler-Interstate Co.
- Newport Culvert Co.
- Noble Motor Truck Corp.
- North Carolina Highway Commission (Bridge Dept.).
- North Carolina State College of Ag. & Eng'g.
- North State Culvert & Machinery Co.:
  - Good Roads Mchy. Co.
  - Monarch Tractors.
  - Avery Co.
  - Ransome Concrete Machinery Co.
  - Novo Engine Co.
  - Sidney Steel Scraper Co.
  - Burch Plow Works.
  - Eagle Wagon Works.
  - Wiard Plow Co.
- Raleigh F. W. D. Sales Co.
- Republic Motor Tr. Co.
- Russell Grader Co.
- Schramm, Inc.
- S. E. T. Valve & Hyd. Co.
- Superior Boiler Wks.
- Texas Co., The.
- Tractor & Machinery Sales Co.:
  - Holt Mfg. Co.
  - Stockland Road Mchy. Co.
  - Pawling & Harnischfeger Co.
  - Sauerman Bros.
  - Smith Eng'g. Co.
- Universal Motor Co.:
  - Hadfield-Penfield Steel Co.
  - Full-Crawler Co.
  - A. C. Johnson Prod. Co.
  - Gustav Schaefer Wagon Co.
  - Wehr Co.
- Warren Bros. Co.
- Western Display & Mfg. Co.
- Wheeling Corrugating Co.
- Wilkins, J. D.
- White Co.

Standardization to Establish Basis for Pan-American Trade

At a conference of representatives of United States manufacturers interested in Latin-American trade, held in Boston, June 3, under the auspices of the American Engineering Standards Committee, resolutions were passed designed to extend in Pan-American engineering and industrial fields the general principles of standardization and thereby establish a sound basis for better and more intelligent trade. This action precedes a conference on Pan-American standardization to be held in Lima, Peru, next November and called by the Pan-American Union. Either the Inter-American High Commission or the Pan-American Union will serve as the official channel of communication in this field without the creation of any new international machinery. The resolutions at the Boston conference were drawn up by a committee headed by Charles E. Skinner, of the Westinghouse Electric & Manufacturing Co.

Business Notes

Harvey T. Gracely, advertising manager, Marion Steam Shovel Co., has been promoted to assistant sales manager.

Clarence E. Silva, formerly in the engineering department of the Marion Steam Shovel Co., has been promoted to the position of advertising manager made vacant by the advancement of Harvey T. Gracely to the assistant sales managership of the company.

T. R. Harrison has assumed charge of the research department of the Brown Instrument Co., Philadelphia. He was formerly associated with the pyrometry department of the Bureau of Standards and more recently with the Champion Porcelain Co., Detroit.

Universal Road Machinery Co., Kingston, N. Y., manufacturer of stone crushers, elevators and screens, has appointed as its representative for the Northwest the J. J. Ross Mill Furnishing Co., Seattle, Wash.

Lenher Engineering Co., New York, for 20 years sales agent for the S. Flory Manufacturing Co., has been appointed Eastern sales agent for the Bay City Foundry & Machne Co., Bay City, Mich., manufacturer of power-driven winches, capstans and cranes for motor trucks, as well as deck auxiliaries and the Dreadnaught vertical capstan and car puller. The company will continue its distribution of the Flory hoisting engines and other products.

John A. Roebling's Sons Co., Trenton, N. J., manufacturer of wire rope, gave a private exhibition last week of its 5-reel moving picture entitled "Heat X—The Story of Wire Rope." All operations from delivery of raw materials to shipment of finished product were shown, emphasis being placed on the careful selection of materials and frequent testing during the process of manufacture. The film was planned and produced for the Roebling company by the Pathescope Co. of America, Inc., New York.

John J. Ennis, Cincinnati, Ohio, has been appointed distributor for the Novo Engine Co., Lansing, Mich.

The Pittsburgh Testing Laboratory announces the occupancy of its new laboratories and office building at Stevenson and Locust Sts., where it will have greatly improved facilities for service.

Edward Valve & Manufacturing Co., East Chicago, Ind., announces the appointment on May 1 of the Dunbar Engineering Co. as its New York representative, with offices at 50 Church St.

W. C. McDowell has been elected a director and vice-president in charge of sales of the Traylor Engineering & Manufacturing Co., Allentown, Pa.

Texas Creosoting Co., Orange, Tex., a new organization, began last month operating on full time. The products of the plant are creosoted piles, poles, ties, timbers, crossarms, and sheetpiles, particularly the Martinez interlocked type. The company has adopted the use of a copper monogrammed dating nail as a means of identifying its product.

Knickerbocker Portland Cement Co. has established offices in the City Savings Bank Building, Albany, N. Y.

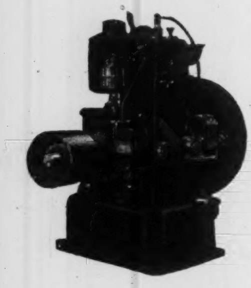
L. A. Marshall, for a number of years service manager of the Industrial Works, Bay City, Mich., has been assigned to the company's Chicago office as sales engineer.

Wilson Welder & Metals Co. announces the removal of its plant and general offices from New York to the Wilson building, Hoboken Factory Terminal, Hoboken, N. J.

Herbert J. Desson, manager of the Detroit office of the Blaw-Knox Co., died, after a brief illness, April 16 at the age of 44 years. Mr. Desson was born in Cleveland and joined the company in 1916; three years later he was placed in charge of the company's Detroit branch. His successor, just appointed, is Irving A. Pfeil, of the company's Chicago office. Mr. Pfeil is a civil engineering graduate of Ohio Northern University. During the World War he served as lieutenant in the air service. He has been with the company since 1919.

Equipment and Materials

Small Gasoline Power Unit



A complete power plant unit, requiring no accessories or attachments other than four holding down bolts, is being manufactured by the Collis Co., Clinton, Iowa, in the form of a vertical single-cylinder, 4-cycle engine, built in two sizes, 3 and 5 hp. In the design of the unit portability, light weight, compactness and high power delivery were the main considerations. A feature of the equipment is the incorporation of the radiator on the inside of the flywheel. This method of cooling requires only 5 quarts of water, which is circulated through the cylinder and radiator by a direct-driven centrifugal pump. Strong air currents reach each honeycomb radiator tube by vanes in the flywheel, an increase in the speed of the engine sending more air through the radiator. This plan of cooling eliminates fans, belts, and pulleys. The engine is equipped with gear-driven high tension magneto and an impulse starter coupling.

The engine base serves as the fuel tank from which gasoline is pumped to a Zenith carburetor built on the Venturi tube principle. As an option a gravity-feed system with tank attached to the side of the cylinder can be furnished.

The engine speed is controlled by a hand lever. A graduated scale quadrant shows the speed of the engine and the horsepower developed. The engine may be throttled down to 600 r.p.m. or advanced to 1,000 r.p.m., the rated horsepower being delivered at 950 r.p.m. The bearings, of white metal, are fitted with laminated shims between halves, making it possible to take up any wear without replacing parts.

Ball-Bearing I-Beam Trolley

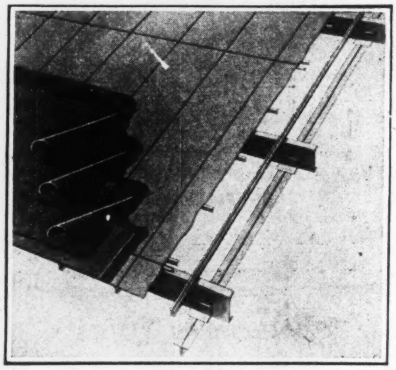
A new ball-bearing, oscillating type of I-beam trolley has been announced by the Chisholm-Moore Manufacturing Co., Cleveland. It is called the "Moore" and identified by bright red frames which are made of steel. The wheels have the bearings built in, making one unit. The trolley weighs only 17½ lb. complete and has only eight parts exclusive of washers, cotter pins and nuts. It is built in one size only, to handle loads up to 1 ton inclusive. It is adaptable to any size I-beam of from 4 to 7 in. and by the substitution of special separators, at slight extra cost, can be used with larger beams. The trolley can be used with any makes of chain blocks and hoists for the overhead handling of material.

Tests of Gypsum Sheets

In reporting the results of tests of Gyp-Lap, an exterior sheathing of gypsum encased in tough fibre, the deflection of a frame sheathed with this new product of the U. S. Gypsum Co. was incorrectly stated in the June 5 issue of this journal, p. 996, to have been 1¼ in. at a pull of 90 lb.; the deflection noted occurred at a pull of 900 lb.

New Roof Has Flat Deck of Copper Steel Units

A new form of lightweight, fireproof steel deck construction, making possible flat roofs with slope of ½ in 12 in., is announced by the Truscon Steel Co., Youngstown, Ohio. The deck is of copper steel with stiffening angles welded to the plates to add strength and rigidity. Eaves, gables, ridges and gutters are reinforced. On the flat steel surface built-up roofing materials are cemented with roofing pitch. The result is a non-combustible roof, designed for a 40-lb. live load, but which has been tested to 160 lb. without failure; the roof weighs 4½ lb. per square foot. The underside is easily painted and forms an ideal reflector of light.

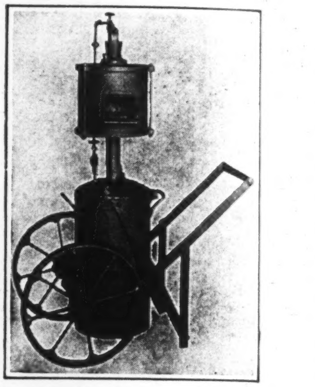


The roof is standardized and factory built in units. Expansion and contraction are automatically taken care of at the joints, which occur every 2 ft., preventing cracking, sagging, twisting or warping. The roofing is built up on the job as soon as the steel deck is in place and is cemented with a positive bond, with no open laps or joints.

Improved Features of Oil-Burning Rivet Forge

Two changes have been made in the oil-burning rivet forges, designated Nos. 1 and 2, manufactured by the Buffalo Forge Co., Buffalo, N. Y. These consist of an extension of the fireproof liner through the fire opening in the steel shell and a redesigned bottom plate made with a liberal shelf extension to receive hot rivets.

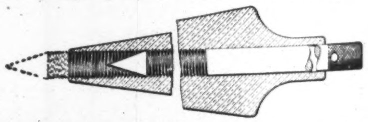
The forge consists essentially of a welded steel oil tank on which is mounted a head or fire chamber. This head is made up of a circular steel plate housing held between cast-iron top and bottom plates by means of three bolts. The lining of the fire chamber is a one-piece, removable, circular section of firebrick 2 in. thick at the sides and 2½ in. thick at the bottom, made of the best quality refractory material. An old lining is easily removed and replaced when necessary. The oil tank is tested under a pressure of 125 lb. which is ample insurance against leakage. Air is supplied by means of a single connection which furnishes pressure for the oil supply, as well as for the atomizer. Kerosene, distillate or any fuel oil is burned in this forge with equal ease.



This unit, weighing 125 and 200 lb. in two sizes noted, can be readily made into a portable forge for use in factories or on construction work by mounting on a special small size two-wheel truck.

New Two-Piece Plumb Bob Has Protective Feature for Point

A new design of plumb bob, built in two parts, a brass body and a steel spindle, has been developed by Henry O. Brooks, civil engineer, 16 Shattuck St., Lowell, Mass. The special feature of the device is the means provided for protecting the point of the plumb bob and renewing it at small expense in case of damage. As shown in the accompanying cross section the body is bored out and threaded for a portion of the distance to receive a steel spindle pointed at one end. When in use the spindle is screwed down so that the point projects; at other times, by screwing the spindle in the reverse direction, its point retires to a position of safety inside the brass body of the bob where it cannot be damaged. Another advantage of the disappearing point is that the bob may be carried in the pocket or tool bag without puncturing a hole in the fabric. If the point should accidentally be damaged, a new spindle can be fitted into the body without the expense of purchasing a new plumb bob.



Business Side of Construction

FACTS AND EVENTS THAT AFFECT COST AND VOLUME

Commerical Building Awards Increase

Number and Value For First Five Months Greater Than Year Ago—New York City Leads Other Sections

Building contracts awarded throughout the United States during the first five months of this year, at a minimum value of $150,000 and not including industrial construction, numbered 1,187, as against 1,021 for the corresponding period in 1923. The average value per contract was $374,000 for the first five months of this year, compared with $390,000 from January to June, last year.

CLASSIFICATION OF BUILDING CONTRACTS ACCORDING TO USE—NUMBER AND VALUE FOR FIRST FIVE MONTHS OF 1924

	Jan. Thousand	Feb. Thousand	Mar. Thousand	Apr. Thousand	May Thousand	Total Thousand	Per Cent of Total	N. Y. City Total Thousand	N. Y. City Per Cent of Total
Hotels and apartments	$19,405	*$36,971	$28,428	$15,756	$38,870	$139,430	37.60	$54,095	39
Schools	12,728	16,259	16,059	19,707	18,067	82,820	18.70	18,051	22
Offices	19,785	16,654	11,145	8,800	9,876	65,760	14.80	14,300	22
Hospitals	3,215	16,537	3,230	11,439	12,282	32,703	7.40	1,700	5
Stores	6,905	4,680	1,850	4,912	6,813	25,160	5.60	350	1
Warehouses	†3,033	†3,210	3,619	1,627	5,632	17,121	3.84	1,050	6
Theaters	450	1,585	2,300	2,675	9,000	16,010	3.62	2,900	18
Churches	2,479	3,217	3,402	1,752	4,000	14,850	3.30	950	6
Clubs, lodges and halls	1,862	1,581	3,294	3,713	3,585	14,935	3.00	150	2
Public	3,810	654	3,797	1,679	2,725	12,665	2.80	....	..
Garages	†3,580	†3,375	1,550	610	1,395	10,510	2.41	....	..
Banks	2,427	1,079	1,860	1,633	1,310	8,309	2.00	1,050	13
Exchanges	1,335	....	1,000	575	1,165	4,075	1.00	1,500	37
Total	$81,014	$105,802	$81,534	$74,378	$114,720	$443,448	100.00	$96,096	22

	Jan.	Feb.	Mar.	Apr.	May	Tatal (1924)	Total (1923)
Number	266	229	218	225	249	1,187	1,021
Average contracts	$359	$458	$374	$330	$458	$374	$390

* Includes $18,000,000 project

† Minimum $40,000, thereafter $150,000.

So far as buildings are concerned, it is evident that this year is ahead of 1923 in actual number of jobs, but falls short of last year in average value per contract.

The part played by New York City in the nation's building program is brought out in the accompanying tabulation of contracts according to classification, number and value.

Awards listed in this table do not cover mills, factories, machine shops or other industrial buildings; they do, however, include offices, stores, warehouses, garages and other commercial structures.

The total value of large building contracts for the first five months of 1924 was $443,448,000, 22 per cent of which was awarded in New York City. At least 39 per cent of the lettings for hotels and apartments; 37 per cent of the exchanges and 22 per cent of the schools and offices were in New York City. Only one per cent of the stores and 2 per cent of the clubs, lodges and halls, however, were awarded in this city.

(*Continued on p. 1122*)

Business Briefs

..**Call money** easy at 2 per cent, June 23.

Time loans for short periods at 2¾ @ 3 per cent; longer credits, 3¼@3½ per cent.

Commercial paper, all names, rated at 4@4¼ per cent.

Foreign exchange (Demand):

	Normal	This Wk.	Last Wk.	Year Ago
Sterling...	$4.86⅔	$4.32 1/16	$4.32¼	$4.61⅛
Franc....	0.193	0.054¼	0.0552¼	0.0617¾
Lira.....	0.193	0.0432¾	0.0433¼	0.0444⅓

Bids Wanted on Big Jobs

See Construction News, pp. 371 to 383, regarding the following:

Power plant, Copco, Calif., California-Oregon Power Co., Klamath Falls, Ore., $4,000,000.

(*Continued on p. 1122*)

Bids Received Below Engineers' Estimates

A list of several contracts awarded during the past three weeks in which the bids received were considerably below the engineers' estimate in each case, is shown in the accompanying table.

These jobs are scattered throughout the country and cover the following classifications of work: water-works, sewers, bridges, dams, streets, roads and drainage ditches.

The reason given for the appearance of so many bids so far below the engineer's estimate, is that construction is falling off in certain sections of the country and contractors in these localities are scaling profits down in order to hold their organizations together. Local fluctuations in sand and gravel prices have evidently not been taken into consideration by the engineers and in addition to that, the sudden curtailment in various manufacturing industries has thrown an unusual amount of cheaper common labor upon the market during the past few weeks.

BIDS RECEIVED BELOW ENGINEERS' ESTIMATES ON VARIOUS JOBS THROUGHOUT THE COUNTRY

Location	Nature of Job	Engineer's Estimate	Bids Received
Ill., Vandalia	Concrete paving	$44,168	$38,163 40,790 41,415
Ill., Astoria	Sewer: 2,650 lin.ft. 10-in. and 24,900 lin.ft. 8-in.; 74 manholes; 9 drop manholes; 2 auto flush tanks; 3 non flush tanks, etc.	41,235	33,574 33,928 37,820
Okla., Oklahoma City	Installing 26 flood gates in dam and extension of same	200,000	198,000
Ind., Kosciusko County	Road: 5.66 mi., 18 ft., hard surface paving	100,957	83,900
Ohio, Hamilton County	Road: 14,690 ft., 16 ft. wide; 25,000 cu.yd. grading; 200 cu.yd. concrete; 1,512 lin.ft. 12-in. to 48-in. corr. pipe; 3,100 cu.yd. crushed stone; 1,600 cu.yd. screenings, etc.	68,640	60,524
Ind., Dearborn County	Concrete arch bridge	75,000	69,933 77,000 77,800
Ind., Jefferson County	Road, grading and gravel	30,159	26,775 27,302 27,559
Ind., Hamilton County	Road	58,414	49,474 52,491 54,968
Ind., Wayne	Concrete paving	96,764	85,222 85,788 88,500
Okla., Oklahoma City	Enlarging drainage ditch, grading and bank protection; 300,000 cu.yd. excavation	80,000	74,132 76,364 77,428
Ohio, Toledo	Water lines	42,278	38,904
		26,490	23,405
		18,391	17,092
		17,084	16,075
		20,732	18,388
		6,703	5,948
Ore., Harrisburgh	Bridge, concrete and steel; three 180-ft. spans	225,000	183,200 186,400 186,825 183,200
N. J., Newark	Street: 2,000 sq.yd. grading and paving with 3-in. sheet asphalt on 6-in. concrete	79,000	72,243
Mo., St. Louis	Sewer: section, reinforced-concrete horseshoe, 14x11 ft.x2½ in.	208,000	174,769
Mo. St. Louis	Sewer: section, reinforced-concrete	305,000	301,860

Commercial Building Awards Increase

(Concluded from p. 1121)

Despite reports of slowing down in building construction in other sections of the country, New York City continues to expand her building program.

A recent survey conducted by S. W. Straus and Co. shows that plans filed in the five boroughs of this city in May amounted to $65,377,437, a gain of 64 per cent over the corresponding period in 1923. May permits were of larger volume than for the same month of any previous year.

NUMBER OF BUILDING CONTRACTS LET FOR VARIOUS TYPES IN FIRST FIVE MONTHS OF 1924

	Jan.	Feb.	Mar.	Apr.	May	Total	Aver. M
Hotels & Apts.	85	51	71	56	56	319	$437
Schools	40	51	51	64	67	273	303
Offices	22	20	20	17	20	99	665
Hospitals	12	12	8	19	14	65	503
Stores	14	16	10	16	16	72	353
Warehouses	22	13	8	3	15	61	280
Theatres	3	3	4	7	5	22	728
Churches	15	15	15	10	17	72	203
Club	6	5	9	13	14	47	299
Public	12	2	6	5	9	34	372
Garages	19	36	6	4	6	71	148
Banks	11	5	8	8	6	38	218
Exchanges	5	..	2	3	4	14	290
Total	266	229	218	225	249	1,187	$374

Bids Wanted on Big Jobs

(Concluded from p. 1121)

Club, Philadelphia, Pa., Penn Athletic Club, $3,000,000.

Auditorium, Los Angeles, Calif., $1,250,000.

Drainage, Shrewsbury, La., $1,250,000.

High School, San Francisco, Calif., $818,000.

Bridge, Evansville, Ind., to exceed $1,000,000.

Sanitarium, Ft. Worth, Tex., $1,000,000.

Sewer, Tulsa, Okla., $450,000.

Weekly Construction Market

THIS limited price list is published weekly for the purpose of giving current prices on the principal construction materials, and of noting important price changes on the less important materials. Moreover, only the chief cities are quoted.

Valuable suggestions on costs of work can be had by noting actual biddings as reported in our Construction News section.

The first issue of each month carries complete quotations for all construction materials and for the important cities. The last complete list will be found in the issue of June 5, the next, on July 3.

	New York	Atlanta	Dallas	Chicago	Minneapolis	Denver	San Francisco	Seattle	Montreal
Steel Products:									
Structural shapes, 100 lb.	—$3.44	$3.80	—$4.20	$3.30	$3.45	—$4.10	$3.60	$3.60	$4.20
Structural rivets, 100 lb.	4.00	4.35	4.90	3.75	3.90	5.15	5.00	4.25	5.00
Reinforcing bars, ¾ in. up, 100 lb.	—3.34	3.30	3.38	3.20	3.35	3.85	3.65	3.50	2.70
Steel pipe, black, 2½ to 6 in. lap, discount	44%	55%	43%	47%	55.05%	36%	36.80@49.10%	45%	47.43
Cast-iron pipe, 6 in. and over, ton	—60.60@61.60	45.50	—59.00	57.20@60.20	58.50	68.00	59.00	65.00	60.00
Concreting Material:									
Cement without bags, bbl.	2.50@2.60	2.35	2.05	2.20	2.42	2.84	2.61	2.90	—1.80
Gravel, ¾ in., cu.yd.	1.75	2.00	2.38	2.00	1.85	1.90	2.15	1.50	1.25
Sand, cu.yd.	1.00	1.40	2.00	2.00	1.25	1.00	1.50	1.50	1.25
Crushed stone, ¾ in., cu.yd.	1.85	2.00	2.83	2.00	1.75	3.50	2.15	3.00	2.25
Miscellaneous:									
Pine, 3x12 to 12x12, 20 ft. and under, M.ft.	—58.00	40.00	—57.20	51.50	38.75	—31.00	36.00	—23.00	—60.00
Lime, finishing, hydrated, ton	18.20	22.50	20.00	20.00	25.50	24.00	22.60	24.00	21.00
Lime common, lump, per bbl.	3.00@3.25	1.65	1.85	1.50	1.40	2.70	2.10	2.80	10.50
Common brick, delivered, 1,000	23.65	12.00	14.10	11.00	13.00	12.00	15.50	15.00	17.50
Hollow building tile, 4x12x12, per block	Not used	.091	.11	.064	.08	.075	.....	.11	.12
Hollow partition tile 4x12x12, per block	.1162	.091	.11	.....	.....	.075	.108	.11	.....
Linseed oil, raw, 5 bbl. lots, gal.	.98	1.03	1.14	.94	1.08	1.18	1.05	1.13	1.01
Common Labor:									
Common labor, union, hour	.75	.30	.....	.....	.....	.50@.55	.55	.62½	.....
Common labor, non-union, hour	....	.25	.30@.50	.82½	.50@.55	.35@.50	.50	.62½	.25@.30

Explanation of Prices—Prices are to contractors in carload lots unless other quantities are specified. Increases or decreases from previous quotations are indicated by + or — signs. For steel pipe, the prevailing discount from list price is given; 45-5% means a discount of 45 and 5 per cent.

New York quotations delivered, except sand, gravel and crushed stone, alongside dock; common lump lime, in 280-lb. bbl. net, and hydrated lime f.o.b. cars; tile "on trucks"; linseed oil and cast-iron pipe f.o.b.

Labor—Concrete laborers' rate, 93¾c.; building laborers (pick and shovel men) 75c. per hr.

Chicago quotes hydrated lime in 50-lb. bags; common lump lime per 180-lb. net. Lumber delivered on job.

Minneapolis quotes on fir instead of pine. Brick, sand and hollow tile delivered. Cement on cars. Gravel and crushed stone quoted at pit. We quote on brown lime per 180-lb. net; white is $1.80 for Kelly Island and $1.70 for Sheboygan. Common labor not organized.

Denver quotes on fir instead of pine. Cement "on tracks"; gravel and sand at pit; stone on cars; lime, brick, hollow tile and lumber on job. Tile price is at warehouse. Linseed oil, delivered, in wooden bbl. Common lump lime per 180-lb. net.

Atlanta quotes sand, stone and gravel per ton instead of cu.yd. Common lump lime per 180-lb. net.

Dallas quotes lime per 180-lb. bbl. Steel, cement, cast-iron pipe and crushed stone f.o.b. cars, other materials delivered.

San Francisco quotes on Heath tile, size 5½ x 8 x 11½. Prices are all f.o.b. warehouses except C. I. pipe, which is mill price plus freight to railway depot at any terminal. Common lump lime per 180-lb. net. Lumber prices are to dealers in yards at San Francisco, for No. 1 fir, common.

Seattle quotes on Douglas fir (delivered) instead of pine. Lump finishing lime per 180-lb. net. Hollow building tile delivered. Hydrated lime in paper sacks. Sand and gravel at bunkers.

Montreal quotes on pine lumber. Sand stone, gravel and lump lime per ton. Stone, lime and tile are delivered; sand, gravel and cement on siding; brick f.o.b. plant; steel and pipe at warehouse. Hollow tile per ft. Cement price is in Canadian funds (the Canadian dollar stands at 98.70). Bag charge is 80c. per bbl. Discount of 10c. per bbl. for payment within 20 days from date of shipment. Steel pipe per 100 ft. net; 3-in., $47.43; 6-in. $119.

Conditions Affecting the Market

All price changes in the nine cities reporting weekly to *Engineering News-Record* were in a downward direction for the week ended June 26.

The declines occurred mainly in steel shapes, cast-iron pipe and lumber. Structural shapes dropped 10c. per 100 lb. in Denver, 15c. in New York and 20c. in Dallas warehouses during the week. Cast-iron pipe declined $1 per ton in New York and $2.50 in Dallas. The price of yellow pine timbers fell $2 per M. ft. in New York and $3 in Dallas, while Douglas fir declined $2 in Seattle and $6.75 per M ft. in Denver.

Lumber production, for the entire country, increased over 5,500,000 ft. during the week ended June 14, according to the National Lumber Manufacturers' Association. New business also increased during the week, while shipments fell off slightly on orders previously placed.

Demand and production are also on the increase in brick, lime, glass and the concreting materials.

Steel, therefore, occupies a position in direct contrast with that of the other basic materials. The U. S. Department of Commerce reports a drop in May bookings of steel castings and also in sales of fabricated steel structurals. These reports, combined with that of a drop of 580,358 tons in unfilled orders on books of the U. S. Steel Corporation and downward revisions in steel warehouse prices, may indicate danger of a similar trend in the other materials, especially since steel is regarded as a barometer of general conditions.

Reinforcing bars are now $2.20@$2.25; structural shapes, $2.10@$2.25 and plates, $2@$2.20 per 100 lb., at Pittsburgh mills.

CONSTRUCTION NEWS

Engineering News-Record, January 3, 1924

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Jan. 4	South Orange, N. J.	Jan. 3
Jan. 7	Haledon, N. J.	Jan. 3
Jan. 10	Conover, N. C.	Jan. 3
Jan. 10	Belzoni, Miss.	Dec. 20
Jan. 10	St. James, Mo.	Dec. 20
Jan. 14	North East, Pa. Adv. Dec. 27 and Jan. 3.	Dec. 27
Jan. 15	Oklahoma City, Okla. Adv. Dec. 20 to Jan. 3.	Dec. 20
Jan. 16	South Bend, Ind.	Dec. 20
Jan. 19	Charlottesville, Va. Adv. Dec. 27 and Jan. 3.	Dec. 27
Jan. 29	Bloomington, Ind. Adv. Jan. 3.	Jan. 3

SEWERS

Bids Close		See Eng. News-Record
Jan. 4	Long Island City, N. Y.	Jan. 3
Jan. 9	Brooklyn, N. Y.	Jan. 3
Jan. 11	Nanty-Glo, Pa.	Jan. 3
Jan. 15	Tell City, Ind.	Jan. 3
Jan. 15	Versailles, Mo.	Jan. 3
Jan. 25	Wash., D. C. Adv. Jan. 3.	Jan. 3
Jan. 30	Fostoria, O. Adv. Dec. 27 and Jan. 3.	Jan. 3
Feb. 5	Baton Rouge, La.	Jan. 3

BRIDGES

Bids Close		See Eng. News-Record
Jan. 11	Seattle, Wash.	Dec. 20
Jan. 17	New Orleans, La.	Jan. 3
Jan. 22	St. Louis, Mo.	Dec. 27
Jan. 22	Lakefield, Ont.	Jan. 3
May 1	Tientsen, North China	Oct. 11

DAMS

Bids Close		See Eng. News-Record
Feb. 7	Kingston, N. C.	Dec. 27

RAILWAYS

Bids Close		See Eng. News-Record
Jan. 3	Missouri	Jan. 3
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Jan. 14	Angleton, Tex.	Jan. 3
Jan. 15	Pueblo, Colo. Adv. Dec. 27 and Jan. 3.	Jan. 3
Jan. 15	St. Catharines, Ont.	Jan. 3
Jan. 15	Cape May, N. J.	Jan. 3
Jan. 17	Rochester, N. Y. Adv. Dec. 20 to Jan. 3.	Dec. 20
Jan. 18	Lake Charles, La. Adv. Dec. 27 and Jan. 3.	Dec. 27
Jan. 24	Baton Rouge, La	Jan. 3

STREETS AND ROADS

Bids Close		See Eng. News-Record
Jan. 7	Vicksburg, Miss.	Dec. 13
Jan. 7	Albany, Ga.	Jan. 3
Jan. 8	Breckenridge, Tex.	Jan. 3
Jan. 8	Monticello, Ind.	Dec. 20
Jan. 9	Del Rio, Tex.	Dec. 27
Jan. 9	Cameron, Tex.	Jan. 3
Jan. 10	San Angelo, Tex.	Dec. 20
Jan. 10	Brooklyn, N. Y.	Jan. 3
Jan. 11	Denton, Tex.	Jan. 3
Jan. 11	Seattle, Wash.	Dec. 27
Jan. 11	Franklin, Tex.	Dec. 27
Jan. 14	El Monte, Calif.	Jan. 3
Jan. 14	California	Jan. 3
Jan. 14	Oilton, Okla.	Dec. 13
Jan. 15	Brady, Tex.	Jan. 3
Jan. 15	Michigan	Dec. 6
Jan. 15	Michigan	Dec. 13
Jan. 15	Rock Springs, Tex.	Dec. 27
Jan. 15	Louisiana	Dec. 27
Jan. 15	Maryland Adv. Jan. 3.	Jan. 3
Jan. 16	Santa Rosa, Calif.	Jan. 3
Jan. 22	Louisiana	Jan. 3
Jan. 22	St. Louis, Mo.	Dec. 27
Jan. 23	Winona, Miss.	Jan. 3
Jan. 29	Baton Rouge, La.	Jan. 3

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Jan. 8	Canton, N. Y.	Dec. 27
Jan. 15	New York, N. Y.	Jan. 3
Feb. 1	Peoria, Ill.	Dec. 27
Apr. 30	Wellington, New Zealand	Dec. 6

BUILDINGS

Bids Close		See Eng. News-Record
Jan. 4	Roxbury, (Boston P. O.), Mass.	Jan. 3
Jan. 5	Phila., Pa.	Jan. 3
Jan. 7	Baltimore, Md.	Jan. 3
Jan. 7	Boston, Mass.	Jan. 3
Jan. 7	Lebanon, Pa.	Jan. 3
Jan. 8	Wilson, N. C.	Dec. 20
Jan. 8	Brooklyn, N. Y.	Dec. 27
Jan. 8	New York, N. Y.	Dec. 27
Jan. 8	Bellaire (Jamaica P. O.), N. Y.	Dec. 27
Jan. 9	Baltimore, Md.	Dec. 27
Jan. 9	Denver, Colo.	Dec. 13
Jan. 10	Baltimore, Md.	Jan. 3
Jan. 10	Milwaukee, Wis.	Jan. 3
Jan. 10	Salem, Mass.	Jan. 3
Jan. 10	Birmingham, Ala.	Dec. 13
Jan. 12	Boston, Mass.	Nov. 29
Jan. 14	Galveston, Tex.	Nov. 29
Jan. 14	Schuylerville, N. Y.	Dec. 13
Jan. 14	Galveston, Tex.	Dec. 27
Jan. 17	Tyler, Tex.	Jan. 3
Jan. 17	Jonesville, Mich.	Jan. 3
Feb. 1	Dorchester, Mass.	Nov. 29
Feb. 4	Urbana, Ill.	Dec. 13
Feb. 4	Columbus, O.	Dec. 27

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Jan. 9	Scow—Phila., Pa.	Dec. 20
Jan. 9	Storage and Recreation—Cape Hatteras, N. C.	Dec. 20
Jan. 9	Quarters and Boathouse—Poyners Hill, N. C.	Dec. 20
Jan. 9	Underpinning Foundations — Wash., D. C.	Dec. 20
Jan. 9	Remodeling—Norfolk, Va.	Dec. 27
Jan. 10	Steel Hulls — Vicksburg, Miss.	Dec. 6
Jan. 14	Clearing Landing — Florence, Ala. Adv. Jan. 3.	Jan. 3
Jan. 15	Filtration Plant, etc.—Wash., D. C. Adv. Dec. 20 to Jan. 3.	Dec. 20
Jan. 16	Scow and Barge—Milwaukee, Wis. Adv. Dec. 20 to Jan. 3.	Dec. 20
Jan. 16	Fuel Oil Storage—Mare Island, Calif.	Dec. 6
Jan. 19	Gates—Cincinnati, O. Adv. Dec. 27 and Jan. 3.	Dec. 27
Jan. 21	Post Office—State College, Pa. Adv. Dec. 27 and Jan. 3.	Dec. 27
Jan. 28	Snagboat—Wilmington, N. C. Adv. Jan. 3.	Jan. 3
Jan. 29	Extension—Kansas City, Mo.	Jan. 3
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15
Feb. 6	Storehouse—Pearl Harbor, H. T.	Dec. 20

UNCLASSIFIED

Bids Close		See Eng. News-Record
Jan. 9	Transmission Towers — San Francisco, Calif.	Dec. 20
Jan. 9	Wharf—Pembroke, Ont.	Dec. 27
Jan. 9	Sprinkler System—Syracuse, N. Y.	Jan. 3
Jan. 19	Transformers, etc.—Melbourne, Australia	Oct. 18
Jan. 21	Jetty—New Westminster, B. C.	Jan. 3
Feb. 11	Transformers and Spares—Melbourne, Australia Adv. Jan. 3.	Jan. 3
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIALS AND EQUIPMENT

Bids Close		See Eng. News-Record
Jan. 4	Snow Loader — Trenton, N. J.	Jan. 3
Jan. 9	San Francisco, Calif.	Dec. 20
Jan. 9	Asphaltic Cement, etc.—New York, N. Y.	Jan. 3
Jan. 10	Land Dredge—Savannah, Ga. Adv. Dec. 27 and Jan. 3.	Dec. 27
Jan. 14	Pumps—Mont Pelier, O.	Jan. 3

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., Hartford—Water Dept., 1026 Main St., plans to purchase 200 new hydrants. $15,000. C. M. Saville, 1026 Main St., engr.

N. J., Park Ridge—Takes bids about Feb. 15, 13 mi. c.i. mains, 1 steel stand pipe, 2 pumping stations and 2 artesian wells. H. J. Harder, 129 Market St., Paterson, engr.

W. Va., Martinsburg—Plans suction reservoir $12,000, pipe and repairs $13,000, 2 Diesel oil pumping engines and pumps installed $30,000. Will probably note on $100,000 bonds for above project. C. W. Kilbourne, chrm. conr.

Fla., Tampa—Feb. 12, to vote on $100,000 bonds extending mains. R. D. Martin, City Hall, engr.

La., Gibsland—Voted $60,000 bonds for waterworks improvements and electric light plant. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Ill., Girard—Making surveys rein.-con. dam, filtration plant and distribution mains. $100,000. Caldwell Eng. Co., Jacksonville, engrs.

Ill., Carmi—Having surveys made filtration plant, dam in Little Wabash River, and supply lines. $50,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs. Will mature in spring.

Ill., Coulterville—Having surveys made impounding reservoir, pumping equipment and distribution mains. $100,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs.

Ill., Highland—Making preliminary plans 4- to 8-in. mains, etc. $65,000. L. Day, 34 East Grand St., St. Louis, Mo., engr.

Ill., Lebanon—Having preliminary surveys made deep well, pumping equipment and distribution mains. $50,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs. Noted Dec. 27.

Ill., Marissa—Plans impounding reservoir, pumping equipment and distribution mains. $100,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs.

Ill., Pittsfield—Making plans distribution system. $50,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs.

Ill., Villa Grove—Rejected bids new pumping station incl. equipment, 1 motor driven deep well pump, one 20 hp. electric motor, well 630 ft. deep with 15½ in. interior diam. $15,000. Will readvertise. Holbrook, Warren & Van Praag, 416 Millikin Bldg., Decatur, engrs. Noted Dec. 20.

Kan., Cottonwood Falls—City voted $15,000 bonds water distribution system, etc. Private plans.

Kan., Leavenworth—Making plans 6 m.g. filtration plant and other miscellaneous water improvements. To exceed $25,000. A. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Mo., Piedmont—Election Jan. 12 (extended date), to vote on $40,000 bond issue. W. A. Fuller Co., Ry. Exch. Bldg., St. Louis, engrs. Noted Dec. 20.

Neb., Dannebrog—Voted $17,400 bonds for waterworks system. H. Hald, city clk.

Neb., Republican—Takes bids in January waterworks improvements. $23,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Tex., Dallas—See "Streets and Roads."

Tex., Lubbock—Making plans waterworks extensions. $25,000. J. B. Hawley, Cotton Exchange Bldg., Ft. Worth, consult. engr. S. Sanders, city engr.

Tex., Lubbock—See "Streets and Roads."

Okla., Okemah—Voted $65,000 bonds for dam, pipe line, equipment and filter units. Holway Engr. Co., Wright Bldg., Tulsa, engrs. Noted Dec. 13.

Waterworks (Continued)

Calif., Glendale — See "Streets and Roads."

Calif., Moorpark—See "Excavation, Drainage, Irrigation."

BIDS DESIRED

N. J., Haledon—Jan. 7 extending water system. H. J. Harder, 129 Market St., Paterson, engr. Noted Oct. 11.

N. C., Conover—Jan. 10, by C. R. Brady, mayor and Bd. Alderman, water supply line from here to Newton and distribution system, also sewerage system incl. 4 mi. 6- to 10-in. sanitary sewer, with all necessary appurtenances. Spoon & Lewis, Greensboro, engrs. Noted Dec. 13.

Mich., River View—Jan. 2, by J. Perry, village clk., R. F. D., Wyandotte, waterworks system incl. distribution and c.i. mains connecting with Wyandotte system. $88,000. R. A. Murdoch, 603 Free Press Bldg., Detroit, engr. Noted Nov. 15.

Ky., Elizabethtown—Feb. 12, by Mayor and City Council, waterworks improvements. To exceed $25,000. Former bids rejected. Noted Nov. 29.

Ind., Bloomington—Jan. 29, at office of Bloomington Water Co., waterworks improvements, incl. dam, pumping station and pipe lines. U. S. Hanna, secy.; adv. E. N.-R. Jan. 3.

Ill., Forest Park — Jan. 4, for rein.-con. reservoir, air lift pump, compressor, pipe for air line, receiving tank, etc., water pipe, gate valves and connections, housing for receiving tank, well and work shop, transformers and transmission lines, etc. H. C. Huxhold, village clk.

Mo., Chilicothe—Jan. 7, by J. L. Schmitzm, secy. Bd. Pub. Wks., constructing reservoir, 5,600 cu.yd. embankment, 28,500 sq.ft. 4 in. rein.-con. paving, etc. E. P. Harper, 3031 Park Ave., Kansas City, consult. engr.

Minn., Moorhead—See "Industrial Works."

Wash., Kelso—Jan. 5, by City Council installing water treating system and additional equipment, removing pumping equipment to new location. $25,000. Former bids rejected. U. G. Jackson, city engr. Noted Sept. 13.

BIDS RECEIVED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bedford, Livonia and Morgan Aves., here, from Grippo Contg. Co., $19,991. Noted Dec. 20.

Wis., Milwaukee—Bd. Pub. Wks. oil removal plant for Riverside pumping station from The Permutit Co., 440 4th Ave., New York City, $6,150 and $4,950; electric freight elevator for above from Heller Elevator Co., 250 Milwaukee St., $3,178.

Wis., New Holstein—See "Sewers."

Minn., St. Paul—H. W. Austin, city purch. agt., Dec. 18, 8,000 lin.ft. 60 in. outside diam. steel pipe, with nec ssa y bends and sleeves, from Lasker Iron Wks., 3201 South Lincoln St., Chicago, Ill., $109,838.

CONTRACTS AWARDED

N. J., Trenton—To Hersey Mfg. Co., 290 Bway., New York City, five hundred ⅝ meters and couplings, $10.97 each, one hundred fifty ¾ meters an couplings $16.47, and fifty 1 in. meters $24.13.

Wash., Pasco—Intake, pumping plant and mains, to Campbell Constr. Co., Sunnyside; elevated tank to Chicago Bridge and Iron Co., 608 South Dearborn St., Chicago, Ill. Engs. est. $84,000.

N. C., Greensboro—For 7½ mi. c.i. mains between here and city reservoir, to Ocie Dasheall Co., Portsmouth, Va., $72,000. Noted Dec. 13.

Ia., Washington—For 200,000 gal. elevated steel tank, etc., to Pittsburgh-Des Moines Steel Co., 9th and Tuttle Sts., Des Moines, $14,400. Noted Nov. 22.

Minn., Minneapolis—Bell and spigot pipe, to Amer. Cast Iron Pipe Co., Acipco St., Birmingham, Ala., 50,000 lin.ft. 6 in. 16 ft. lengths, Class C $0.995 per ft., 12,000 lin.ft. 8 in., 16 ft. lengths, Class C, $1,445, 6,000 lin.ft. 12 in., 12 ft. lengths, Class B, $2,285, 1,400 lin.ft. 16 in., 12 ft. lengths, Class B $3.48; to Columbian Iron Wks. 811 Boyce St., Chattanooga, Tenn., two hundred and twenty-five 6-in. gate valves, hub end, Class C $25.62, each, thirty 8-in. gate valves, hub end, Class C, $40.26 each twenty 12 in. gate valves Class B, $76.86 each, also 120 hydrants $88.44 each; to Amer. Brake Shoe Fdry. Co., 37th Ave. N. E. and University Ave., 120 tons special castings, $81.25 per ton. Noted Dec. 20.

Minn., St. Paul—Furnishing and delivering about 2,925 tons Class B c.i. pipe in 12 ft. lengths, as follows: 2,640 pieces 6 in., 2,200 of 8 in. and 880 pieces 12 in., to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala., $55.66 per ton; 1,320 pieces of 16 in. to Glamorgan Pipe & Fdry. Co., The Rookery, Chicago, Ill., $55.55 per ton; 330 pieces of 20 in. to Amer. Cast Iron Pipe Co., Acipco St., Birmingham, Ala., $55.70 per ton. Noted Dec. 20.

S. D., Madison—Furnishnig 500 lin.ft. 6 in. and 325 ft. 10 in. c.i. pipe, etc., to Amer. Cast Iron Pipe Co., Acipo St., Birmingham, Aia. Noted Dec. 13.

Tex., Dallas—See "Streets and Roads."

Ont., Toronto—For 20,000 lin.ft. 20 in. and up, c.i. pipe to F. Hankin & Co. Ltd., 386 King St. W., $228,220. Engrs. est. $230,000. Noted Dec. 6.

Wash., Seattle—Bd. Pub. Wks., mains in East Northlake Ave. et al., to R. G. Stevenson, 1327 North 34th St., 3,055 ft. 12 in. c.i. pipe $4, 1,575 ft. 8 in. $2.25, total $19,898. Engrs. est. $21,526. Noted Dec. 20.

Ont., Amherstburg—Anderdon Twp. Council, 2 mi. 1½ and 2 in. water pipe, to Duff & Carnahan, Amherstburg, $30,000.

Sewers

PROPOSED WORK

N. J., Lambertville—Making plans sewerage system. $130,000. C. D. Pollock, 13 Park Row, and A. P. Folwell, 243 West 39th St., New York City, engrs.

Pa., Mercer — Boro Council takes bids about Feb. 1, disposal plant. $30,000. J. M. Rice, Oliver Bldg., Pittsburgh, engr.

Fla., Tampa—Feb. 12, to vote on $750,000 bonds extending sanitary and storm sewers. R. D. Martin, City Hall, engr.

O., Warren — Plans Red Run sewerage system. $645,000. E. H. Harvey, city engr.

Mich., Birmingham—Having plans prepared sewage disposal plant and septic tank. $25,000. Ruhling, Holdsworth & Hudson, 16549 Woodward Ave., Detroit, engrs.

Ill., Highland—Making preliminary plans 6- to 16-in. sewers, 2 septic tanks, etc. To exceed $75,000. L. Day, 34 East Grand St., St. Louis, Mo., engr.

Ill., Lebanon — Having preliminary surveys made sewerage system. $75,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs.

Ill., Pittsfield — Having surveys made complete sewerage system. $80,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs. Will mature in spring.

Ill., Teutopolis—Making preliminary plans 8- to 36-in. sewerage system, disposal plant, etc. $25,000. W. A. Fuller Co., 1917 Ry. Exch., St. Louis, Mo., engrs.

Ill., Vandalia—Takes bids in spring 12,000 lin.ft. 8 in. sewers, 35 manholes, etc., $25,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

Wis., Green Bay—Buchholz-Schilling Realty Co., East Walnut St., having preliminary plans prepared, 8-10 in. vitr. pipe sewers in subdivision, Allouez Twp. $25,000. H. R. Albert, c/o Courthouse, engr.

Kan., Topeka—Soon takes bid 2 intercepting main sewers for downtown part of city. $100,000. C. A. Haskins, Kansas City, consulting engr., and W. E. Baldry, City Hall, Topeka, city engr. Noted Aug. 16.

Mo., Cameron—Plans sewerage system. To exceed $25 000. Black & Veach, 701 Mutual Bldg., Kansas City, engrs.

Mo., Palmyra—Election Jan. 8, to vote on $15,000 bonds for sewers.

Tex., Dallas—See "Streets and Roads."

Tex., Lubbock—See "Streets and Roads."

Okla., Chickasha—Preparing preliminary plans sewers, outlets, disposal plant and water line from tower to plant. $70,000. J. C. Milliken, Chickasha, engr. Noted Dec. 27.

Calif., Fresno—Plans election to vote on approximately $500,000 bonds storm sewerage system. W. Stranahan, city engr.

Calif., Inglewood—City having plans prepared new sewage disposal system. To exceed $25,000. A. W. Cory, city engr.

Calif., Tulare—Plans election to vote on $125,000 bonds or more for disposal plant. G. S. Lewis, city engr.

BIDS DESIRED

N. Y., Brooklyn—Jan. 9, by E. Riegelmann, boro pres., Boro Hall, sewer in 24th Ave. (engrs. est. $37,586) and in East 36th St., $2,244.

N. Y., Long Island City—Jan. 4, by M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., sewers and appurtenanes in 159th (19th), 116th (Walnut), 117th (Briggs), 94th (Walker Ave.), Sts., Suwanee, Roanoke, Liberty, 107th (Dalrympel) Aves., and westerly side Woodhaven Blvd.

Pa., Nanty-Glo—Jan. 11, by J. M. Carlisle, boro secy., constructing 2,255 lin.ft. 8, 10 and 12 in. sanitary sewers, and 1,080 ft. 6 in. laterals. C. C. Hauth, Trust Bldg., Ebensburg, engrs.

D. C., Wash.—Jan. 25, by Dist. Comrs., 509 Dist. Bldg., constructing 2,600 lin.ft. sewer. Further information Room 427 Dist. Bldg.; adv. E. N.-R. Jan. 3.

N. C., Conover—See "Waterworks."

La., Baton Rouge—Jan. 24, by Comn. Council, storm drains in Goose Hollow, St. Philip and Roseland Terrace Canals, 4,250 cu.yd. Class A concrete, 384,000 lb. steel, etc. J. W. Billingsley, City Hall, consult. engr.

La., Baton Rouge — Feb. 5, by Comn. Counil, sanitary sewers, 4,600 lin.ft. 10 and 24 in. vitr. clay pipe, 520 lin.ft. 36 in. c.i. pipe. J. W. Billingsley, Ciyt Hall, consult. engr.

O., Fostoria—Jan. 30, intercepting sewers, pumping machinery, superstructures, grit chambers, sludge beds, etc., for disposal plant. The J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.; adv. E. N.-R. Jan. 3.

Ind., Tell City — Jan. 15, by Common Council concrete and vitr. brick sewer in Fulton St. with branches in 9th, 11th and Ruben Sts., Resolution 1. $68,764. J. Adams, Jr., city clk.

Mo., St. Louis—See "Excavation, Drainage, Irrigation."

Mo., Versailles—Jan. 15, by E. T. Archer & Co., engrs., 609 New England Bank Bldg., Kansas City, lateral sewers, here. $30,000.

Tex., Houston—Jan. 14, by City Comn., for storm sewers in Southmore Addition. $175,000. J. C. McVea, city engr. Noted Dec. 20.

BIDS RECEIVED

Md., Baltimore — Bd. Awards, Dec. 26, 4,200 ft. 8- to 27-in. sewer in Dist. 24 B, Sanitary Contr. 208, from F. B. Carozza, 5209 York Rd., A $139,000 and B $145,997; 6,400 ft. 8- to 48-in. sewers and storm drains, etc., Dists. 50 and G-11, Storm Water Contr. 63, from A. J. Boyle, American Bldg., $48,910. Noted Dec. 20.

Ill., Lewistown—For 13,000 ft. 8-in. vitr. sewer, disposal tank, sludge bed, etc., from W. Anno, Havana, $19,922. Noted Dec. 13.

Wis., Milwaukee—Sewage Comn., 508 Market St., 340 standard manhole frames and covers, from Nortmann-Duffke Co., 27th Ave., $27.50 each.

Wis., New Holstein—Sewer and water sytem, from W. F. Ribbens, Mayville, $106,000. Noted Oct. 11.

Calif., Los Angeles—Bd. Pub. Wks., constructing following sections North Outfall Sewer, 11,050 lin.ft. semi-elliptical sewer, Sect. 4, from Ross Constr. Co., Van Nuys Hotel, $303,300; 15,197 lin.ft. semi-elliptical sewer Sect. 6, from Callahan & Conney, $298,000; 10,906 lin.ft. semi-elliptical sewer, Sect. 8, from L. S. Atkinson, Jr., Chapman Bldg., $249,500, from C. R. Adams, Snelling, using pre-cast concrete type, $137,500; combined bid for all sections from W. E. Callahan Constr. Co., and Smith Bros., Seventh-Hill Bldg., $1,213,000; for Sect. 9, 55,000 vitr. clay sewer lining blocks from Tropico Potteries, Inc., Glendale, $184, 6,002 lin.ft. rein.-con. pipe, 8 ft. 6 in. in diam. with vitr. clay lining, from Western Reinforced Concrete Pipe Co., 1611 East 6th St., $13.50. Noted Dec. 20.

CONTRACTS AWARDED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, temporary sewers in Clarendon Rd., to Tomasetti & Co., Inc., 1133 60th St., 785% engrs. est. $32,785). Noted Dec. 27.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., reconstructing outlet sewer in lines of (1) 43rd, and (2) 51st Sts. in Flushing Bay, etc., to A. M. Hazell, Inc., 26 Cortlandt St., New York, (1) $35,380; to J. D. Walsh, Inc., 132 4th St., Brooklyn, (2) $44,980. Noted Dec. 20.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Zulette Ave., to MacDonald & Wilson, $17,937; Findlay Ave., to J. V. Timoney Constr. Co., 220 East 201st St., $11,502; Melville St., to F. Casparine, $41,108; Rhinelander and Wilson Aves., to A. Gregorio & Co., $59,942 and $28,252 respectively. Noted Dec. 27.

La., New Orleans — Sewerage & Water Bd., 425 Carondelet St., sewerage and water improvements during 1924, to J. A. McGowan, 1325 Calhoun St., on percentage basis. Noted Oct. 11.

O., Cincinnati — Constructing sewer in Duck Creek between Williams and Dana Sts., to Cannel & Conrad, 2907 Madison Rd., $194,774.

Sewers (Continued)

O., Cincinnati—Sewers in Marburg Ave., to M. J. Connelly, 326 West Oak St., Ludlow, Ky., $43,000. Noted Dec. 20.

Kan., Great Bend—Sewage system, 16,500 ft. trench 8 ft. deep, 6,300 ft. trench 8- to 12-ft. deep, 11,500 ft. wet trench 0- to 3-ft. of water, also 2,400 lin.ft. 18 in., 4,950 lin.ft. 15 in., and 14,500 lin.ft. 24 in., lock joint rein.-con. pipe, to T. Johnson, Eagle Grove, Iowa, $75,462. Noted Dec. 6.

Mo., Farmington—For 62,862 ft., 8- to 15-in. vitr. pipe sewer, 360 ft. 8- to 15-in. c.i. pipe, disposal plant, etc., to Welp & Zigrang, Bancroft, Iowa, $81,582. Noted Dec. 20.

Tex., Burkburnett—Will build complete sewerage system, by day labor. $50,000. Montgomery & Ward, City Natl. Bank, Wichita Falls, engrs.

Tex., Park Place (Harrisburg P. O.)—Disposal plant and sewers, to General Excav. Co., Magnolia Blvd., Dallas, $94,820. Noted Dec. 13.

Waste Disposal

PROPOSED WORK

Fla., Tampa—Plans garbage incinerator. $30,000. R. D. Martin, City Hall, engr.

Bridges

PROPOSED WORK

Fla., Tampa—Feb. 12, to vote on $250,000 bonds for bridge over Fortune St., $325,000 bonds, bridge over Cass St., and $325,000 bonds, bridge at or near Carew St. R. D. Martin, city engr.

Fla., Tampa—See "Streets and Roads."

O., Akron—Bd. Control takes bids after Jan. 1, rein.-con., steel and stone bridges over canal at Bartges St. $26,000. E. A. Kemmler, city engr.

N. D., Fargo—Northern Pacific Ry., 5th and Jackson Sts., St. Paul, Minn., had plans prepared to replace 190 ft. single track draw span with 2 double track deck girder spans one 83 ft. long and other 93 ft. long, with one 230 ft., and one 300 ft. timber approaches, 407 tons steel, 245,000 ft. lumber, 300 cu.yd. concrete, etc., over Red River, here. $95,000. M. F. Clements, c/o owner, bridge engr.

Mont., Big Horn—Northern Pacific Ry. Co., 5th and Jackson Sts., St. Paul, Minn., plans to replace three 155 ft. pin connected trusses for light loading with three 155 ft. pin riveted trusses for heavy loading, here. $95,000. M. F. Clemens, bridge engr.

Mont., Miles City—Northern Pacific Ry. Co., 5th and Jackson Sts., St. Paul, Minn., plans to replace two 155 ft. steel trusses through-pin connected for light loading, with two 155 ft. pin-riveted trusses designed for heavy loading, over Tongue River. $70,000. M. F. Clements, c/o owner, bridge engr.

Mo., Kansas City—Bd. Pub. Wks. plans 237 ft. reinforced steel and concrete bridge, two 50 ft. and one 90 ft. spans, over Blue River, at Independence Rd., 40 and 58 ft. roadway, 6 ft. sidewalk on each side, etc. $150,000. J. A. L. Waddell, 400 Graphic Art Bldg., engr.

Tex., Fairfield—See "Streets and Roads."

Tex., Liberty—See "Streets and Roads."

California—See "Streets and Roads."

BIDS DESIRED

La., New Orleans—Jan. 17, by Bd. Port Comrs., Suite 200, New Court Bldg., double deck bridge and approach span for ferry landing at foot of Canal St. J. H. Walsh, genl. mgr.

Mo., Kansas City—See "Railways" under "Missouri."

California—Jan. 14, by State Hy. Comn., Sacramento, 240 ft. bridge, 21 ft. wide between curbs, consisting of three 60 ft. and two 30 ft. rein.-con. girder spans supported on piers and bents, also 0.2 mi. of approaches to be graded, over San Lorenzo Creek near King City. R. M. Morton, state hy. engr.

Ont., Lakefield—Jan. 22, by E. M. Elliott, clk. Peterboro Co., County Bldg., Peterboro, rein.-con. spandrel arch highway bridge with 109 ft. and 84 ft. spans, 20 ft. roadway, 6 ft. sidewalk. $25,000. A. W. Connor & Co., 34 Victoria St., Toronto, engrs.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, Dec. 28, 73 ft. span steel encased in concrete bridge, incl. removing existing bridge, etc., over Passaic River, M. P. 32.2, State Highway Route 16, in municipalities of Bernard and Passaic, Somerset and Morris Counties, from Hoffman Constr. Co., Morristown Rd., Bernardsville, $31,952. Noted Dec. 13.

Tex., Richmond—Fort Bend Co., bridge over Brazes River at Morton St., from J. DePuy, Bedell Bldg., San Antonio, original design piers, $244,427. Engrs. est. $275,000. Noted Nov. 29.

SEWERS—LOUISVILLE, KY.

Following are lowest three bids opened by Sewerage Comrs., Nov. 16, for constructing Dry Run Relief Sewer, Contr. No. 15, (A) H. Bickel Co., 423 Garden St., Louisville, (awarded contract); (B) Cannell-Conrad Co., Louisville; (C) Cement Gun Co., Inc., Allentown, Penn. The unit bids were as follows:

	A	B	C
16,500 cu.yd. earth excavation and refill	$2.40	$2.72	$2.65
280 cu.yd. earth excavation and refill	10.00	9.50	16.00
1,370 cu.yd. earth excavation and refill	2.40	3.72	3.40
1,470 cu.yd. earth excavation and refill	2.40	3.72	3.50
1,540 cu.yd. class A concrete masonry	18.00	21.80	23.00
35 cu.yd. class A concrete masonry	33.00	30.00	35.00
575 cu.yd. class A concrete masonry	25.00	34.90	28.00
18 cu.yd. class A concrete masonry	36.00	34.90	46.50
250 cu.yd. class C concrete masonry	18.00	12.00	14.60
200 cu.yd. hydrated lime	.75	.99	.80
10 cu.yd. brick masonry	30.00	30.00	34.20
239,400 lb. reinforcing bars	.062	.045	.06
300 cu.yd. earth excavation below sewer	1.00	3.00	3.00
300 cu.yd. gravel refill below sewer	.50	3.00	3.30
24 in. and less $2,528.54 A.S.T.M. clay pipe	37%	40%	34%
30 in. $72.00 A.S.T.M. clay pipe	10%	20%	00%
$345.00 pipe for underdrain	47%	40%	36%
200 ft. 6 in. laying with cement mortar	.50	1.00	.16
10 ft. 12 in. laying with cement mortar	.50	1.00	.32
10 ft. 15 in. laying with cement mortar	.60	1.00	.40
265 ft. 18 in. laying with cement mortar	.72	1.00	.50
275 ft. 24 in. laying with cement mortar	.96	1.00	.60
10 ft. 30 in. laying with cement mortar	1.50	2.00	1.00
300 ft. 6 in. laying underdrain	.40	1.00	.40
300 ft. 8 in. laying underdrain	.45	1.00	.50
10 M.ft. b.m. sheeting, bracing	40.00	50.00	40.00
2,200 sq.yd. water bound macadam	1.50	1.25	1.70
310 sq.yd. vitrified block	6.75	5.00	5.50
80 sq.yd. brick sidewalk	2.20	1.00	1.50
Overflow chamber (lump sum)	400.00	400.00	400.00
2 ft. 9 in. x 4 ft. sanitary connection (lump sum)	100.00	100.00	100.00
9 ft. sewer and junction chamber (lump sum)	500.00	500.00	500.00
Clay St. sewer (lump sum)	100.00	100.00	100.00
Shelby St. sewer (lump sum)	100.00	100.00	100.00
Beargrass intercepter (lump sum)	1,250.00	1,250.00	1,250.00
15 in. V. P. sewer in Ky. St. (lump sum)	550.00	550.00	550.00
House drains (lump sum)	......	......	......
Outlet structure (lump sum)	1,100.00	1,100.00	1,100.00
5.6 T. 24 in. A.S.T.M. c.i. pipe	67.00	75.00	76.00
24.5 T. 36 in. A.S.T.M. c.i. pipe	67.00	75.00	76.00
48 ft. 24 in. laying c.i. pipe	2.40	15.00	1.45
108 ft. 36 in. laying c.i. pipe	3.60	15.00	1.75
Cleaning up (lump sum)	100.00	500.00	350.00
Progress and completion, $25 per day	......	......	......
Extended totals	$133,722.00	$149,233.00	$151,911.00

SEWERS—MILWAUKEE, WIS.

Bids were opened by Sewerage Comn., Nov. 2, for installing sewers in various streets, from (A) Hammen & Co., 516 Garfield Bldg., Detroit, Mich., (awarded contract); (B) H. Hohensee, Ludington Ave., Wauwatosa; (C) Wenzel & Henoch Co., 498 27th St., Milwaukee. The unit bids were as follows:

	A	B	C
3,950 ft. 84 in. concrete sewer	$58.40	$54.87	$57.87
4,712 ft. 78 in. concrete sewer	52.65	53.87	55.87
295 ft. 60 in. concrete sewer	39.50	34.00	53.00
1,112 ft. 30 in. concrete sewer	26.50	31.00	33.00
927 ft. 24 in. terra cotta sewer	25.00	28.00	19.87
250 ft. 18 in. terra cotta sewer	25.00	18.00	19.00
75 ft. 12 in. terra cotta sewer	25.00	17.00	15.00
750 standard manholes	25.00	32.00	32.00
150 drop manholes	35.00	35.00	37.00
Extended totals	$575,187	$576,055	$598,021

SEWERS—DES MOINES, IOWA

Bids were opened by City Clk., Oct. 15, for installing Southwest Sewerage System, from (A) C. G. Herrick, Des Moines; (B) Royer & Craig, Des Moines. The unit bids were as follows:

	A	B
14,511 ft. 48 in. sewer	$21.40	$20.50
2,874 ft. 45 in. sewer	22.50	22.95
2,713 ft. 42 in. sewer	22.00	23.95
698 ft. 36 in. sewer	8.00	10.00
6,106 ft. 30 in. sewer	7.60	7.25
1,198 ft. 27 in. sewer	5.17	6.00
13,386 ft. 24 in. sewer	5.45	4.90
1,007 ft. 21 in. sewer	2.89	3.51
1,091 ft. 18 in. sewer	2.50	3.22
15,533 ft. 15 in. sewer	1.40	2.07
11,633 ft. 12 in. sewer	1.00	1.89
1,156 ft. 10 in. sewer	1.00	1.49
Dry weather outfall, complete (lump sum)	5,500.00	5,000.00
Inverted siphon, complete (lump sum)	9,000.00	12,000.00
100 cu.yd. rock excavation	13.00	15.00
50 cu.yd. concrete	16.00	25.00
4,000 lb. steel	.04	.06
Cinder or gravel foundation for 48 in. sewer (lump sum)	400.00	400.00
Cinder or gravel foundation for 45 in. sewer (lump sum)	700.00	400.00
Cinder or gravel foundation for 42 in. sewer (lump sum)	100.00	100.00
Cinder or gravel foundation for 36 in. sewer (lump sum)	50.00	100.00
Cinder or gravel foundation for 30 in. sewer (lump sum)	50.00	100.00
Cinder or gravel foundation for 27 in. sewer (lump sum)	50.00	100.00
Cinder or gravel foundation for 24 in. sewer (lump sum)	510.00	250.00
Cinder or gravel foundation for 21 in. sewer (lump sum)	25.00	100.00
Cinder or gravel foundation for 18 in. sewer (lump sum)	25.00	100.00
Cinder or gravel foundation for 15 in. sewer (lump sum)	50.00	40.00
Cinder or gravel foundation for 12 in. sewer (lump sum)	50.00	10.00
Cinder or gravel foundation for 10 in. sewer (lump sum)	25.00	10.00
Extended totals	$626,909	$638,980

Bridges (Continued)

Calif., Los Angeles — See "Streets and Roads."

CONTRACTS AWARDED

Wis., Milwaukee — Park Bd., City Hall, wooden piling for bridge on Mason St., to W. F. Tubesing Co., 373 Bway., $76,509. Noted Dec. 13.

Kan., Phillipsburg — See "Streets and Roads."

Tex., Beaumont—Jefferson Co. 3,219 ft. bridge over Neches River, one 240 ft. swing span and two 125 ft. steel approach spans, twelve 38 ft. concrete deck girder spans, etc., to Brown Abbott Co., Inc., Wilson Bldg., and Smith Bros., Inc., Amer. Natl. Exch. Bank Bldg., Dallas, $326,021. Former contract rescinded. Noted Dec. 20.

Tex., Cleburne—Johnson Co., 360 ft. concrete girder bridge, with twelve 30 ft. spans over Buffalo Creek, near here, to McClung Constr. Co., Sherman, $21,047. Engrs. est. $27,000. Noted Dec. 20.

Tex., McKinney—Collin Co., 6 bridges on State Highway 6, 1,107 ft. concrete girders and steel spans incl. forty-three 20 ft., one 80 ft., four 31 ft. and one 43 ft. spans, to Brown-Abbott Co., Inc., Wilson Bldg., Dallas, $81,447. Noted Dec. 6.

Tex., Palestine — See "Streets and Roads."

Dams

PROPOSED WORK

Minn., Fond du Lac—See "Unclassified" under Minnesota.

Wash., Lake Cushman—City of Tacoma had plans prepared and takes bids about Feb. 1, dam, 1st unit of hydro-electric plant in connection with Lake Cushman power project. Will sell $4,000,000 bonds Jan. 21. J. L. Stannard, City Hall, Tacoma, ch. engr. of Lake Cushman Power Project. Noted Nov. 1.

N. S., East River Sheet Harbor—See "Unclassified."

BIDS DESIRED

Ind., Bloomington—See "Waterworks."

Colo., Pueblo—See "Excavation, Drainage, Irrigation."

Railways

PROPOSED WORK

North Carolina—Norfolk Southern R.R., Norfolk, Va., plans refrigerating plant and enlargement of yards at Star, also construction of long sidings and passing tracks at Eagle Springs, West End, Candor, Norwood and Wadesboro. F. L. Nicholson, Norfolk, Va., ch. engr.

Texas — Artesian Belt Ry. Co., Artesia Wells, plans 8 mi. standard railroad from Pulliam, Tex., to asphalt beds west of city. $40,000.

BIDS DESIRED

Missouri—Jan. 3, by M. Raming, city purch. agt., Kansas City, grading for railroad siding ¾ mi. long, ¼ mi. electric railroad, also 16 ft. span, rein.-con. bridge on track, just north of Kansas City. Fuller & Maitland, 201 Walsix Bldg., Kansas City, engrs.

Colorado—See "Excavation, Drainage, Irrigation" under Pueblo.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., West Palm Beach—Lake Worth Inlet Dist. voted $125,000 bond issue to construct inlet to connect Lake Worth with Atlantic Ocean. C. Holsblaw, West Palm Beach, engr.

Miss., Jackson—See "Streets and Roads."

Calif., Bakersfield—Kern River Water Storage Dist. plans irrigation system for 250,000 acres of land. $15,000,000. W. H. Hull, pres. Noted Nov. 29.

Calif., Bieber — Big Valley Irrigation Dist., plans irrigation system, reservoirs in Round Valley and Jess Valley. To exceed $25,000. Bonds in excess of $25,000 will be voted to finance construction. Engineer not selected.

Calif., Montague—Klamath—Shasta Valley Irrigation Dist. election in February to reorganize district and vote on bonds for construction of works to irrigate approximately 30,000 acres.

Calif., Moorpark—Moorpark—Conejo Irrigation Dist. plans irrigation system embracing approximately 28,000 acres, incl. pipe lines, wells and pumping plants, etc. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, engrs.

N. S., East River Sheet Harbor—See "Unclassified."

BIDS DESIRED

N. J., Cape May—Jan. 15, by Bd. Commerce and Navigation, State House, Trenton, redredging section of inland waterway in Grassy Sound Channel, Richardson's Channel and Suaires Channel, Cape May Co., V. Gelineau, 1 Exchange Pl., Jersey City, dir. H. J. Sherman, 501 Cooper St., Camden, engr.

Mo., St. Louis — Jan. 29, by Bd. Pub. Wks., 5,657 ft. partially lined open channel, 40 ft. wide at bottom, 100 ft. wide at top and 20 ft. deep; closed sanitary sewer 84 in. diameter, 12- to 84-in. laterals, sanitary sewer of brick or 2-ring segmental block, Sect. A, River Des Peres. $346,000. W. W. Horner, City Hall, engr. Noted Dec. 13.

Tex., Angleton—Jan. 14, by Bd. Comrs. San Bernard D. D. 9, 15 mi. ditch, 135,000 cu.yd. excav. in Brazoria Co. $30,000. T. J. Arrington, Angleton, engr.

Colo., Pueblo—Jan. 15, by Pueblo Conservancy Dist., construction of relocated river channel and relocation of 35 mi. railroad yard tracks, also barrier dam 6 mi. west of here. E. D. Spruill, secy.; adv. E. N.-R. Jan. 3. Noted Nov. 1.

Ont., St. Catharines—Jan. 15, by J. W. Pugsley, secy. Dept. Rys. & Canals, Parliament Bldg., Ottawa, Sect. 8, Welland Ship Canal, earth and rock excav., mass and rein.-con., reinforcing and structural steel, canal gates, etc. $5,000,000. W. A. Bowden, ch. engr.

CONTRACTS AWARDED

Ill., Eureka—Comrs. Rome View, Levee & D. D., Sect. 1, 1,457,358 cu.yd. floater work, Sect. 2, 243,215 cu.yd. dry land work, and Sect. 3, 207,530 cu.yd. internal drainage floater work in Woodford Co., to E. Gillen Constr. Co., Havana, $0.14 per cu.yd., total $267,134. Noted Dec. 13.

Streets and Roads

PROPOSED WORK

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., rejected bids granite block repaving West Bway. Will readvertise. Noted Dec. 27.

N. Y., Norwich—Chenango Co. plans constructing 3 mi. roads, 24 short lengths, all connecting links. $100,000. E. B. Pendleton, co. surveyor.

N. Y., Pen Yan—Yates Co. plans constructing Roads 320, A and B, and Lake Rd., 16- to 18-ft., $50,000. Will mature in spring. Engineer's name withheld.

N. J., Trenton—Mercer Co. plans concrete road from Houghs Corner to Grand Ave., 20 ft. $77,000. H. F. Harris, co. engr.

W. Va., Beckley—Raleigh Co., election Jan. 23, to vote on $400,000 bonds improvements in Slab Fork Dist. Election Oct. 16 declared illegal. W. J. Lampbou, Beckley, engr.

W. Va., Parkersburg—City Council takes bids paving 10 streets, vitr. brick. $76,000. J. V. Dunbar, Parkersburg, engr.

Fla., Bradentown—Voted $43,000 bonds for paving various streets. Kirby & Myler, Bradentown, engrs. Noted Dec. 6.

Fla., Brooksville — Hernando Co. voted bonds for road construction as follows: $75,000 for 12 mi. road Spring Lake to Pasco Co. line; $72,000 for 12 mi. road Pettaway farm at Spring Lake to Richland; $44,500 for 7½ mi. road from Spring Lake and Richland Rd. to Pasco Co. line and Rerdell Rd.; $78,000 for 12 mi. road from Brookville to Citrus Co., through Annullalaga; $25,000 for 3 mi. road from southwest corner Lykesplace to North St.; $25,000 for 4 mi. road from Kitchen's corner northwest to Annullalaga Rd.; $25,000 for 4¾ mi. Brookville via Springstead Place east and south; $30,500 for 5 mi. road from Brooksville easterly; $36,000 for 10 mi. road from Spring Hill Rd. and from Holwig Church via Rock Hill school Istachatta to Citrus Co.; $29,500 for 4 mi. road from No. 5, north of Brooksville to Tucker Hill. Noted Dec. 6.

Fla., Madison—Voted $60,000 bonds for paving various streets. Noted Nov. 29.

Fla., Tampa—Feb. 12, to vote on $111,000 bonds for opening, widening and repaving Lafayette St., and constructing viaduct. R. D. Martin, City Hall, engr.

Fla., Tampa—See "Unclassified."

Fla., Wauchula—Hardee Co. voted bonds as follows: $27,000 for road from Stevens Mill to Yankatown and Zolfo River bridge west; $31,500 for road 1 mi. east of Moffits and from Peace River via Bonds Corner to Papach School; $27,000 for 3 mi. road from Gardner east; $36,000 for road from Buchanan to Sweetwater; $73,000 for road from Zolfo to Crewsville; $105,500 for 12.75 mi. road from Ona Station to Lilly; $36,000 for road west 2 mi. from Carrollton Corner to 2 mi. south from Williams Corner; $107,000 road through Bowling Green to Fort Green Springs; $27,000 road from Wauchula east 3 mi. and from Griffin Pl. to Zolfo; $330,000 road from Ona to Highland Co. line. Noted Nov. 8.

Fla., Wauchula—Hardee Co. election Jan. 18, to vote on $800,000 bonds repaving various roads.

Miss., Jackson — Voted $250,000 bonds paving, eliminating grade crossings, widening Town Creek channel, etc. Noted Dec. 6.

Louisiana—State Bd. Educ., Baton Rouge, plans to expend $1,712,000 during coming 2 years for six state institutions, as follows: Normal College at Natchitoches, 1924-1925 $250,000, 1925-1926 $300,000, Favrot & Livaudais, Hibernia Bldg., New Orleans, archts.; Southwestern Louisiana Institute at Lafayette, 1924-1925 $177,500, 1925-1926 $190,000, M. H. Goldstein, Hibernia Bldg., New Orleans, archt.; Polytechnic Institute at Ruston, 1924-1925 $300,000, 1925-1926 $175,000, J. W. Smith, Munroe, archt.; School for the Blind at New Orleans, 1924-1925 $25,000, E. Weil, Whitney Annex, New Orleans, archt.; School for the Deaf, 1924-1925 $85,000, 1925-1926 $85,000; Southern University at New Orleans, 1924-1925 $62,000, 1925-1926 $62,000.

Ky., Louisville—Bd. Park Comrs. plans rock asphalt or concrete surfacing 4.5 mi. Western Parkway, 60- to 80-ft. $270,000. G. W. Schardein, pres.

O., Columbus—Making plans improving 10,319 ft. High St. and 1,661 ft. Spring St., by widening roadway 3 ft. on each side, setting back curb, and paving gutters with brick, etc. $102,816 and $36,221 respectively. R. H. Simpson, city engr.

O., Cincinnati—Plans paving Main St. from 4th to Front Sts. $53,800. F. Krug, city engr.

O., Dayton—Plans paving with 5,000 sq. yd. Herman Ave., brick on concrete; 4,000 sq.yd. rein.-con. in 3 alleys. $26,000. J. F. Hale, city engr.

Ill., Granite City—Plans grading and rein.-con. surfacing 16 blocks 1st, 13th and 20th Sts., 30 ft. Private plans.

Ill., Marion—Plans grading and rein.-con. surfacing 2,600 ft. Main St., etc. $25,000. G. F. McCarty, city engr.

Ill., Mt. Olive—Making plans grading, surfacing probably with rein.-con., approximately 8,000 ft. various streets. $75,000. Holbrock, Warren & Van Praag, 418 Millken Bldg., Decatur, engrs.

Ill., Pittsfield — Making plans grading and paving 10,000 ft. various streets, brick on concrete. $100,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs.

Ill., Vandalia—Making preliminary plans grading, paving with rein.-con., asphaltic concrete, brick or bituminous, laying concrete integral curb and gutter, approximately 9,600 ft. 6th, 7th, 8th, Randolph, North, Gallatin and Remann Sts., 28 ft., $95,000-$100,000. Will mature in spring. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

Wis., Green Bay — Buchholz-Schilling Realty Co., East Walnut St., having preliminary plans prepared concrete paving in subdivision, Allouez Twp. $25,000. H. R. Albert, c/o Courthouse, engr.

Kan., Hays—Takes bids in spring improving 90 blocks, Grand Ave., Crawford, Second, Perry, 4th, 5th, 6th, 7th, Fort, Wilson, Bway., Evergreen, South Chestnut, Oak, and Grand Sts. To exceed $200,000.

Kan., Leavenworth—Takes bids in spring grading and paving 16 blocks Olive, Thornton, Kansas, Grand, Bway., Randolph, Elm, and Ohio Sts., Columbia St. between Michigan and Kansas Sts., and Columbia St., from Spruce St. 300 ft. north, all 24 ft. $50,000. W. V. Thomas, city engr.

Ark., Harrison — Making preliminary plans grading and surfacing with rein.-con. or asphalt on concrete, 12 blocks down-town district, 20 ft. To exceed $40,000.

Ark., Malvern—Making preliminary plans about 10,000 sq.yd. rein.-con. paving. $25,000. W. Donathan, Malvern, engr.

Tex., Alice—Jim Wells Co. making plans grading, surfacing with gravel and bituminous macadam 65 mi. State Highway 12 A

Streets and Roads (Continued)

from San Patricio Co. line to Brooks Co. line, 18 ft. $1,230,000. L. W. S. Mantel, co. engr.

Tex., Anderson—Grimes Co. voted $200,000 bonds grading and surfacing Iola Dist. also $175,000 bonds grading and surfacing Bedias Dist. R. M. West, co. judge. Noted Dec. 13.

Tex., Baird—Callahan Co. making plans and surveys grading and surfacing with bituminous macadam 33 mi. Bankhead Highway from Eastland Co. line to Taylor Co. line, 18 ft. $562,000. T. H. Webb, co. engr.

Tex., Bay City—Matagorda Co. making plans grading and gravel surfacing 4.85 mi. Matagorda Rd., from Bay City to Rd. Dist. 8, 16 ft. $39,000. E. N. Gustafson, co. engr.

Tex., Brownsville — Cameron Co. voted $660,000 bonds hard surfacing road from here to Pt. Isable. W. O. Washington, co. engr. Noted Dec. 20.

Tex., Dallas—See "Unclassified."

Tex., Dallas—Making plans gravel surfacing 3 mi. White Rock Rd., around White Rock reservoir, 20 ft., $30,000; paving with bituminous types and storm sewers in Lindsey Ave., $50,000 plus. E. A. Kingsley, city engr.

Tex., Dallas—Cedar Crest Addition making plans paving, sewers, water, etc. $250,000. Koch & Fowler, Central Bank Bldg., engrs.

Tex., Del Rio — Plans paving various streets. $100,000. Address Mayor.

Tex., Fairfield—Freestone Co. voted $1,000,000 bonds for Dallas-Houston and Palestine-Waco Rds., also bridge over Trinity River at Anderson County line. Federal Aid appropriates $800,000 towards cost. F. Roper, co. judge. Noted Nov. 29.

Tex., Gonzales—Gonzales Co. voted $125,000 bonds, hard surfacing Rd. Dist. 5. J. G. Kirby, Gonzales, engr. Noted Nov. 29.

Tex., Liberty—Liberty Co. making plans grading, gravel surfacing and bridging 16.5 mi. State Highway 35, from Cleveland to Trinity Co. line, 16 ft. $147,000. W. C. Youngs, Dayton, co. engr.

Tex., Lone Oak—Voted $50,000 bonds for paving, sewers and waterworks. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs. Noted Nov. 29.

Tex., Lubbock—Making plans paving and storm sewers. $350,000. J. B. Hawley, Cotton Exchange Bldg., Ft. Worth, consult. engr. S. Sanders, city engr. Noted Dec. 13.

Tex., Lubbock—J. Hess having plans prepared paving and watermain extensions in 100 acre Hess Addition. $250,000. Myers & Noyes, Mercantile Bank Bldg., Dallas, engrs.

Tex., Palo Pinto — Palo Pinto Co. vitr. brick paving 35,149.98 sq.yd. State Highway 1, 18 ft., to Tibbetts Constr. Co., 209½ West 8th St., Ft. Worth, $50,967; 42,180 lin.ft. concrete curbing on above road, to McClung Constr. Co., Sherman, $21,933. Engrs. est. $80,190. Noted Dec. 20.

Tex., San Angelo—Soon takes bids gravel paving Bishop, Harris and Pecos Sts. $50,000. M. Barfield, city secy.

Tex., Seguin—Guadalupe Co. voted $24,000 bonds to be supplemented by State and Federal Aid for surfacing with bituminous topping 15.2 mi. State Highway 3, 16 ft. $90,000. L. W. Taylor, Seguin, engr.

Tex., Wichita Falls—Wichita Co. having plans prepared grading and concrete surfacing Bates Section, State Highway 30, 18 ft. $263,000. J. M. Isbell, co. engr.

Okla., Muskogee—Soon takes bids 10,000 sq.yd. vitr. brick paving. $50,000. J. R. Marsh, Muskogee, engr.

Okla., Pauls Valley—Garvin Co. election Jan. 4, to vote on $750,000 bonds for hard-surfacing 70 mi. roads. Noted Nov. 29.

Okla., Purcell—McClain Co. election Jan. 7 to vote on $55,488 bonds grading and paving 200,000 sq.yd. highway across Goldsby and Johnson Twps., 60,000 cu.yd. W. C. Burnham, Capitol Bldg., Oklahoma City, engr.

Ariz., Phoenix—Having surveys made paving 8 mi. Tombstone-Bisbee Rd. H. Rieger, city engr.

California—State Hy. Dept., Sacramento, plans 1¾ mi. state highway on Mt. St. Helena, Lake Co., also 2 bridges on above project which will be financed by Lake Co. R. M. Morton, Forum Bldg., state highway engr.

Calif., Eureka — Humboldt Co. plans road from Willow Creek to Klamath River at Weitchped $35,000; widening and improving road on Peninsula between Arcata and Somoa $25,000; Lord-Ellis Road in Rd. Dist. No. 3 $30,000; road from Grizzly Creek to Bridgewille $40,000; road from Capetown to Petrolia $40,000. A. J. Logan, co. surveyor.

HIGHWAY—CALIFORNIA

Bids were opened by State Highway Comn., Sacramento, Dec. 3, for constructing highway from Redding to Bayha, Shasta Co., (A) Fredrickson & Shannon, Cary Bldg., Fresno; (B) Kaiser Paving Co., Oakland; (C) Blanco & Taylor, Vallejo. The unit bids were as follows:

	A	B	C
69,000 cu.yd. roadway embankment, without classification	$0.81	$1.00	$1.15
33,000 sta. yd. overhaul	.02	.02	.02
600 cu.yd. structure excavation without classification	1.65	2.00	1.50
52,150 lin.ft. subgrade (preparing and shaping)	.24	.16	.50
22,220 cu.yd. class "A" Portland cement concrete (pavement)	14.20	14.75	15.50
310 cu.yd. class "A" Portland cement concrete (culverts and monuments)	24.50	35.00	45.00
164 lin.ft. 12 in. corrugated metal pipe	.85	1.00	1.00
1,434 lin.ft. 18 in. corrugated metal pipe	1.25	1.15	1.50
66 lin.ft. 24 in. corrugated metal pipe	1.75	2.00	2.00
Hauling and setting 84 monuments	2.50	2.00	2.50
3,375 cu.yd. class "A" Portland cement concrete (pavement), ½ width construction	1.00	1.00	1.00
Extended totals	$398,807	$423,287	$471,377

Calif., Glendale—Plans made improving Concord, Patterson, Fairmount Sts., etc., 83,600 sq.ft. grading, 2,450 lin.ft. curbing, 12,350 sq.ft. walks, 150 sq.ft. 5 in. concrete gutter, 59,935 sq.ft. 3 in. macadam pavement, 1,020 ft. 8 in., 658 ft. 4 in., and 93 ft. 6 in. Class B water pipe; also improving Windsor Rd. between Garfield and Los Angeles Sts., and Thompson Ave. between Glenwood and Kenneth Rds., 153,375 sq.ft. grading, 91,550 sq.ft. 5 in. and 27,018 sq.ft. 3 in. macadam pavement, 2,080 lin.ft. 4 in. class B water pipe, 2,070 lin.ft. class B curbing, 10,304 sq.ft. walks, 4,155 sq.ft. concrete gutter. B. F. Dupuy, city engr.

Calif., Glendale—City had plans prepared improving Watson St. and Elen Ave., 3,648 lin.ft. concrete curbing, 103,880 sq.ft. grading, 14,370 sq.ft. 5 in. and 38,670 sq.ft. 3 in. oil macadam pavement, 4,810 sq.ft. concrete gutter, 990 lin.ft. 6 in. and 1,320 lin. ft. 4 in. c.i. water pipe. B. F. Duprey, city engr.

Calif., Los Angeles — Plans election to vote on approximately $400,000 bonds for grading, concrete curbs, gutters, walks, and paving streets in Municipal Improvement Dist. 21.

Calif., Los Angeles—Plans made improving Vine St. between Yucca and Melrosee Sts., 506,133 sq.ft. 7 in. concrete pavement, 1,800 sq.ft. asphalt pavement, 12,086 sq.ft. 2 in. bituminous base pavement, 10,431 lin. ft. concrete curbing, 52,242 sq.ft. walks, etc.

Calif., Oakland—Had plans prepared improving Fifth St. between Jefferson and Cypress Sts., 202,727 sq.ft. grading, 707 lin.-ft. concrete curbing, 6,299 lin.ft. curbing with steel guard, 100 lin.ft. curbing to be reset, 7,873 sq.ft. concrete gutter, 194,754 sq.ft. 6 in. concrete base with 2 in. Warrenite bituminous surface, 485 lin.ft. 8 in. sewer; also portions of Bartlett and Lynde Sts., and 27th St. from 9th St. northeast, 94,117 sq.ft. grading, 3,148 lin.ft. concrete curbing, 6,275 sq.ft. concrete gutter, 48,183 sq.ft. oil macadam pavement; 18,270 sq.ft. cement walks. W. W. Harmon, city engr.

Calif., Riverside—Riverside Co. had plans prepared paving approximately 8 mi. Nuevo-Lakeview Rd., macadam and resurfacing 12 mi. road with 2 in. oil bound macadam. $70,000. L. Nafager, co. engr.

Calif., San Diego—Making plans paving Alameda Place and other streets, 1½ in. bituminous concrete asphalt top, 1,252 sq. yd. 4 in. and 12,320 sq.yd. 5 in. concrete, 879 ft. 6 in. concrete sewer; Columbia St., 3,524 sq.yd. 4 in. concrete, and 30,186 sq. yd. bituminous concrete; San Marcus and other streets in Burlingame, and 2 in. sheet asphalt wearing surface on 4 in. portland cement. F. A. Rhodes, City Hall, co. engr.

Calif., Santa Rosa—Sonoma Co. making plans paving 9 mi. Sebastopol to Pocket Hill Canyon highway, 18 ft., 5 in. Willite. E. A. Peugh, Santa Rosa, co. surveyor.

Calif., Santa Rosa—Sonoma Co. rejected bids grading approximately 38 mi. Mendocino-Jenner Highway, 240,000 cu.yd. excav., etc. Noted Dec. 6.

Ont., London—Takes bids about April 1, paving Askin Ave., asphalt on concrete. $30,000. W. A. Near, City Hall, engr.

BIDS DESIRED

N. Y., Brooklyn—Jan. 10, by F. D. Gallatin, pres. Park Comrs., Municipal Bldg., New York, grading, paving with sheet asphalt on concrete, etc., main roadway of Eastern Parkway.

Maryland—Jan. 15, by State Rds. Comn., Baltimore, paving 1.72 mi. State Highway in Baltimore City, Contr. BC-41, sheet asphalt. J. N. Mackall, chn. adv. E. N.-R. Jan. 3.

Ga., Albany—Jan. 7, at City Hall, constructing 7 blocks North Jefferson St., 15,430 sq.yd. 1½ in. sheet asphalt, 1,200 tons binder. P. F. Whittier, dir. Pub. Wks.

Louisiana—Jan. 22, by State Hy. Comn., Reymond Bldg., Baton Rouge, 5 mi. Project 379, Sect. A Opelousas-Oakdale Highway, 11.5 mi. Project 380, Sect. A, Eunice-Lecompte Highway, and 9.18 mi. Project 379, Sect. B, Opelousas-Oakdale Highway. J. M. Fourmy, ch. engr.

La., Baton Rouge—Jan. 29, by Comn. Council, paving 16 streets, 102,269 sq.yd. asphaltic concrete, brick, sheet asphalt, or Warrenite bitulithic, on concrete, etc. J. W. Billingsley, City Hall, consult. engr.

Miss., Winona—Jan. 23, by Montgomery Co. at Court House, grading and gravel surfacing 12.026 mi. Federal Aid Project 19, 18 ft. $172,839. H. C. Dietzer, c/o State Highway Dept., Jackson, engr.

Mo., Kansas City—See "Railways" under "Missouri."

Tex., Brady—Jan. 15, by E. J. Adkins, judge. McCulloch Co. grading and gravel surfacing, etc. 4.64 mi. State Highway 9, Federal Aid Project 419, 16 ft. $47,828. E A. Burrows, co. engr. Noted Dec. 20.

Tex., Breckenridge — Jan. 8, by City Com., paving 50 blocks various streets, brick and bituminous types. $75,000. Elrod Eng. Co., 3206 Elm St., Dallas, engrs.

Tex., Cameron—Jan. 9, by J. T. Kemp, judge Milam Co. grading and paving, etc. 11.38 mi. State Highway 43, 16 ft., 2,179 cu.yd. 1:2:4 concrete. $90,250. A. F. Mitchell, co. engr.

Tex., Denton—Jan. 11, by B. C. Jackson, judge Denton Co. grading and gravel surfacing 5.59 mi. State Highway 39, State Aid Project 453, 16 ft. $46,500. H. T. Brewster, co. engr.

Tex., Galveston—Taking bids rock asphalt paving 25th St. from Ave. F to Sea Wall. $75,000. C. A. Holt, city engr. Noted Sept. 13.

Tex., Houston—Receiving bids paving McKinney Ave. from Chenevert St. to Belt and Terminal R.R. tracks, Bell St. from Louisiana to Crawford Sts., bituminous types or brick. $75,000. J. C. McVea, city engr.

Okla., Davis—Jan. 10, by F. L. Crossett, city clk., grading and paving 3 blocks Main St., 6,600 sq.yd. concrete, 2,700 lin.ft. curbing, 2,600 cu.yd. excav. $29,000. E. T. Archer & Co., New England Bldg., Kansas City, Mo., engrs. Noted Sept. 27.

Okla., Pawhuska—Taking bids grading, curbing and paving 5 blocks Lynn Ave. from High School to Hospital, 5,600 sq.yd. asphalt, $28,000. J. W. Buckley, Pawhuska, engr. Noted Oct. 25.

Calif., El Monte—Jan. 14, improving Columbia, Tyler, Utah and Washington Sts., etc., 13,303 lin.ft. curb, 46,558 sq.ft. concrete pavement, 25,124 sq.yd. cement concrete pavement, 8,329 lin.ft. sewers, 8,540 cu.yd. excav. without curbs, 9,617 cu.yd. excav. incl. curbs, etc.

California—Jan. 14, by State Hy. Comn., Sacramento, 8.2 mi. grading, and 3.5 mi. paving with Portland cement concrete, State Highway Project, Orange Co. R. M. Morton, Forum Bldg., Sacramento, state highway engr.

Calif., Auburn—Receiving bids grading and paving 276,000 sq.ft. High St., etc. To exceed $45,000. J. Barieau, city engr.

Calif., Lodi—City Trustees taking bids improving Garfield and Harold Sts., 217,031 sq.ft. grading, average depth of cut 4 in.; 206,590 sq.ft. 2½ in. asphaltic concrete base; 1½ in. Warrenite Bituminous surface pavement; 16,060 sq.ft. concrete gutter and 12,848 lin.ft. concrete curbing. Noted Dec. 27.

Streets and Roads (Continued)

Calif., Riverside—Supervs. Riverside Co., taking bids 96 ft. 12 in., and 212 ft. 18 in. corrugated culvert pipe, 698,000 sq.ft. 5 in. macadam paving, 5,000 cu.yd. grading, 27 cu.yd. A concrete in culverts, and 32 cu.yd. A concrete in paving, in Rd. Dist. Improvement 14.

Calif., Santa Rosa—Jan. 16, by Supervs. Sonoma Co., grading approximately 38 mi. Jenner-Mendocino Highway, 240,000 cu.yd. excav. E. A. Peugh, co. surveyor.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelman, boro pres. Boro Hall, Dec. 28, repaving Liberty Ave., permanent asphalt on 6 in. concrete, from Borough Asphalt Co., 1301 Metropolitan Ave., **$82,270. Noted Dec. 20.**

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Dec. 27, grading, etc., for width of 60 ft. centrally located Neill Ave. from Bronxdale to Matthews Aves., and for its full width from Matthews to Paulding Aves., from I. F. Cavaluzzo, 1538 Walton Ave., **$31,350. Noted Dec. 20.**

N. Y., New York—I. Miller, pres., Manhattan Boro, Municipal Bldg., Dec. 27, widening and repaving widened portion of 57th St., sheet asphalt on concrete, from Uvalde Asphalt Paving Co., 1 Bway., $38,638. **Noted Dec. 20.**

La., New Orleans—Bd. Port Comrs., New Court House Bldg., concrete floor slab grading and paving at Claiborne Ave. landing, from J. Reiss, Carondelet Bldg., $155,635. Noted Dec. 20.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, concrete curbing and refined asphalt paving **(1)** 4,565 sq.yd. Magnolia Ave., Pearl, North Magnolia and South Magnolia Sts. from Sublette to January Sts., engrs. est. $28,600 **(2)** 5,000 sq.yd. St. Louis Ave., $30,400 **(3)** 1,470 sq.yd. Compton Ave. from Lucas to Morgan Sts., $3,920 **(4)** 9,095 sq. yd. Laclede Ave. from Leffingwell to Grand Sts., $66,000 **(5)** 1,495 sq.yd. Dewey Ave. from Bingham to Merame Sts., $13,520 **(6)** 1,660 sq.yd. Ray Ave. from Neosho to Taft Sts., $9,520 **(7)** 2,160 sq.yd. Keokuk St., from Grand to Giles Sts., $11,300 **(8)** 2,850 sq.yd. Kingsburg St. from Rosedale to Skinker Sts., $9,120 **(9)** 955 sq.yd. Henry Ave., from Milentz to Herman Heights, $6,800 **(10)** 3,815 sq.yd. Lansdowne Ave. from January to Hampton Sts., $26,800 **(11)** 4,850 sq.yd. Marmaduke Ave. from Tamm to Ivanhoe Sts. $24,520 **(12)** 3,255 sq.yd. Smiley Ave. from Leola to Ivanhoe Sts. $18,200, from Higgins-Wall Dyer Constr. Co., International Life Bldg., **(1)** $27,687 **(2)** $28,656 **(3)** $3,917 **(5)** $12,886 **(6)** $9,521 **(7)** $11,271 **(9)** $6,582 **(10)** $25,916 **(11)** $24,511 **(12)** $17,632; from Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., **(4)** $77,697; from Granite Bituminous Paving Co., Ry. Exh. Bldg., **(8) $9,121.** Noted Nov. 29.

Tex., Marlin—Falls Co., grading, surfacing with gravel subbase and concrete paving 1.84 mi. State Highway 2, 74.6 cu.yd. concrete, 5,568 cu.yd. roadway and 6,993 cu.yd. borrow excav., 19,444 sq.yd. concrete pavement, 1,152 cu.yd. gravel subbase, 5,868 lb. reinforcing, from Brown & Root, Georgetown, $58,684. Engrs. est. $66,721. Noted Nov. 15.

California—State Hy. Dept., Sacramento, road from Truckee to Boca, Nevada Co., from Irey & Holden, Lodi, $67,052, engrs. est. $95,500; and grading and gravel or broken stone surfacing 9.9 mi. State Hy. between Bayha and Halfway Creek, Shasta Co., from Nevada Contg. Co., **Fallon, Nev., $480,862. Noted Nov. 29.**

Calif., Colton—Improving 9th St., from Hall-Johnson Co., P. O. Box 51, Lynwood, 235,054 sq.ft. concrete paving, **$0.205 per** sq.ft., 1,328 ft. walks, $0.50, 605 ft. concrete curbing $0.18. Noted Dec. 27.

Calif., Los Angeles—Improving Leesdale St., from G. H. Oswald, 366 East 58th St., grading $10,000, 766 ft. curbing, $0.70 per ft., 240,015 sq.ft. 6 in. concrete paving, **$0.255, 2 wood trestle bridges, $37,886.**

Calif., Oroville—Improving Pine St., etc., 4,100 cu.yd. excav., 170,400 sq.ft. 2½ in. asphaltic concrete base with 1½ in. warrenite bituminous surface, 1,100 lin.ft. curb, 1,100 sq.ft. concrete gutter, etc., from Chico Contg. Co., Chico, $44,550.

Calif., Riverside—Riverside Co. improving north and south connections between state and county highways in vicinity of Whitewater, from G. Pearson, La Verne, 3,231 lin.ft. grading and shaping, $0.55 per lin.ft., 57,050 sq.ft. 6 in. gravel base $0.90, 57,050 sq.ft. asphalt surface pavement, $0.06, etc. Noted Dec. 13.

Calif., San Diego—Common Council, improving 1st, 2nd and 3rd Sts., from Griffith Co., 25 14th St., 31,200 sq.ft. paving with 4 in. cement concrete base, 1 in. binder and 1½ in. asphalt wearing surface, $0.254, 173,086 sq.ft. paving with 3 in. bituminous base and 1½ in. asphalt concrete wearing surface, $0.17, 99,451 sq.ft. paving with 2½ in. bituminous base and 1½ in. asphalt concrete wearing surface, $0.162, 674 sq.ft. cement concrete sidewalk, $0.24, 1,298 lin.ft. cement concrete curbing, $0.68, sixteen 4 in. cement sewer laterals, $35 each, eight 6 in. cement sewer laterals, $40 each, etc.; Maryland St., from G. R. Daley, 4430 Boundary St., 73,692 sq.ft. paving with 4 in. concrete base and 1½ in. asphalt wearing surface, $0.21, 31,174 sq.ft. paving with 2½ in. bituminous base and 1½ in. asphalt wearing surface, $0.163, 200 sq.ft. cement concrete sidewalk, $0.24, 297 lin.ft. cement concrete curbing, $0.70, etc. Noted Nov. 1 and Dec. 13.

Calif., San Diego—From Griffith Co., 25 14th St., improving 24th, 25th, and B Sts., 253,819 sq.ft. paving at $0.164 per sq.ft., eight 4 in. cement concrete sewer laterals, $38.50 each, 746 lin.ft. cement concrete curbing, $0.65; from G. R. Daley, 4430 Boundary St., Louisiana St. between Upas and Lincoln Sts., 139,576 sq.ft. paving with 1½ in. asphalt concrete top on 3 in. bituminous base, $0.185, seven 6 in. cement concrete sewer laterals $38.50 each, five 4 in. cement concrete sewer laterals, $32.50 each, 11.7 lin.ft. cement concrete curbing $0.70, also Girard Ave. and Coast Blvd., 118,601 sq.ft. paving with 5 in. Portland cement concrete, $0.28, 291.4 sq.ft. cement concrete sidewalk, $0.24, 120 lin.ft. cement-concrete curbing, $0.70, construction of three corrugated iron culverts with accessories complete $680, iron pipe guard railing 336 ft. long, $1,200, miscellaneous $225.

Calif., San Francisco — Bd. Pub. Wks., Dec. 19, grading, concrete paving and building sewers in Wilde Ave., between Delta and San Bruno Aves., 4,388 lin.ft. concrete curbing, 1,610 sq.ft. art stone walks, 19,200 sq. ft. concrete and 71,225 sq.ft. asphaltic concrete, etc., from J. M. Smith, 407 11th St., $38,667. Noted Dec. 13.

Calif., San Francisco — Bd. Pub. Wks., grading, etc., for Ocean View Extension of Municipal Ry. System, 64,000 cu.yd. excav., under 400 ft., 188,000 cu.yd. excav., equivalent to 100 ft. overhaul, 28,000 sq.yd. top soil removed, stored and placed, 50 cu.yd. concrete, etc., from J. M. Smith, 407 11th St., $30,552. Noted Dec. 20.

Calif., San Jose—Santa Clara Co., improving Santa Clara-Los Gatos Rd., Sect. 1, from J. A. Costello, Jr., 1083 Shotwell St., San Francisco, concrete $65,242; from San Jose Paving Co., San Carlos and Dupont Sts., asphaltic concrete $64,800; from J. Doyle, San Jose, oil macadam $41,582. Noted Dec. 6.

CONTRACTS AWARDED

Connecticut—State Hy. Comn., Hartford, to J. Arboria, 82 Church St., New Haven, 25,441 ft. Cornwall-Kent Highway $182,659, 9,560 ft. bituminous macadam in Mansfield $50,073, 12,325 ft. waterbound macadam Southbury Rd. $56,857, 8,354 ft. rein.-con. in Shelton $44,422, 7,430 ft. trap rock waterbound macadam on Abington Rd., in Pomfret $34,663; to J. Demichiel & Bro., 58 High St., Torrington, 20,867 ft. waterbound macadam in Sharon $187,132; to D. O'Connell & Sons, Holyoke, Mass., 13,400 ft. rein.-con. in Suffield $84,118, to F. Arrigoni & Son, 624 Main St., Middletown, 21,000 ft. waterbound macadam on Groton-Stonington Rd., $105,319; to Berlin Constr. Co., Berlin, Southbury bridge over Pomperaug River, $11,884. Noted Dec. 13.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sheet asphalt repaving Jackson Ave., to W. J. Fitzgerald, 547 West 45th St., New York City, $347,719. Noted Dec. 13.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing and laying sidewalks, etc., on Reservoir Pl., to L. Minna, $5,176; grading, etc., Tyndall Ave., to I. F. Cavaluzzo, 1538 Walton Ave., $16,040; sheet asphalt repaving East 188th St., to Interboro Asphalt Co., 2306 Creston Ave., $8,295. Noted Dec. 27.

N. Y., New York—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., reconstructing pavements, curbs and headers on south clearance roadway alongside approach of Williamsburg Bridge to Sicilian Asphalt Paving Co., 41 Park Row, $31,143. Noted Dec. 27.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., granite block repaving 1st Ave., to J. Meehan & Son, 74 Cortlandt St., $47,070. Noted Dec. 27.

Md., Baltimore—Bd. Park Comrs., Lexington and Gay Sts., 50,000 cu.yd. grading and filling at Mt. Royal Reservoir, Mt. Royal and North Aves., to H. O. Firor & Co., 1707 West Pratt St., $0.59 per cu. yd. Noted Dec. 27.

W. Va., Wayne—Wayne Co., grading 4 miles Konova-Buffalo Rd., to Wellman Constr. Co., Wayne, $39,176.

N. C., Fayetteville — Paving various streets, one third with sheet asphalt and two thirds with warrenite bitulithic, to J. P. McGuire, Norfolk, Va., $300,000. Noted Nov. 29.

Alabama—State Hy. Dept., Montgomery, grading and surfacing 6.053 mi. road, Franklin Co., to Scott-Chambers Constr. Co., West Point, Ga., Class A concrete $22.50, local gravel $1.20. Noted Dec. 6.

Ill., Galesburg — Improving Grand Ave., 7,620 cu.yd. grading, 10,198 lin.ft. concrete curb and gutter, 18,004 sq.yd. brick pavement on 4 in. concrete base with asphalt filler, etc., to H. H. Gunther, 859 East Loesy St., $65,843. Noted Dec. 13.

Ill., Palatine—Bd. Local Impvts., paving Chicago St. to Northern Illinois Supply Co., Rockford, $58,170.

Ia., La Porte—Curbing, 8 in. rein.-con. paving, etc., 23 blocks, to P. P. Smith, 1600 Washington Ave., Cedar Rapids, $2.45 per sq.yd., total $62,000. Noted Dec. 13.

Minn., St. Paul—Paving Payne Ave. from Jessamine to Maryland Sts., 5,249 sq.yd. 3-in. vertical fibre brick, 1,190 bbl. cement, etc., and Payne Ave. from Maryland St. to north city limits, 14,536 sq.yd. 3-in. vertical fibre brick, 4,858 bbl. cement, etc., to Fielding & Shepley, 216 University Ave., $21,999 and $81,590 respectively; White Bear Rd. from Payne Ave. to north city limits, one course concrete, to Feyen Constr. Co., 277 Burgess St., $18,966. Noted Dec. 6.

Kan., Kansas City — Wyandotte Co., grading, draining, and concrete surfacing 0.484 mi. Federal Aid Project 174, to Sommers Hall Constr. Co., Newton, $32,634.

Kan., Phillipsburg — Grading 0.946 mi. Sect. A Pikes Peak Ocean to Ocean Highway, Federal Aid Project No. 166, and rein.-con. and steel bridge with 80 ft. center span and two 30 ft. side spans on Sect. B, of same road, also grading 2.981 mi. Sect. A Project 176, and I beam and concrete bridge with 37 ft. center span and two 30 ft. approach spans, and one 20 ft. rein.-con. slab bridge on Sect. B of same project, to Somer-Hall Constr. Co., Newton, $53,636. Noted.

N. D., Ellendale — Dickey Co., grading Federal Aid Project 206, 62,003 cu.yd. excav., etc., to L. Wahlmend & Con, Enderlin, $39,016.

N. D., La Moure—La Moure Co. grading Federal Aid Project 176, 103,623 cu.yd. excav., etc., to R. S. Burnstad, La Moure, $45,024.

Ark., Little Rock—Improving Dist. 360, concrete base, to Bittles Concrete Co. North Little Rock, asphalt surface, to Gregory & Wilson, Southern Trust Bldg. Engrs. est. $55,000.

Tex., Cleburne—Johnson Co. grading and reshaping road bed and hauling and placing 14,173.4 cu.yd. gravel on State Highway 10A, State Aid Project 443, to McClung Constr. Co., Sherman, $34,841. Engrs. est. $39,106. Noted Dec. 20.

Tex., Ft. Worth — Paving 23,000 sq.yd. Bunting, J, I and Essex Aves., amiesite, to Worth Constr. Co., F & M Bank Bldg., $2.70 per sq.yd., total $85,000. Noted Dec. 20.

Tex., Houston—Paving 30 blocks, gravel, to C. K. Horton, Box 1025, $36,227.

Tex., Palestine — Anderson Co., grading, rein.-con. paving, and bridging 9.7 mi. State Highway 19, Federal Aid Project 403-A, 16 and 18 ft., and grading, gravel surfacing, and bridging 10.75 mi. Palestinebrushy Rd., 16 ft., to Henderson & Co., Omaha, $321,076 and $32,444 respectively. Engrs. est. $353,184 and $35,000 respectively. Noted Dec. 20.

Oklahoma — State Hy. Dept., Oklahoma City, gravel 12 mi. road between Norman and Oakland City, Federal Aid Project 112, Sect. B, and 11 mi. Federal Aid Project 112, Sect. A, Cleveland Co., to Southern Constr. Co., Durant, $167,280 and $177,967 respectively; 6.8986 mi. Federal

Streets and Roads (Continued)

Aid Project 33, Sect. C, Choctow Co., to Garrett & Mills, 1728 West Main St., Oklahoma City, $79,921; 6,1115 mi. Federal Aid Project 74, Sect. A, Murray Co., to Maney Bros., Empire Bldg., Oklahoma City, $75,475.

Wash., Wenatchee—Grading and paving Orondo St. from Mission to Washington Sts., to Standard Asphalt Paving Co., North 517 Lincoln St., Spokane, $25,341. Engrs. est. $26,000.

California—State Hy. Comn., Sacramento, paving with concrete 9 mi. State highway between Old Elk Grove and Sacramento, Sacramento Co., to Kaiser Paving Co., Amer. Bank Bldg., Oakland, $283,667, engrs. est. $334,442; grading 10.4 mi. State Hy. between Quail Lake and Northerly Boundary, Los Angeles Co., to Williams & Singletary, Colton, $47,724, $51,292. Noted Dec. 20.

Calif., Los Angeles—Improving Lakme Ave. between M and Anaheim Sts. to G. H. Oswald, 366 East 58th St., Los Angeles, 173,988 sq.ft. asphalt pavement, $0.24 per sq.ft., 6,017 ft. curbing, $0.70; 30,262 sq. ft. walks $0.20 per sq.ft., 6,742 sq.ft. concrete gutter, $1.40 per sq.ft., etc.

Calif., Los Angeles—Improving Vernon Ave. 166,477 sq.ft. concrete pavement, 18,410 sq.ft. walks, 2,542 ft. house sewers, etc., to W. Liddington, 420 East 60th St., approximately 51,500. Noted Dec. 27.

Calif., Oakland—Improving Castro St. between 1st and 7th Sts., to Hutchinson Co., 1706 Bway, Oakland 62,935 sq.ft. grading $0.03 per sq.ft., 2,054 ft. curbing $0.70, 212 lin.ft. curbing with guard $1.10, 2,619 sq.ft. concrete gutter $0.30, 60,317 sq.ft. 6 in. concrete paving with 2 in. warrenite-bitulithic surface, $0.30, conduit $2.80 lin.ft., catch-basins $85. each, total in excess of $25,000. Noted Dec. 13.

Calif., Riverside — Riverside Co. paving approximately 8 mi. Nuevo-Lakeview Rd., 698,000 sq.ft. 5 in. macadam pavement, 5,000 cu.yd. grading, etc., to Hall-Johnson Co., P. O. Box 51, Lynwood, approximately $115,000.

Calif., San Bruno—Grading, paving and building sewers in Elm, Cypress and Clarke Aves., etc., in Huntington Park, 120,000 sq. ft. asphaltic concrete base with Warrenite surface, to Municipal Impvt. Co., 306 12th St., Oakland, $90,224. Noted Rec. 27.

Calif., San Francisco—Grading, etc., for Ocean View Extension of Municipal Ry. System, 64,000 cu.yd. excav. under 400 ft., 188,000 cu.yd. excav., equivalent to 100 ft. overhaul, remove stored and placed 28,000 sq.yd. top soil 50 cu.yd. concrete, etc., also grading, concrete paving and building sewers in Wilde Ave. between Delta and San Bruno Aves., 7,100 cu.yd., cut, 1,035 cu.yd. fill, 75 lin.ft. 12 in. sewer, 4,388 lin.ft. concrete curbing, 1,610 sq.ft. art stone walks, 19,200 sq.ft. concrete and 71,225 sq.ft. asphaltic concrete, to J. M. Smith, 715 Ocean Ave., San Francisco, $30,552 and $38,667 respectively. Noted Dec. 20.

Calif., Upland — Asphalt paving, cement gutters, walks, and stone curbs, on 2nd Ave., to Griffith Co., Railway Bldg., Los Angeles, approximately $25,500.

Calif., Ventura — Comrs. Ventura Co., received no bids improving portion of Santa Ana Rd., 2,000 cu.yd. earthwork, 4,452 lin. ft. shaping and rolling, 71,232 sq.ft. asphaltic macadam; also Willow St. and Willard Ave., in Santa Paula, 58,144 sq.ft. asphaltic macadam, 3,634 lin.ft. shaping and rolling, 2,500 cu.yd. excav. Work will be done by force account. C. W. Petit, co. surveyor.

Industrial Works

PROPOSED WORK

N. Y., New York—Publishing—Pictorial Review, 7th Ave. and 37th St., having plans prepared by Renwick, Aspinwall & Tucker, archts. and engrs., 8 West 40th St., 14 story, brick, steel and stone, 9th Ave. and 34th St. $6,500,000.

Pa., Phila.—Printing Plant and Office—Public Ledger Co., 6th and Chestnut Sts., having plans prepared by H. Trumbauer, Land Title Bldg., (2nd unit) 12 story, 84 x 84 x 169 x 230 ft., brick and steel, plain foundation, 6th, Chestnut and Sansom Sts.

W. Va., Charleston—Plant—Carrier Chemical Co., purchased 7½ acre site and plans plant, $50,000. A. Krug, secy.

North Carolina — Plant — Cunningham Brick Co., Greensboro, purchased 148 acre site between Gordontown and Hannersville for shale brick manufacturing plant.

N. C., Star — Refrigerating Plant — See "Railways" under North Carolina.

La., Gibsland—See "Waterworks."

Tenn., Nashville — Plant — Tennessee Enameling Co., Charl Park, plans to rebuild plant, 41st St. and along tracks of Nashville, Chattanooga & St. Louis R.R., recently destroyed by fire. $50,000. M. H. Wright, vice pres.

Ky., Louisville—Factory—Amer. Woolen Co. of Kentucky, 1000 East Oak St., plans 3 story addition. $150,000.

Ky., Louisville — Warehouse — Louisville Gas & Electric Co., 311 West Chestnut St., plans brick warehouse, Dumesnil and 7th Sts. $200,000. Engineer and architect not selected.

Ia., Des Moines—Power Plant—Des Moines Electric Co., 802 Locust St., having plans prepared for power plant. $16,000,000. T. J. Lucas, c/o Illinois Power and Light Corp., 1547 Illinois Merchants Bank Bldg., Chicago, ch. engr.

Minnesota—Power Plant—See "Unclassified."

Minn., Moorhead—City plans improving present water and light plant, $55,000, or constructing new one, $125,000. R. G. Price, city clk.

Kan., Fort Scott—Electric Light Plant—Plans election to vote on $200,000 bonds for plant. R. Talis, Fort Scott, engr. Noted Dec. 13.

Minn., St. Paul—Power House—Macalester College, Grand and Snelling Aves., having preliminary plans prepared by W. M. Ingemann, 637 Endicott Bldg., and E. D. Litchfield & Rogers, 477 5th Ave., New York City, 1 story, brick and concrete, on campus. $45,000.

Mo., Carthage—Factory—Liggett & Platt, 219 West 2nd St., having plans prepared by P. K. Simpson, Center Bldg., 1 story and basement, 80 x 400 ft. rein.-con. $50,000. Noted July 12.

Mo., St. Louis — Garage — Down Town Garage Co., c/o O. J. McCawley, 613 Chestnut St., having preliminary plans prepared by G. E. Wells, archt. and engr., Boatmans Bank Bldg., 3 story and basement, rein.-con. and brick, plain foundation 300 car capacity. 7th St. $175,000.

Tex., Breckenridge—Plant—Sauders & Fisher Co. plans casing head gasoline plant, 20,000,000 cu.ft. gas daily capacity. $200,000. Private plans. Work will probably be done by day labor.

Tex., Dallas—Printing Plant—Cassidy Realty Co., 3517 Lindenwood Ave., had plans prepared by A. Burton, archt. and engr., Melba Theatre Bldg., 3 story, 100 x 136 ft., brick and concrete. $75,000.

Tex., Dallas—Warehouse—Lyons Parson Co., Carter and Hord Sts., having plans prepared by J. A. Pitzinger, engr. and archt., Southwestern Life Bldg., and takes bids in spring 6 story, concrete, Carter and Collins Sts. $100,000.

Tex., Dallas—Warehouse—E. C. Palmer, Ltd., Lacy St., plans brick and concrete. $100,000. Engineer and architect not announced.

Tex., Galveston—Garage—J. Christianson Co., Ave. I, had plans prepared by D. N. McKenzie, archt. and engr., 2107 Post Office St., 1 story, 50 x 120 ft., brick garage. $45,000.

Tex., Refugio — Plant — Pratt-Hewitt Syndicate, soon takes bids 5 story, 200 x 360 ft., rein.-con. and brick. $1,000,000. Noted Oct. 11.

Tex., Texas City — Refinery — Knox Process Co. having plans prepared oil refinery. $500,000. L. Steerman, mgr. Private plans.

Calif., Davis—Warehouse, etc—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, having plans prepared, warehouse, office and service buildings. $40,000 or more. Private plans. Noted Feb. 22.

Calif., Long Beach—Garage and Office—H. S. Wright, c/o J. H. Roberts, archt., Marine Bank Bldg., had plans prepared 2 story, 50 x 150 ft., brick, American Ave.

Calif., Los Angeles — Garage — J. A. Nadeau Co., 1100 East Slauson Ave., had plans prepared by A. G. Bailey, Jr., Orpheum Bldg., 1 story, brick addition, East Slauson Ave. $40,000.

Calif., Los Angeles — Shop — California Paint Remover Co., 709 South Crocker St., had plans prepared 1 story, 120 x 140 ft., brick, Paloma and 14th Sts. Private plans.

Calif., Los Angeles — Shop — Stockham Pipe & Fitting Co., Terminal Sales Bldg., having plans prepared by F. D. Chase, Insurance Bldg., 1 story pipe shop, 24th St., $40,000.

Calif., Los Angeles—Sub-Station—Pacific Electric Ry. Co., Pacific Electric Bldg., plans sub-station, 2nd and Toluca Sts.

Calif., Oxnard—Plant—Ord Ice Co., had plans prepared ice plant. To exceed $50,000. A. A. Miller, Ventura, Calif., interested.

Calif., San Bernardino—Warehouse—Associated Warehouse Co., having plans prepared by L. L. Jones, Grosse Bldg., Los Angeles, 3 story, 100 x 150 ft., rein.-con. and brick. $150,000.

Calif., San Jacinto—Factory—Riverside Cement & Roofing Co., Riverside, plans factory, here. To exceed $75,000.

Calif., Venice—Factory—Jennings-White Co., c/o J. C. Barthel, 119 Wavecrest Ave., Santa Monica, plans factory. To exceed $150,000.

Ont., Welland — Garage — Gram Bros., Division St., having plans prepared by N. A. Kearns, Temple Bldg., 2 story, rein.-con., brick and steel, Division St. $50,000.

BIDS DESIRED

N. Y., New York—Repair Shop—Jan. 15, by G. A. Whalen, comr. of Plant and Structures, Municipal Bldg., central motor repair shop, 16th St. and Ave. C.

Fla., Tampa—Warehouses, etc.—Dec. 31, by Tilt Hargan Co., engrs., 90 West Bway., New York City, N. Y., for 2 steel warehouses and bulkheads for Gulf & Southern Steamship Co., Tampa.

O., Cleveland—Garage—Company, c/o S. H. White, archt., Schofield Bldg., taking bids 1 story, 150 x 400 ft., concrete, brick and steel commercial garage, $150,000.

O., Cleveland—Plant—Dercum & Beer, archts., 4500 Euclid Ave., taking bids 3 story, 90 x 116 ft., rein.-con. and brick 12th St. and Oregon Ave., for German Consolidated Newspaper Co., c/o C. Raid, genl. mgr., 1570 West 35th St. $150,000. Noted Dec. 20.

Wis., Appleton—Garage—Kurz Motor Car Co., 1107 College Ave., taking bids 2 story and basement, 30 x 77 ft., and 26 x 42 ft., concrete additions, plain foundations, College Ave. $40,000. Private plans.

Tex., Houston—Bakery—Houston Baking Co., c/o J. Finger, archt. and engr. Woolworth Bldg., taking bids 2 story, 50 x 123 ft. brick and tile. $50,000 incl. equipment.

Calif., Emeryville — Factory — Westinghouse Electric Co., 62nd and Powell Sts., taking bids 3 story, rein.-con. addition, Powell and 62nd Sts. B. H. Prack, 62nd and Green Sts., engr. To exceed $150,000.

Calif., Emeryville—Garage—Cozzens-Ball, Inc., San Pablo and 48th Aves., Oakland, taking bids 1 story, rein.-con., here. $80,000.

Calif., Emeryville—Warehouse—W. J. Miller, archt., Lachman Bldg., San Francisco, receiving bids 1 story, 110 x 120 ft., rein.-con., Doyle and 64th Sts., here, for Detroit Steel Products Co., 251 Kearny St., San Francisco. $40,000.

Calif., Los Angeles—Plant—L. A. Parker, archt., Pacific Electric Bldg., taking bids 125 x 175 ft. rein.-con. North Main St., for Los Angeles Brewing Co., 1920 North Main St. Noted Dec. 20.

Calif., Los Angeles—Garage—M. Swasey, archt., Hibernian Bldg., taking bids for 2 story, 115 x 150 ft., brick, Gordon and Sunset Sts., for S. W. Smith, 1620 South Figueroa St.

Calif., Los Angeles—Warehouse—Blake, Moffitt & Towne, 242 South Los Angeles St., taking bids 4 story, 90 x 187 x 216 x 221 ft., rein.-con. and brick, South Los Angeles St. J. D. Galloway, 1st Natl. Bank Bldg., San Francisco, engr.

BIDS RECEIVED

La., New Orleans—Bd. Port Comrs., 200 New Court Bldg., furnishing 1,720 tons structural steel for superstructure of Canal Ave. warehouse, (a) furnishing steel, (b) erecting and painting, from Virginia Bridge & Iron Co., Whitney Bldg., (a) $145,684; Ingalls Iron Wks., City Bank Bldg., (b) $21,500; also unloading painting and erecting steel from B. N. Davis, 831 Magazine St., $16,063.

CONTRACTS AWARDED

Mass., Dorchester (Boston P. O.) — Garage—F. W. Doyle, Adams St., 2 story, 70 x 150 ft., brick and steel, plain foundation, Adams St., to Scully Co., 118 1st St., Cambridge (Boston P. O.), $60,000.

Industrial Works (Continued)

Mass., Springfield—Garage, etc.—H. J. Perkins, Dwight St., 1 story, 90 x 160 ft., garage and showroom, brick and steel, Taylor St., to F. T. Ley Co., 495 Main St., $45,000.

Mass., Worcester—Power House—Boston & Maine R.R., North Station, Boston, will build 1 story, 45 x 65 ft., brick and steel, by day labor. $75,000. A. B. Corthell, ch. engr. Noted Dec. 13.

N. Y., North Tonawanda — Factory — Kardex Co., Main St., 1 story, 100 x 600 ft., rein.-con., brick and steel, to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland, O. Archts. est. $200,000.

Pa., Ardmore—Factory—Mentopine Corp., 501 Green St., Phila., 3 story and basement, 54 x 90 ft., brick, steel and iron, plain foundation, to Bowden Constr. Co., 1935 Chestnut St., Phila., $65,000.

N. C., Gastonia—Mill—Loray Mills, 1 story addition, 25,000 sq.ft. floor space, to Aberthaw Constr. Co., 27 School St., Boston, Mass.

Fla., Tampa—Warehouse—City Comn., 75 x 694 ft., rein.-con. fabricated steel, concrete pile foundation, Estuary St., to McGucken, McGucken & Edwards, 204 Nebraska Ave., $79,090. Noted Nov. 15.

Miss., Jackson—Factory—Morris Ice Co., rebuilding factory, to W. J. McGee, Jackson. Engrs. est. $175,000. Noted Nov. 22.

O., Cleveland — Factory — Horsburgh & Scott, 5114 Hamilton Ave., 3 story and basement, 120 x 140 ft., rein.-con. and brick, 5114 Hamilton Ave., to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $250,000.

O., Cleveland — Foundry — Gluntz Brass Foundry Co., c/o D. J. Gluntz, pres., 1629 East 55th St., 1 story, 60 x 100 ft., brick and steel, 1629 East 55th St., to J. H. O'Grody, 26 Euclid Arcade. Engrs. est. $40,000.

O., Cleveland—Plant—Natl. Biscuit Co., 35 9th Ave., New York City, 1 story, 60 x 493 ft., concrete, brick and steel, East 83rd and Woodland Sts., here, to Lundoff-Bicknell Co., B. F. Keith Bldg. Archts. est. $200,000. Noted Dec. 13.

O., Dayton—Plant—Miami Ice & Fuel Co., Ludlow Bldg., 5 story, rein.-con. and brick cold storage plant, plain foundation, Eaker St., to Huffman Realty Co., 305 Callahan Bldg., $240,000.

O., Reading (branch of Cincinnati)—Factory—General Match Co., 1626 Hamer St., Cincinnati, 1 story, 200 x 220 ft., brick and steel, to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland. Archts. est. $150,000. Noted Dec. 13.

Mich., Niles—Factory and Warehouse—Kawneer Mfg. Co., 1 story, 100 x 125 ft., and 1 story, 48 x 130 ft. factory buildings, also 2 story, 100 x 212 ft. warehouse, to R. Reisinger & Co., 464 Oakland Ave., Milwaukee, Wis.

Wis., Madison—Garage—A. J. McCance, 204 Meary St., will build 1 story, 60 x 100 ft., rein.-con., brick and steel, plain foundation, by day labor. $50,000. Noted Dec. 13.

Wis., Marinette—Warehouse—Victory Bag & Paper Co., Ludington St., will build 2 story, timber, plain foundation, by day labor. $50,000. Private plans.

Wis., Milwaukee—Garage—Argo Investment Co., 77 Michigan St., 2 story and basement, brick and concrete, garage, plain foundation, 5th St., to Bentley Bros., 807 South Pierce St. Archts. est. $75,000.

Wis., Oshkosh—Warehouse—Morgan Co., Oregon and 6th Sts., 3 story, brick and mill construction, to Fluor Bros. Constr. Co., 48 Otter St. Archts. est. $60,000.

Minn., St. Paul — Garage — Studebaker Sales Co., 9th and Franklin Sts., general contract 3 story and basement, 60 x 80 ft. rein.-con. and brick addition, 9th and Franklin Sts., to W. M. Murphy & Son, 346 Endicott Bldg. Total $60,000.

Mo., Kansas City—Assembly Plant—Ford Motor Co., Highland Park, Detroit, Mich., (1st unit) 1 story, 200 x 840 ft., rein.-con., brick and steel, to J. R. Vansant Constr. Co., 417 Ridge Bldg., $400,000. Total cost $750,000. Noted Oct. 18.

Mo., St. Louis—Factory—Diamond Wood Heel & Mfg. Co., 407 South Bway., 2 story and basement, 75 x 168 ft., brick and rein.-con., 2506 South Bway., to Pollman Constr. Co., St. Louis. Est. cost $65,000.

Mo., St. Louis—Garage—F. Dubinsky, Wainright Bldg., 1 story, 80 x 110 ft., rein.-con., Washington St., to A. H. Stiel, archt., 813 Chestnut St., by day labor. $40,000.

Mo., St. Louis—Garage—McNicol Bros., 5618 Easton Ave., will build 1 story, 100 x 135 ft., brick, concrete and terra cotta, Blendon Pl., by day labor. $40,000. Stephen & Pearson, Chemical Bldg., archts.

Tex., Houston — Texas & New Orleans R.R., Southern Pacific Bldg., concrete work for shops, to Southwestern Constr. Co., West Bldg., $54,000.

Okla., Sand Springs — Bleachery — Sand Springs Cotton Mills soon takes bids on steel work for 2 story and basement, 200 x 240 ft., rein.-con., brick and steel. Work will be done by day labor. Total cost $150,000. Noted Dec. 13.

Wash., Seattle—Factory—Amer. Can Co., foot of Clay St., 5 story, 120 x 310 ft. steel and concrete addition, 1st and Clay St., to A. W. Quist Co., Hoge Bldg. Archts. est. $700,000.

Calif., Long Beach—Garage—Soft Water Laundry Co., 700 Anaheim St., 1 story, 30 x 125 ft., brick, Anaheim St., to McGrew & Sons, 1345 West Ocean Ave.

Calif., Los Angeles—Garage—J. L. Grant, c/o contractor, 1 story, 60 x 150 ft., brick, Flower St. near Pico St., to J. M. Cooper, Marsh-Strong Bldg.

Calif., Los Angeles — Garage — R. B. Lloyd, Bank of Italy Bldg., 1 story and mezzanine, 60 x 80 ft., brick addition, Vermont Ave., to May & Grimwood, 719 Haas Bldg.

Calif., Los Angeles—Garage—J. B. Newman, c/o contractor, 1 story, 100 x 200 ft., brick, East 9th St., to V. P. Gilbert, 705 Citizens Natl. Bank Bldg.

Calif., San Francisco — Warehouse — Siegen Realty Co., 233 Lick Bldg., 1 story rein.-con., Howard and Erie Sts., to H. L. Peterson, Lick Bldg., $42,000.

Calif., San Francisco — Laundry and Power Plant—See "Buildings."

Buildings

PROPOSED WORK

Mass., Boston—Apartment—S. S. Levy, archt., 39 Court St., preparing plans 4 story apartment. $350,000. Owners name withheld.

R. I., Providence—Court House—Providence Co. Court House Comn. taking competitive plans 6 and 4 story, brick and stone, South Main St. $3,000,000. Noted May 4.

R. I., Providence—Hospital—Lying-In Hospital, 96 Parkway St., soon takes bids 4 story, brick, concrete and steel, Pleasant Valley Parkway. $1,000,000. E. Porter, supt. Stevens & Lee, 9 Park St., Boston, Mass., archts. Noted Oct. 11.

R. I., Providence—School—J. W. Donahue, archt., 477 Main St., Springfield, Mass., opens bids about Jan. 15, 2 story and basement, brick, concrete and steel, plain foundation, Smith St., for La Salle Academy, 205 Fountain St. $400,000.

Conn., Bristol—School—South Side School Dist. plans 3 story school. $375,000. Engineer and architect not selected.

N. Y., Brooklyn—Bank—Mechanics Bank, 215 Montague St., soon takes bids brick, steel and stone, plain foundation. Ralph and Gates Aves. $200,000. E. E. Seelye, 103 Park Ave., New York, engr. Holmes & Winslow, 134 East 44th St., New York, archts.

N. Y., Brooklyn—Municipal—City, Boro Hall, soon receives bids 11 story, brick and steel, plain foundation, Court and Joralemon Sts., $6,000,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., New York, archts. and engrs. Noted Nov. 29.

N. Y., Buffalo—Office—State Building Comn., Albany, had plans prepared office building, here. $200,000. S. W. Jones, Albany, state archt.

N. Y., Elmira—High School—Plans election in spring to vote on $250,000 bonds for new Junior High School. Park Pl. P. E. Kingston, pres. School Bd. Architect and engineer not announced.

N. Y., Hoosick Falls—School—Bd. Educ. plans to rebuild 4 story, 380 x 500 ft., brick and steel, near Hoosick River Bridge. $265,000. Engineer and architect not selected.

N. Y., New York — Bank and Office — Railroad Cooperative & Loan Assn., 437 Lexington Ave., having plans prepared by Ludlow & Peabody, archts. and engrs., 101 Park Ave., 13 story, brick, steel and stone, plain foundation, Lexington Ave. $800,000. G. E. Martin, pres.

N. Y., New York—Church, Office, etc.—Broadway Temple c/o Donn Barber, archt. and engr., 101 Park Ave., having plans prepared 24 story, brick, steel and stone, plain foundation, 173rd St. and Bway. $4,000,000.

N. Y., New York—Clubhouse—Knights of Columbus, 244 West 51st St., soon receive bids 15 story, brick, steel and stone, 8th Ave., $1,650,000. E. F. Fanning, 522 5th Ave., archt. and engr. Noted Sept. 6.

N. Y., Rochester—Club—Rochester German Societies, 421 St. Paul St., having plans prepared 4 story and basement, 100 x 150 ft. club house, St. Paul St. $150,000. Engineer and architects names withheld.

N. J., Asyla (Grenloch P. O.)—Hospital—Camden Co. (Camden) rejected bids group of buildings, here. Plans will be revised and work readvertised. Noted Dec. 27.

N. J., Somerville — Hospital — Somerville Hospital plans new hospital. $350,000.

N. J., Trenton—Buildings—State Building Comn., Trenton, plans psychopathic and convalescent buildings, and addition to dining hall at State Hospital for Insane, here, $384,000. Engineer and architect not selected.

Pa., Bustleton — School — Maternity and Blessed Virgin Roman Catholic Church, Welsh and Newton Sts., having plans prepared by Hoffman-Henon Co., Finance Bldg., Phila., 3 story and basement, 60 x 120 ft. brick, steel and stone, plain foundation, Welsh and Newton Sts. $150,000.

Pa., Lewisburg—High School—Lewisburg School Dist., plans 3 story and basement, 110 x 120 ft., rein.-con., brick and steel, West End Section. $200,000.

Pa., Phila.—Apartment—Hoffman-Henon Co., archt., Finance Bldg., preparing plans 10 story and basement, 50 x 60 ft. brick and steel, plain foundation, 19th and Delancey St. $300,000. Owners name withheld.

Pa., Phila. — Apartment — F. B. Koelle, archt., Otis Bldg., preparing plans 4 story and basement, 90 x 130 ft., rein.-con., brick and steel, plain foundation, Chelton and Germantown Aves. $150,000. Owner's name withheld.

Pa., Phila.—Church—D. J. Dougherty, 1723 Race St., having plans prepared by Hoffman-Henon Co., Finance Bldg., 1 story, 60 x 125 ft., steel and stone, plain foundation. Cobbs Creek Parkway and Cedar Ave. $200,000.

Pa., Phila.—Hotel—Greenfield and Tanke, Fox Theatre Bldg., agents for owner (name withheld), having plans prepared by F. E. Hahn, 1112 Chestnut St., 24 story, 75 x 157 ft. 16th and Market Sts.

Pa., Scranton — School — Holy Rosary Church, Williams St., takes bids early in January, 2 story, 82 x 125 ft., brick, limestone and steel, Williams St. $250,000. Morris & McHale, Mears Bldg., archts.

N. C., Asheville—Office—Professional Office Building Co., Inc., plans 12 story and basement, 60 x 90 ft., fireproof, Otis St. and Battery Ave. $400,000. Engineer and architect not announced.

N. C., Raleigh—College—Bd. Trustees Meredith College, authorized $750,000 bond issue for new college at Method, suburb. Total cost $1,000,000. $250,000 on hand. C. E. Brewer, pres.

N. C., Winston-Salem—Depot—Southern Ry., 1300 Penn Ave., Wash., D. C., soon lets contract depot on old Wheeler property, here. $750,000. J. B. Akers, Charlotte, N. C., ch. engr. M. W. and structural.

Fla., Tampa—Hospitals and Auditorium—Feb. 12, to vote on $250,000 bonds for hospitals; also $250,000 bonds for auditorium. W. E. Duncan, city clk.

Ala., Birmingham—Court House—Jefferson Co. having plans prepared by J. B. Wheelock, Birmingham, court house, propably 4 story. $500,000.

Ala., Huntsville—Schools—Voted $150,000 bonds for schools.

La., Monroe—Court House and Jail—Ouachita Parish Police Jury, had plans prepared by J. W. Smith, Monroe, new court house and jail. $400,000. Will award contract in February.

Tenn., Knoxville—Market and Auditorium—J. L. Humphreys, plans market and auditorium building in North Knoxville. $300,000. Engineer and architect not selected.

Tenn., Memphis—Arcade—Avenue Realty Co. having plans prepared by Hanker & Cairns, Madison Ave. Bldg., 2 story, brick, tile and stone, Union and South 3rd Sts. $150,000.

Buildings (Continued)

Tenn., Memphis—Cafe, Apartment and Restaurant—C. B. Renegar, 317 Adams St., having plans prepared by Mahan & Broadwell, Amer. Bank Bldg., 2 story and basement, Adams and Lauderdale Sts. $150,000.

Tenn., Nashville—Memorial—Vanderbilt University had plans prepared by H. C. Hibbs, 4th and 1st Natl. Bank Bldg., and takes bids about Jan. 10, 3 story and basement, rein.-con., brick and stone. Bway. near Medical School. $300,000. Noted Nov. 13.

Ky., Louisville—Business and Apartment—Mammoth Realty Co., 608 West Walnut St., plans 6 story, 70 x 150 ft., 604 West Walnut St. $250,000.

O., Cleveland—Apartment—A. H. Oyer, 515 Bangor Bldg., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story and basement, 42 x 162 ft., brick and timber, East 79th St. and Hough Ave. $175,000.

O., Cleveland—Apartment—Urban Realty & Development Co., Guardian Bldg., plans 4 story, brick, on lot 221 x 244 ft., Morland Circle. $250,000. Engineer and architects name withheld.

O., Cleveland — Clubhouse, Apartment, etc.—Aerie 135 Fraternal Order of Eagles, C. Shannon, chn. Bldg. Com., 2226 East 55th St., plans 10 story, concrete, brick and steel, East 40th St. and Windsor Ave. $1,000,000.

O., Cleveland — Commercial — Empire-Cleveland Development Co., c/o S. W. Manheim, East 9th St. and Chester Ave., plans brick, steel and concrete, 9th and Boliver Sts. $300,000. Engineer and architect not selected.

O., Cleveland—Commercial—Syndicate of Investors, c/o A. H. McBride, of Cleveland News Publishing Co., Leader-News Bldg., plans 3 story, brick, steel and concrete, on lot 12 x 135 ft., Walnut and Paynes Aves. $150,000. Engineer and architect not selected.

O., Cleveland — Home — Eliza Jennings Home for Aged, c/o C. S. Orr, 14903 Clifton Blvd., Lakewood, having plans prepared by Meade & Hamilton, 1002 Natl. City Bldg., 3 story and basement, 90 x 160 ft., concrete, brick and steel, 10503 Detroit Ave., here. $225,000.

O., Cleveland—Store and Office—J. Heller, 2218 Lorain Ave., plans 6 story and basement, concrete, brick and steel, on site 69 x 156 ft., West 25th St. and Market Place. $200,000. Engineer and architect not selected.

O., East Cleveland—(Cleveland, P. O.)—Commercial and Apartment—Company c/o F. J. Poulson, Guardian Bldg., Cleveland, plans 4 story, brick and timber, Euclid and Hower Aves. $300,000. Engineer and architect not selected.

O., Lakewood (Cleveland P. O.)—Commercial and Apartment—H. L. Smith, Illuminating Bldg., Cleveland, plans 3 story and basement, brick, steel and timber, on plot 90 x 185 ft., Detroit Ave., here. $150,000. Engineer and architect not selected.

O., Youngstown—High School—Bd. Educ. plans East High School, 3 story, Emma St. $900,000. P. Boucherle, Stambaugh Bldg., archt. Will mature in spring.

Ind., Ft. Wayne—College—Concordia College having plans prepared by J. M. E. Riedel, Noll Bldg., 3 story and basement, 50 x 158 ft., brick. $150,000.

Ind., Ft. Wayne — Schools — Bd. School Trustees having plans prepared 2 story and basement, rein.-con. and brick, $150,000, Mahurin & Mahurin, 124 West Jefferson St., archts.; also 2 story and basement, rein.-con. and brick, $160,000, Pohlmeyer & Pohlmeyer, Central Bldg., archts.

Mich., Highland Park (Detroit P. O.)—Library—City having plans prepared by E. L. Tilton, 141 East 45th St., New York City, 2 story, brick, steel and stone, plain foundation. Woodward Ave. $500,000.

Wis., Appleton—Hotel—See "Unclassified."

Wis., De Forest—Store and Apartment—J. H. Bertrand, having plans prepared by P. Dean, Dean Bldg., Madison, 2 story, 67 x 135 ft., rein.-con., brick and stone, plain foundation. $150,000.

Wis., Milwaukee—Hotel—State & Fourth Realty Co., 209 Grand Ave., having preliminary plans prepared by Lindl, Lesser & Schutte, 82 Wisconsin St., 8 story and basement, 50 x 150 ft., brick and concrete, plain foundation, State St. $500,000.

Wis., Racine—Clubhouse—Racine Aerie of Eagles, c/o W. Armstrong, pres., 1818 College Ave., plans 3 story, brick and concrete, plain foundation. $175,000. Engineer and architect not selected.

Ia., Sioux City—Apartment—G. G. Francis, c/o E. Schroeder Co., archt., 405 Bway., Milwaukee, Wis., having plans prepared 3 story and basement, 52 x 100 ft., brick and concrete, Jackson and 26th Sts., $150,000.

Kan., Emporia—High School—Bd. Educ. plans junior high school. $400,000. Engineer and architect not selected.

Mo., Kansas City—School—Redemptorist Fathers, 325 Hunter St., rejected bids 3 story and basement, 160 x 168 ft., rein.-con., brick and stone, Hunter Ave. $350,000. E. P. Madorie, 1106 Contentional Bldg., archt. Noted Dec. 6.

Tex., Dallas — Store and Office — Volk Bros., Elm St., plans 10 story, 75 x 100 ft., concrete, steel and brick. $900,000. Engineer and architect not announced.

Tex., San Marcos—High School—Voted $200,000 bonds for high school. F. E. Erck, mayor. Noted Nov. 29.

Okla., Tulsa—Hotel—C. P. Alexander having final plans made by L. I. Shumway, 725 Wright Bldg., 5 story and basement, rein.-con., brick, steel and terra cotta, South Cheyenne St. $200,000.

Okla., Tulsa — Store — Van Dever Dry Goods Co., 109 South Main St., having plans prepared by Atkinson & Olson, 816 Mayo Bldg., 8 story and basement, 60 x 135 ft., rein.-con. $300,000. W. W. Huff, 506 Mutual Life Bldg., Kansas City, Mo., structural engr. Noted Sept. 6.

Calif., Davis — Office — See "Industrial Work."

Calif., Inglewood — Theatre, Office and Store—A. Bennett, c/o Engineering Service Co., archts., Washington Bldg., Los Angeles, having plans prepared 2 story, 75 x 150 ft., brick, seating capacity 1,500 or more.

Calif., Long Beach—Bank and Office—Bank of Italy, Powell and Eddy Sts., San Francisco, plans 8 story, Class A, fireproof construction. To exceed $150,000. Engineer and architect not selected.

Calif., Long Beach—Bank and Office—Guaranty Title Co., 146 Locust Ave., plans 5 story, fireproof construction, Locust Ave. To exceed $150,000.

Calif., Long Beach—Lodge, Store and Office—Palos Verdes Lodge 389 Masonic Fraternity of Long Beach having plans prepared by Davies & Baume, et al., Farmers & Merchants Bldg., approximately 4 story, brick, Pine Ave. $150,000 or more.

Calif., Long Beach—Office—See "Industrial Works."

Calif., Los Angeles—Apartment—Laiser, Killen & Condon, Los Angeles, having plans prepared by Walker & Eisen, Pacific Finance Bldg., 5 story and basement, 150 x 226 ft., rein.-con. and brick, 4th St. and Normandie Ave., $1,000,000.

Calif., Los Angeles—Apartment and Store—M. Mandel, 3674 Arlington St., having preliminary plans prepared by J. M. Cooper, Marsh-Strong Bldg., 5 story, rein.-con., Hollywood Blvd. $500,000.

Calif., Los Angeles—Apartment—Walker & Eisen, archts., Pacific Finance Bldg., preparing preliminary plans approximately 13 story, 150 x 150 ft., rein.-con., Ardmore Ave. Owner's name withheld.

Calif., Los Angeles—Auditorium—Mystic Shrine of Los Angeles, had revised plans prepared by J. C. Austin, Detwiler Bldg., A. M. Edelman, H. W. Hellman Bldg., both of Los Angeles, and G. A. Lansburgh, 140 Montgomery St., San Francisco, rein.-con., and steel, Jefferson and Royal Sts., $2,000,000 or more. Noted Mar. 15.

Calif., Los Angeles—Hotel—Lane, Slosburg & Schlank, Mortgage Guarantee Bldg., had plans prepared by H. W. Charlton, Central Bldg., Glendale, 4 story, brick, Figueroa St. $150,000.

Calif., Los Angeles—Hotel—C. S. Levi, archt., Douglas Bldg., preparing preliminary plans 150 x 235 ft., approximately 4 story, brick, $150,000 or more. Owner's name withheld.

Calif., Los Angeles—Museum—Los Angeles Co. having plans prepared by Allied Architects Assn., Citizens Natl. Bank Bldg., 3 story, 150 x 200 ft., fireproof, in Exposition Park. To exceed $150,000.

Calif., Los Angeles—Office and Store—Citizens Mortgage Co., Loew State Bldg., having plans prepared by Noernberg & Johnson, Railway Bldg., 12 story, rein.-con. and brick, 11th St. and Bway. $500,000 or more.

Calif., Los Angeles—Store and Office—Grand Ave. Building Co., c/o L. L. Jones, archt., Grosse Bldg., having plans prepared 12 story and basement, rein.-con. and brick, Grand Ave. near 7th St. To exceed $500,000.

Calif., Los Angeles—Store and Office—J J. Morgan, 5627 Hollywood Blvd., had preliminary plans prepared by Lindley & Selkirk, Amer. Bank Bldg., 12 story, 110 x 115 ft., rein.-con., Western Ave. and Hollywood Blvd.

Calif., Marysville—Memorial—Yuba Co. takes bids early in 1924, 2 story and basement, steel and rein.-con. memorial auditorium, here. To exceed $150,000. J. Morgan, Merchants Exch. Bldg., San Francisco, archt. Noted Aug. 30.

Calif., Oakland—Cathedral—Scottish Rite Bodies of Alameda Co., plans Class A construction, Jackson and 15th Sts. $1,000,000. C. Werner, Santa Fe Bldg., San Francisco, archt.

Calif., Pasadena—Office and Theatre—A. C. Blumenthal et al., Loew State Bldg., Los Angeles, plans approximately 8 story, Class A construction, on site 100 x 250 ft., Madison Ave.

Calif., Pomona—Hotel—C. B. Afflerbaugh, 705 East Holt St., interested in syndicate which plans hotel, Holt and Towne Aves. To exceed $150,000.

Calif., San Francisco—Dance Hall and Stores—Trowbridge & Perkins, c/o E. E. Young, archts., 2002 California St., having plans prepared 3 story and basement, Class A construction, Market and 9th Sts., $150,000 or more.

Calif., San Jose — Club — Catholic Women's Community Center, c/o Binder & Curtis, archts., 255½ South 1st St. having plans prepared 4 story and basement, rein.-con., 5th and San Fernando Sts. $150,000 or more.

Calif., San Pedro—Hotel and Store—McCormick Realty Co., 628 North Western Ave., Los Angeles, plans 225 room hotel, fireproof construction. To exceed $150,000.

Calif., San Rafael—Orphanage—Roman Catholic Archbishop of San Francisco, 1100 Franklin St., San Francisco, had plans prepared by J. J. Foley, 770 Fifth Ave., San Francisco, five 2 story, buildings, rein.-con., 3 dormitories, gymnasium and chapel. To exceed $150,000.

Ont., London—School, etc.—Bd. Educ. takes bids after Jan. 1, 2 story 16 room and auditorium, brick, Empress Ave. $180,000. L. E. Carrothers, c/o Bd. Educ., archt.

Ont., Toronto—Apartment—Roberts Bros., 241 Dovercourt Rd., having plans prepared by N. G. Beggs, 6 Jean St., 3 or 4 story and basement, rein.-con., brick, steel and stone, plain foundation, Spadina Rd. $1,000,000.

Ont., Toronto—Hospital—Western Hospital, Bathurst St., having plans prepared by E. J. Lennox, 364 Bay St., altering and constructing 2 and 3 story and basement, rein.-con., brick and steel, plain foundation. $150,000-$200,000.

Ont., Toronto—Office—J. J. O'Neil, 34 University Ave., having plans prepared by W. F. Sparling Co., 54 University Ave., 12 story and basement, rein.-con., brick and steel, plain foundation, Victoria and Adelaide Sts. $800,000.

BIDS DESIRED

Mass., Boston — Temple — Jan. 7, by Krokyn, Brown & Rosenstein, archts., 7 State St., 3 story, 70 x 160 ft., limestone, Seaver St. and Elm Hill Ave., for Miskan Tefila, c/o architects $200,000.

Mass., Roxbury (Boston, P. O.)—School—Jan. 4 (extended date) by School Com. of City of Boston, Phillips Brooks Grammar School, 2 story and basement, 80 x 240 ft., rein.-con. and brick, wood pile foundation, Lawrence Ave., here. $500,000. J. Gray, 175 High St., Boston, archt. Noted Nov. 8.

Mass., Salem—School—Jan. 10, by D. J. Sullivan, mayor, 3 story and basement, 68 x 130 ft., rein.-con. and brick addition to Phillips School, plain foundation, Washington Sq. $200,000. J. H. Bickford Co., 6 Beacon St., Boston, archts. Noted Dec. 20

Pa., Lebanon — School — Jan. 7, by Ritcher & Eiler, archts., 147 North 5th St., Reading, 2 story and basement, brick and steel, 78 x 247 ft. with 58 x 80 ft. wing, plain foundation, 3rd, Lehman, Henry and Houck Sts., for School Bd., here. $280,000.

Pa., Phila.—Apartment—Jan. 5, by E. A. Smith, archt., 1208 Chestnut St., 4 story and basement, 124 x 233 ft., 43rd and Chestnut Sts., for I. N. Smith, Hotel Marlyn, $300,000.

Md. Baltimore—Store—Jan. 7, by T. W. Pietsch, archt., American Bldg., 4 story, 40 x 70 ft., brick, plain foundation, Franklin and Charles Sts., for Mercantile Trust & Deposit Co., Calvert and Redwood Sts. $150,000. H. Massart, 328 North Charles St., engr. Noted Nov. 1.

Md., Baltimore—Store—Jan. 10, by F. J. Baldwin, archt., 328 North Charles St., and

Buildings (Continued)

J. E. Sperry, Calvert Bldg., associated archts., altering and constructing 5 story addition, concrete, brick and steel, plain foundation, Howard and Saratoga Sts., for Hutzler Bros., Howard and Saratoga Sts. $550,000. H. F. Doeleman, 507 North Charles St., engr. Noted Jan. 18.

O., Cleveland—Apartments—A. Krinsky and M. Sadai, 3342 East 125th St., taking bids and open same about Jan. 15, 3 story and basement, 40 x 157 ft., brick, 783 East 88th St., $150,000. N. Petti, 911 Williamson Bldg., archt. Noted Dec. 13.

O., Cleveland—Apartment—I. Lieberman, 11212 Berkshire Rd., taking bids 3 story and basement, 40 x 48 x 94 ft., brick, 794 East 125th St. $150,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland—Apartment—Rothenberg & Bralosky, 2388 Ontario St., taking bids and opens same about Jan. 25, 3 story and basement, 52 x 130 ft. brick, Cornell Rd. near Euclid Ave. $175,000. M. Weis, 618 Union Bldg., archt. Noted Oct. 4.

O., Cleveland — Apartment — M. Weis, archt., 617 Union Bldg., taking bids and opens same about Jan. 20, 3 story and basement, 45 x 148 ft., brick, 979 Parkwood Dr., for I. Brezin, c/o architect. $150,000.

O., Cleveland—Office—S. H. White, archt., Schofield Bldg., taking bids remodeling garage into 10 story office building, 1210 Huron Rd., for Cresswell Building Co., c/o architect. $200,000.

Mich., Jonesville—School—Jan. 17, by R. M. Powers, secy. Bd. Educ., 2 story and basement, rein.-con. and brick, plain foundation, $150,000. E. S. Batterson, 405 Hanselman Bldg., Kalamazoo, archt.

Wis., Milwaukee—Store—Jan. 10, by M. Tullgren & Sons, archts., 425 East Water St., 4 story and basement, 87 x 150 ft., brick and concrete, plain foundation, 3rd St., for C. Ries & Sons, 697 3rd St. $200,000.

Kan., Baldwin City—College—T. W. Williamson, archt., Central Natl. Bank Bldg., Topeka, taking bids 2 story and basement, rein.-con., brick and stone, plain foundation on campus, here, for Baker University. $300,000. Noted Oct. 18.

Tex., Tyler—High School—Jan. 17, by Bd. Educ., brick and concrete high school, also remodeling present buildings. $250,000. De Witt & Lemmon, Southwestern Life Bldg., Dallas, engrs. and archts. Noted Oct. 25.

BIDS RECEIVED

N. Y., Buffalo—Office—Supervs. Erie Co., 29 City and County Hall, 3 story, rein.-con., brick and Indiana limestone, Eagle St., general contract from C. H. Everitt, 295 Auburn Ave., $279,165; heating, from Bresnahan Co., 293 Franklin St., $32,157. Noted Nov. 29.

D. C., Wash.—School—Dist. Comrs., 509 Dist. Bldg., constructing P. S. School 186, Spring and Rock Creek Church Rds., from C. H. Tompkins, 1612 Park Rd., $133,700. Noted Dec. 6.

La., New Orleans—School—Orleans Parish School Bd., Dec. 21, Capdau School, Franklin and Lotus Sts., from O. M. Gwin, Canal Commercial Bldg., $195,715. Noted Nov. 29.

Mich., Ironwood—School—Bd. Educ., 3 story and basement, rein.-con., brick and stone, from Bartleson & Ness, Minot, N. D., $951,000, Madsen & Peterson, 646 Builders Exch., Minneapolis, Minn., $958,890, Natl. Contg. Co., 311 Metropolitan Bank Bldg., Minneapolis, Minn., $978,700. Above bidders have been asked to refigure on certain alternates, and revised bids to be in by Jan. 8. Noted Nov. 15.

Calif., Los Gatos — High School — Los Gatos Union High School Dist., general contract 1 and 2 story, rein.-con., from Herndon & Finnegan, 1814 17th St., Sacrameto, $148,670. Noted Dec. 6.

CONTRACTS AWARDED

Mass., Boston—Apartment Hotel—W. C. Codman & Sons, 15 State St., 8 story, 70 x 116 ft., brick, plain foundation, Charles St., to Chase & Gilbert, 185 Devonshire St., $400,000.

Mass., Northampton — School — School Com., 3 story, brick, to M. C. Kroll, 205 State St., $225,000. Noted Sept. 20.

N. Y., Brooklyn — Apartment — Saturn Realty Co., Inc., c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 4 story, brick, steel and stone, plain foundation, Montgomery St., by day labor. $200,000.

N. Y., Brooklyn — Apartment — Shure & Kaplan, Inc., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., New York, will build 4 story, brick, steel and stone, plain foundation, Sullivan St., by day labor. $200,000.

N. Y., New York—Apartment—Bloom & Rubin, 15 West 97th St., will build 15 story, 100 x 102 ft., brick, steel and stone, plain foundation, 59 East 86th St., by separate contracts. $1,500,000. Schwartz & Gross, 347 5th Ave., archts. and engrs.

N. Y., New York—Apartment—M. Brenner c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, Crotona Parkway, by day labor. $200,000.

N. Y., New York—Apartment—Curtess Realty & Constr. Co., c/o W. I. Hohauser, archt. and engr., 116 West 39th St., will build 6 story, brick, steel and stone, plain foundation, 207th St., by day labor. $200,000.

N. Y., New York—Apartment—J. Dieschel Building Co., Inc., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build two 5 story, brick, steel and stone, plain foundations, Mosholu Parkway, by day labor. $150,000 each.

N. Y., New York — Apartment — Gus Realty Co. c/o C. Schaefer, archt. and engr., 394 East 150th St., will build 2 5 story, brick, steel and stone, plain foundations, East 168th St., by day labor. $175,000 each.

N. Y., New York—Apartment—J. Harbater, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 6 story, brick, steel and stone, plain foundation, East 13th St., by day labor. $300,000.

N. Y., New York—Apartment—Maemin Building Co. c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, Stebbins Ave., by day labor. $350,000.

N. Y., New York—Apartment—L. Weisman c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, Grand Concourse, by day labor. $400,000.

N. J., Elizabeth—High School—Bd. Educ. general contract Junior High School, to Mongan Constr. Co., 207 Market St., Newark, $395,684; electrical work to Cosmo Electrical Co., Newark, $26,100; heating and ventilating to J. H. Nelles Co., 853 Springfield Ave., Newark, $51,000.

Pa., Erie—Store—Stanley Bros. Co., 1201 Parade St., 3 story and basement, 100 x 105 ft. rein.-con. and brick, Parade St., to N. F. Blair Constr. Co., Swetland Bldg., Cleveland, O. Archts. est. $150,000.

Md., Baltimore—Sunday School—Catonsville Methodist Episcopal Church will build 3 story, 73 x 118 ft., stone, plain foundation, Melvin and Frederick Aves. $150,000. Work will be done by separate contracts under supervision of W. M. Griske, archt., Gunther Bldg. Noted Mar. 29.

D. C., Wash.—School—Dist. Comrs., 509 Dist. Bldg., constructing Armstrong Manual Training School, to G. E. Wyne, Home Life Bldg., $469,700. Noted Dec. 20.

Fla., Clearwater—School—Pub. Instruction, Pinellas Co., school to Marshall, Jackson Co., Lakeland, $133,500. Noted Nov. 22.

W. Va., Charleston — Capitol — State Capitol Comn., brick, steel, stone, plain foundation, to G. A. Fuller Co., 175 5th Ave., New York City. $1,030,000. Noted Nov. 15.

Ky., Louisville—Bank—Federal Reserve Bank, 5th and Market Sts., 2 story and basement, 52 x 105 ft., rein.-con. and cut stone addition, to National Concrete Constr. Co., Board of Trade Bldg., $153,000. Noted Nov. 1.

Mich., Detroit — Hotel — Stratford Arms Hotel, 3729 Cass Ave., 7 story and basement, 60 x 125 ft., rein.-con., brick and steel, plain foundation, Sproat St. and Park Ave., to Lynch Constr. Co., 1200 Washington Blvd. Archts. est. $405,000. Noted Nov. 22.

Mich., Detroit—Office and Shop—Detroit Motor Bus Co., Terminal and Edlie Sts., 2 story office building, and 1 story shop, brick and steel, plain foundation, Dexter Blvd., to Austin Co., 1954 Penobscot Bldg. Archts. est. $300,000.

Wis., Milwaukee — Apartments — Beach Realty Co., 53 Patton Bldg., two 4 story and basement, 52 x 130 ft., brick, tile and concrete, plain foundations, Irving Pl., to Raulf Co., 428 Grand Ave., Milwaukee, Architects. est. $165,000 for both.

Ia., Sioux City—High School—Bd. Educ., general contract 4 story and basement, 225 x 228 ft., rein.-con., brick and stone, to Riesche & Sanborn, 514 Jackson St., $321,559; plumbing to V. J. Hogan, 518 Pearl St., $62,716. Noted Nov. 15.

Minn., Virginia—Apartment—C. F. DeZurick and H. Cotlow, 231 Plymouth Bldg., Minneapolis, will build 3 story and basement, 97 x 100 ft., rein.-con., brick and tile, here, by day labor. $250,000. A. Dahlstrom, 305 Essex Bldg., Minneapolis, archt.

Kan., Topeka—School, etc.—Bd. Educ., Parkdale School, brick and rein.-con., 10th and Chandler Sts., also administration building for Topeka High School Manual Training Dept., both general contract to L. K. Bowers & Son, 627 College Ave., $119,196.

S. D., Spearfish—School—Bd. Educ., 2 story and basement, rein.-con., brick, tile and stone, general contract to S. W. Jonason Constr. Co., Aberdeen, $93,757. Noted Nov. 29.

Mo., Kansas City—Office—J. A. Bruening, 317 Dwight Bldg., general contract 12 story and basement, 142 x 145 ft., rein.-con., brick and stone and terra cotta, to Pratt Constr. Co., Huntzinger Bldg. Archts. est. $1,500,000. Noted Oct. 18.

Ark., Batesville — Church — Baptists Church, 135 x 140 ft., sandstone rock and marble, to Young Bros., Batesville. Archt. est. $150,000.

Ark., Ft. Smith—Convent—F. W. Redlich, archt., Stillwater, Okla., 4 story, 78 x 177 ft., rein.-con. and brick, Albert Pike Rd., here, to Majors & Scheers, Sapulpa, Okla., for Benedictine Sisters. $120,000 exclusive of certain features and equipment. Noted Dec. 6.

Calif., Los Angeles—Hotel and Store—E. N. Adam, c/o Russell & Alpaugh, archts., Story Bldg., 9 story and basement, 95 x 140 ft., rein.-con., San Pedro and 5th Sts., to H. T. Johnson Co., Bradbury Bldg., $650,000 on percentage basis. Noted Dec. 20.

Calif., Los Angeles—Store and Loft—A. C. Blumenthal and others, Loew State Bldg., 11 story and basement, 100 x 150 ft., rein.-con. and brick, Bway between 9th and 10th Sts., to Macdonald & Kahn, Loew State Bldg., $650,000. Noted Oct. 25.

Calif., Los Angeles—Store and Apartment—West Coast Home Builders, 4996 West Adams St., will build 3 story and basement, brick, Main and 42nd Sts., by day labor. $150,000. Private plans.

Calif., Norwalk—Hospital—State of California, will build two 2 story, rein.-con. and tile, hospital buildings, by day labor. $110,000 each. B. G. McDougall, Forum Bldg., Sacramento, state archt.

Calif., Oakland—Office—W. H. Wakefield, Easton Bldg., 7 story and basement, rein.-con., Bway. and 17th St., to C. W. Heyer, Jr., Mills Bldg., San Francisco, $300,000.

Calif., San Francisco—Office—Pacific Gas & Electric Co., 445 Sutter St., terra cotta contract for 17 story, brick, steel and concrete, Market and Beale Sts. to Gladding, McBean Co., Crocker Bldg., $155,000. Total cost $1,500,000.

Calif., San Francisco — Orphanage — San Francisco Protestant Orphanage Society, 520 Lake St., 3 story administration building, 2 story concrete and stucco cottages, and 1 story rein.-con. laundry and power house, on 10 acre site bounded by 28th and 30th Aves., Vicente and Wawona Sts., to Lindgren-Swinerton Co., Inc., Standard Oil Bldg., approximately $350,000. Noted Dec. 20.

Calif., San Jose—Lodge Hall—San Jose Masonic Hall Assn., c/o C. Werner, archt., Santa Fe Bldg., San Francisco, general contract 3 story, rein.-con., to I. W. Coburn, 180 Jessie St., San Francisco, $48,300; concrete work, to C. Sartorio, 180 Jessie St., San Francisco, $63,982; and heating and ventilating to Ideal Heating & Eng. Co., 192 Erie St., San Francisco, $24,990. Noted Oct. 25.

Federal Government Work

PROPOSED WORK

Conn., Mystic—Post Office—Treas. Dept., Wash., D. C., rejected bids 1 story, 62 x 64 ft., brick and tile Post Office, here. Noted Dec. 6.

Ky., Addison—Lumber—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 30,000 ft. white oak select dimension, 8- to 20-ft. lengths, 35,000 ft. white oak common dimension, 9- to 12-ft. lengths, f.o.b. here.

BIDS DESIRED

Pa., Phila.—Lumber—Jan. 3, by Depot Quartermaster, 1100 South Broad St., furnishing 100,000 ft. Douglas fir.

N. C., Wilmington—Snagboat—Jan. 28, at office U. S. Engineer, one 90 ft. steel stern-wheel snagboat; adv. E. N.-R. Jan. 3.

Ala., Florence—Clearing Land—Jan. 14, at office U. S. Engineer, clearing land along Tennessee River above Wilson Dam; adv. E N.-R. Jan. 3.

Federal Government Work (Continued)

Mo., Kansas City—Extension—Jan. 29, by Treas. Dept., Wash., D. C., two 67 x 74 ft., brick and cast stone wings, Extension 3, to U. S. Post Office and Court House, here. J. A. Wetmore, acting superv. archt

BIDS RECEIVED

Ky., Louisville—Operating Machinery—U. S. Engineer, P. O. Box 72, operating machinery for Dams 44 and 45, Ohio River, from H. P. Gazzam Machine Co., 3200 Penn Ave., Pittsburgh, Pa., Lot A $29,950; from J. and J. B. Milholland Co., 714 5th Ave., Pittsburgh, Pa., Lot B $13,045. Noted Dec. 20.

Oregon—Road—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., New Post Office Bldg., Portland, improving 3.73 mi. Scottsburg-Reedsport Rd., Siuslaw National Forest, Douglas Co., from T. Knudson, Portland, Class C concrete $154,376 (contractor furnishing explosives). Noted Dec. 13.

Oregon—Road—C. H. Purcell, dist. engr., U. S. Bureau Pub. Rds., New Post Office Bldg., Portland, improving Bear Gulch National Forest Rd., Malheur National Forest, Grant Co., from Morrison & Knutson, Railroad and Reclamation Aves., Boise, Idaho, 25,000 cu.yd. rock excav., $1.47, 20,000 cu. yd. common excav., $0.56, 1,500 cu.yd. structural excav., $1, 1,940 lin.ft. 18 in. corrugated galvanized iron pipe, $2.75, 620 lin. ft. 24 in. corrugated galvanized iron pipe, $5.50, 500 lin.ft. 6 in. tile $1, 15 ft. span log bridge, $225, etc., total $62,712. Noted Dec. 13.

CONTRACTS AWARDED

N. Y., New York—Dredging—U. S. Engineer, 2nd Dist., Army Bldg., dredging in Newark Bay, N. J., to G. H. Breymann & Bros., 17 Battery Pl., Area 1, $0.5475; Morris & Cummings Dredging Co., 17 State St., Area 2, $0.25; Atlantic Gulf & Pacific Dredging Co., 13 Park Row, Area 3, $0.2764. Noted Dec. 6.

Mo., Kansas City—Garage—Treas. Dept., Wash., D. C., 2 story, 103x281 ft. rein.-con., brick and steel, for U. S. Post Office, here, to J. E. Morley, 5817 Charlotte St., approximately $150,000.

FEDERAL POWER COMMISSION

Applications for licenses and Permits.

APPLICATIONS

448—Excelsior Water and Power Co., Smartville, Calif.—Wants license for power house and appurtenant works on South Yuba River, near Nevada City and Marysville.

449—T. A. Clarke, Chronicle Bldg., San Francisco, Calif.—Wants license for small power plant on South Fork Merced River, 55 mi. above Merced.

450—Central Missouri Power and Water Co., Interstate Bldg., Kansas City, Mo., wants permit for 2 power projects in Gasconade River near Vienna and Waynesville.

451 — A. E. Humphreys, c/o District Forester, Post Office Bldg., Denver, Colo.—Wants license for 85 ft. dam across Goose Creek, with power house and appurtenant structures on Goose Creek, Mineral Co.

452 — Juniata River Water Power Co., Pottsville, Pa., and Watts Water Power Co., Harrisburg, Pa.—Want permit for concrete dam across Juniata River and power house about 1 mi. upstream, near Newport, Perry Co.

453—M. Finnerty, 321 Boston Bldg., Denver, Colo.—Wants permit for small power development on Scott, Gomer and Geneva Creeks, Park Co.

454—L. Park, Greenville, Tenn.—Wants permit for dam in Nolichucky River at Bird's Hill Site, Greene Co.

455—T. H. Roberts, 728 Equitable Bldg., Denver, Colo.—Wants license for short transmission line in Tremont Co., Wyo.

Unclassified

PROPOSED WORK

Heating System — Elmira, N. Y. — Bd. Educ. plans new heating system for P. S. 2. $50,000. Will mature in spring.

Parks, Seawalls, etc. — Tampa, Fla. — Feb. 12, to vote on $125,000 for park incl. dredging, filling and embankment, also $250,000 for construction seawalls, roadway and parkways. R. D. Martin, City Hall, engr.

Wharves, etc.—Tampa, Fla.—Feb. 12 to vote on $75,000 bonds for wharves and sheds; also $100,000 bonds for fire stations, alarm systems and equipment. R. D. Martin, City Hall, engr.

Eliminating Grade Crossings—Jackson, Miss.—See "Streets and Roads."

Power Development—Minnesota—Minnesota Power & Light Co., Duluth, plans to eypend $15,000,000 within 3 years to develop 130,000 hp. Project includes new power dam at Fond-du-Lac, hydro-electric power development in Vermilion Lake dist., near Ely, and power plants at Cloquet and Scanlan, together with plants taken over by company. Also extending transmission lines girdling Mesabe and Vermilion iron ranges in northern Minnesota. W. S. Robertson, pres. Noted Aug. 2.

Lighting System — Hot Springs, Ark. — Making preliminary plans "White Way" lighting system for downtown section. $25,000. C. Smith, City Hall, engr.

Levees — Crockett, Tex. — Houston Co. Levee Dist. 1, making plans levee improvements and maintenance. $60,000 bonds approved. C. H. Milburn, Crockett, co. engr.

Underpasses — Dallas, Tex. — City and Gulf Colorado & Santa Fe R.R., Union Sta., Galveston, take bids in January, two concrete and steel underpasses, one on Harwood St. and other on Ervay St., also paving. $100,000. F. Merritt, ch. engr. Gulf Colorado & Santa Fe R.R. E. A. Kingsley, city engr.

Pipe Line—Denison, Tex.—Missouri, Kansas & Texas R.R., Missouri, Kansas & Texas Bldg., Dallas, plans pipe line from Randell Lake to Ray Yard. $40,000. H. H. Johntz, Missouri, Kansas & Texas Bldg., Dallas, engr.

Oil Tank—Webster, Tex.—Humble Oil & Refining Co., Humble Oil Bldg., Houston, plans steel oil tank, here. $25,000. F. W. Reese, c/o owner, engr.

Steel Work—Sand Springs, Okla.—See "Industrial Works" under Contract Award.

Lighting System—Grass Valley, Calif.—City plans lighting system in business and residential districts. $25,000 or more.

Oil Terminal, Pumps, etc.—Long Beach, Calif.—Bay Hills Pipe Line & Storage Co., plans 10 in. pipe line from Signal Hill to Long Beach, 72,000 bbl. booster pump, two 4,000 bbl. loading pumps, and two 80,000 bbl. storage pumps, tanks, loading wharves, etc., $1,250,000. Private plans.

Power Development—East River Sheet Harbor, N. S.—Nova Scotia Power Comn., Halifax, plans power development of Ruth Falls, here, incl. concrete intake dam 800 ft. long, 20 ft. high, 8,000 ft. canal leading to power house, penstock structure from lower end of canal to power house, etc. K. H. Smith, ch. engr.

Transmission Line — Ontario — Ontario Hydro Comn., London, plans 70 mi. transmission line from London to Sarnia on steel towers, 110,000 volts. A. Beck, chn.

BIDS DESIRED

Bulkheads—Tampa, Fla.—See "Industrial Works."

Transmission Line — Louisville, Ky. — Interstate Pub. Service Co., Wild Bldg., Indianapolis, Ind., plans 66,000 volt transmission line from proposed plant in Indiana across Ohio River to here. To exceed $25,000.

Street Lights—Lubbock, Tex. — Making plans street lighting system, $50,000. J. B. Hawley, Cotton Exchange Bldg., Ft. Worth, consult. engr. S. Sanders, city engr. Noted Nov. 15.

Elevator — Port Arthur, Tex. — Kansas City Southern R.R., 11th and Wyandotte Sts., Kansas City, Mo., rejected bids 600,000 bu. elevator, rein.-con., here. $500,000. A. M. Reece, c/o owner, engr. Will be readvertised at once. Noted Oct. 4.

Jetty—New Westminster, B. C.—Jan. 21, by L. H. Colman, secy. Dept. Pub. Wks., Ottawa, Ont., completing Steveston Jetty, at mouth of Fraser River, here. $25,000.

Transformers and Spares—Melbourne, Australia—Feb. 11, by R. Liddelow, secy. State Electricity Comn. of Victoria, four 100 kva. 25,400-6,600 v. transformers and spares, Spec. 24/4, for Morwell Power Scheme; adv. E. N.-R. Jan. 3.

BIDS RECEIVED

Heating and Ventilating Apparatus — Brooklyn, N. Y.—W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Dec. 28, heating and ventilating apparatus in P. S. 205, 20th Ave. from 67th to 68th Sts., for Bd. Educ., 500 Park Ave., New York, from E. Rutzker & Co., 404 East 49th St., New York, $111,288. Noted Dec. 20.

Bulkhead — Long Island City, N. Y. — M. E. Connolly, pres. Queens Boro., Subway Bldg., bulkhead at end of 3rd St. on westerly side of Dutch Kills Creek, from McHarg-Barton Co., Inc., 1328 Bway., New York City, $5,816. Noted Dec. 20.

Steel Rolling Doors—New Orleans, La.—Bd. Port Comrs., 200 New Court Bldg., furnishing and erecting steel rolling doors, from Kinnear Mfg. Co., Hibernia Bank Bldg., $48,500. Noted Dec. 6.

CONTRACTS AWARDED

Pier Shed — New York, N. Y. — J. H. Delaney, comr. Docks, Pier "A," North River, West 44th St. Pier Shed, North River, Contr. 1810, superstructure to Triest Contg. Corp., 247 Park Ave., $813,860. Noted Aug. 2.

Coaling Station—Kingstown, Ga.—Nashville, Chattanooga & St. Louis R.R. Co., Exchange Bldg., St. Louis, Mo., 250 ton rein.-con. coaling station and rein.-con. gravity sand plant, here, to Roberts & Schafer Co., 400 North Michigan Ave., Chicago, Ill. Engrs. est. about $40,000.

Silos—Chicago, Ill.—Marquette Cement Co., 140 South Dearborn St., 6 silos, 40 ft. in diam., and 56 ft. high, to McDonald Eng. Co., Cape Girardeau, Mo. Engrs. est. $100,000.

Foundation — Appleton, Wis. — Conway Hotel Co., Oneida St., plain foundation and excavation for 6 story, 56 x 77 ft., brick and concrete addition, to C. R. Meyer & Sons, 50 State St., Oshkosh. Noted Dec. 27.

Street Lighting System—Venice, Calif.—Lighting system in portions of Washington Blvd. and other streets to D. McEwan, 127 Pier Ave., Ocean Park, approximately $36,500.

Transmission Line—Timmins, Ont.—Hollinger Consolidated Gold Mines, Ltd., 80 mi. transmission line, 110,000 volt on steel towers from here to Island Portage on Abiliki River, to Lang & Ross, Saulte Ste. Marie. Engrs. est. $1,000,000. Noted Sept. 20.

Materials and Equipment

PROPOSED WORK

Graders, etc. — Appleton, Wis. — Outagamie Co. takes bids in February for 1 large grader, several patrol graders and small tools. $20,000. A. G. Brusewitz, highway comr.

Street Flusher, etc.—Oshkosh, Wis.—Bd. Pub. Wks. takes bids about Jan. 15, street flusher $9,000, and 15-ton combination steam roller and scarifier. J. Voss, chn.

Sewer Cleaning Machine—Ripon, Wis.—City plans to purchase sewer cleaning machine. F. A. Preston, city clk.

Paving Materials—Minneapolis, Minn.—F. S. Cram, city purch. agt., soon takes bids on following materials for 1924 season: 1,125,000 gal. road oil, 125,000 bbl. cement, 60,000 sq.yd. 3½ in. creosoted wood block, 2,500,000 paving brick, 1,200 tons asphalt, vitr. sewer pipe, and 400 tons sewer castings. N. W. Elsberg, city engr.

BIDS DESIRED

Asphaltic Cement, etc.—New York, N. Y.—Jan. 9, by J. Miller, pres. Manhattan Boro, Municipal Bldg., 600,000 gal. asphaltic cement, 2,500 cu.yd. sand grit, 20,000 cu.yd. asphalt sand, 20,000 bags portland cement, and 500,000 wood paving blocks.

Snow Loader—Trenton, N. J.—Jan. 4, by City Comn., snow loader, Barber-Greene Type F, for Street Dept. J. E. English, City Hall, engr.

Steam Shovel, etc.—Bowling Green, Ky.—W. H. Crump, Box 525, in market for large jaw crusher, roller and steam shovels.

Pump—Montpelier, O.—Jan. 14, by Bd. Pub. Affairs, one complete motor driven deep well centrifugal pump. F. Eberly, clk.

Coal Cars and Catipillar Treads—Mulberry, Kan.—Carney Cherokee Coal Co., in market for Durkey coal cars, and catipillar treads for tractors.

Concrete Mixer—Kansas City, Mo.—Pratt Thompson Constr. Co., Huntzinger Bldg., in market for large concrete mixer for building construction work.

Caterpillar Tractor—Eureka, Calif.—City in market for 60 hp. caterpillar tractor. H. H. Hanna, city engr.

Steel—Los Angeles, Calif.—See "Buildings."

BIDS RECEIVED

Stone, etc. — Hartford, Conn. — Street Dept., Municipal Bldg., Dec. 18, 30,000 tons crushed stone and 9,000 tons stone dust, from E. Balf & Co., Haynes St., $65,510 and $14,850 respectively.

CONTRACTS AWARDED

Shell—Houston, Tex.—Harris Co., 10,000 tons shell for road construction, to Horton & Horton, McKinney Ave., $14,000. Noted Dec. 6.

Pipe—Montreal, Que.—Furnishing 2,290 tons 16, 20 and 30 in. c.i. pipe, to Canada Iron Foundries Co., Mark Fisher Bldg., $106,500.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Jan. 18.

Dredging

ENGINEERING DEPARTMENT
PARISH OF CALCASIEU, LOUISIANA

Lake Charles, La.

December 15th, 1923.

Sealed bids will be received by the Police Jury of the Parish of Calcasieu, Louisiana, until noon, Friday, January 18th, 1924, in the Police Jury Room, Court House, Lake Charles, Louisiana, and then and there publicly opened, for the construction of a Navigation Channel 30 feet deep by 125 feet wide at the bottom, from Lake Charles to the Sabine River.

SECTION 3

The construction of a channel 30 feet deep and 125 feet wide at the bottom, from Station 714, East along the Intracoastal Canal, to Station 580. A distance of 2.54 miles. Approximately 2,020,000 cubic yards of earth to be moved.

This work is along the present Intracoastal Canal, which on this section, is 6 feet deep and 40 feet wide on the bottom. The Atlantic, Gulf and Pacific Dredging Company have a contract with the War Department to deepen and widen this part of the Intracoastal Canal to 12 by 90 feet; their dredge "TEXAS" is working about Station 760 at present, and will pass Station 714 going East between January 1st and 10th. From Station 714, East to Station 680, the land is marsh, elevation +1.0 to +2.0. The Gum Cove Ridge lies between Station 680 and 580, elevation +2.0 to +12.0. Average stage of water +1.2. All depths and elevations refer to Mean Low Gulf Datum.

SECTION 5

The construction of a channel 30 feet deep and 125 feet wide at the bottom, from Station 58 on the Intracoastal Canal, West to Station 322. A distance of 5 miles. Approximately 3,480,000 cubic yards of earth to be moved.

This work is along the present Intracoastal Canal, which has been deepened and widened from Station 58 to 120, to 12 feet deep by 90 feet wide on the bottom. From Station 120 to 322 the Canal is 6 feet deep by 40 feet wide on the bottom, with a Pilot cut from Station 176 to 322, 12 feet deep by 40 feet wide on the bottom, along the South side of the old ditch: The Government Dredge "BLACKWATER" is at present at Station 120 working West completing the Canal to 12 feet depth and 90 feet width. The Blackwater will probably pass Station 176 about February 1st. From Station 58 to 90 is a low Ridge; Elevation +2.0 to +7.0; from Station 90 to Station 322 is a Black Grass Marsh, with knolls; Elevation +1.0 to +3.0. Average stage of water +1.2. All elevations and depths refer to Mean Low Gulf Datum.

Every bid shall be accompanied by a certified check in an amount equal to five per cent (5%) of the amount of the bid, payable to the Treasurer of Calcasieu Parish, which check shall be forfeited to the Parish should the bidder to whom such contract is awarded fail to enter into the contract required within ten (10) days after notice to do so from the Police Jury of Calcasieu Parish.

The Police Jury reserves the right to reject any or all bids.

V. R. REEVES,
President, Police Jury.
FRED SHUTTS,
Parish Engineer.

OFFICIAL PROPOSALS

Bids: Jan. 15.

Municipal Water Supply Improvement

Oklahoma City, Okla.

Sealed bids will be received by M. Peshek, Jr., City Clerk of the City of Oklahoma City, Oklahoma, up to 12.00 o'clock noon, Tuesday, January 15th, 1924, and a duplicate of each bid must be filed with the City Auditor of the said city, and will be opened and considered by the Board of Commissioners at 2.00 o'clock p.m., Tuesday, January 15th, 1924, for the construction of the following work for the improvement to the municipal water supply for the City of Oklahoma City, Oklahoma:

Section A—1—Ambursen Const. Co. plan—Main Dam Extension.
Section A—2—Ambursen Const. Co. plan—Intake.
Section A—3—Ambursen Const. Co. plan—Gates and Operating Mechanism, Main Dam Extension.
Section A—4—Ambursen Const. Co. plan—Steel Flashboards and Operating Mechanism—Intake.
Section B—1—V. V. Long & Co. plan—Main Dam Extension.
Section B—2—V. V. Long & Co. plan—Intake.
Section B—3—V. V. Long & Co. plan—Structural Steel Crest, Intake.
Section C—1—Callahan Const. Co. plan—Main Dam Extension.
Section C—2—Callahan Const. Co. plan—Intake.
Section C—3—Callahan Const. Co. plan—Gates and Operating Mechanism—Main Dam Extension.
Section C—4—Callahan Const. Co. plan—Gates and Operating Mechanism, Intake.
Section D—1—Holway Engr. Co. plan—Main Dam Extension.
Section D—2—Holway Engr. Co. plan—Intake.
Setion D—3—Holway Engr. Co. plan—Gates and Operating Mechanism—Main Dam Extension.
Section D—4—Holway Engr. Co. plan—Gates and Operating Mechanism—Intake.

Bids will be considered on each Section separately, and contractors may bid on any or all sections. All of the necessary work and materials used shall be in strict accordance with the plans and specifications therefor, now on file in the office of the City Clerk.

Each bidder shall accompany his bid with a sworn statement in writing that the bidder had not directly nor indirectly made any agreement, express or implied, with any other bidder or bidders, having for its object the controlling of the price or amount of such bid or bids, the limiting of the bidder or bidders, the parcelling or farming out to any bidder or bidders, or other persons, of any part of the contract, or any part of the subject matter of the bid or of the profits thereof, and has no knowledge of the amount, kind or character of any bid to be made by any other person, firm or corporation, except those submitted and filed by him.

The bid or bids filed with the City Clerk must be accompanied by a certified check on any national bank, in the sum of at least five (5%) per cent of the amount of the bid or bids.

OFFICIAL PROPOSALS

It being further understood that the amount of damages which the City would suffer would be impracticable to determine and extremely difficult to fix in case the successful bidder should fail to enter into a contract and give the required bonds within the required time, it is therefore understood that by the filing of a bid or bids it will be considered as agreed that the amount of damages which the City would suffer by reason of such failure on the part of said successful bidder is the amount represented by the check or checks so filed by the successful bidder, and that the City shall have the authority to appropriate such checks for its own use and benefit in payment for such damages.

Each bidder shall agree to enter into a contract and furnish the required bonds within ten (10) days after the acceptance of his bid, and shall state in his bid when he will begin the work and when he will complete the same.

The contractor will be required to give bond in the sum of twenty-five (25%) per cent of the contract price for faithful performance of the work, and all other bonds that are required by the laws of the State of Oklahoma or the ordinances of said City, and to give bond to hold the City harmless from any and all damages for which the City might be liable under the law, and which might occur by reason of any act upon the part of the said contractor or of any of his employees.

A deposit of fifty ($50.00) dollars will be required for each set of plans and specifications. Such deposit will be refunded upon the return of the plans and specifications in good condition within 10 days after the bids are opened.

Each bidder is hereby notified that the Ambursen Co. plans, the V. V. Long & Co. plans, the Callahan Const. Co. plans and the Holway Engr. Co. plans are different plans for the same construction work and the City reserves the right to finally adopt for said work any one plan or any part of any plan.

The Board of Commissioners further reserves the right to reject any or all bids.

M. PESHEK, JR.,
City Clerk.

Bids: Jan. 30.

42 in.—48 in. and 60 in. Intercepting Sewers, Sewage Pumps, and Sewage Disposal Plant Improvements

Fostoria, Ohio.

December 24th, 1923.

Sealed proposals for the construction of 42" 48" and 60" Intercepting Sewers and Pumping Machinery, Superstructures, Grit Chamber, Sludge Beds, and other improvements to the Sewage Disposal Plant, will be received by the City of Fostoria, Ohio, until 2 o'clock p.m., Eastern Standard Time, on the 30th day of January, 1924, and will then be publicly opened and read.

Official Proposal Blanks, Instructions to Bidders, Specifications, Form of Contract and Bond may be seen at the office of the Director of Public Service, Fostoria, Ohio, or one (1) copy of plans and specifications may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bank Building, Pittsburgh, Pa., or to the City of Fostoria, Ohio, and deposit of Twenty-five Dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid, or upon the return within thirty (30) days after receipt of bids, of both plans and specifications, in good order.

The right is reserved to reject any or all bids.

JAMES MANECKS,
Director of Public Service.
THE J. N. CHESTER ENGINEERS,
Union Bank Building,
Pittsburgh, Pa.

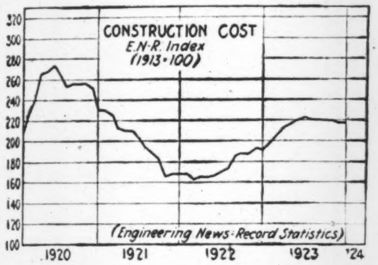
CONSTRUCTION NEWS

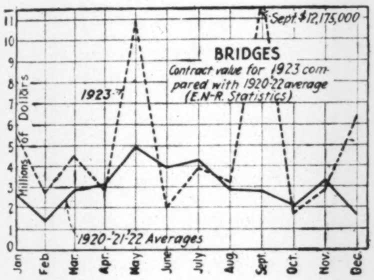
Engineering News-Record, January 10, 1924

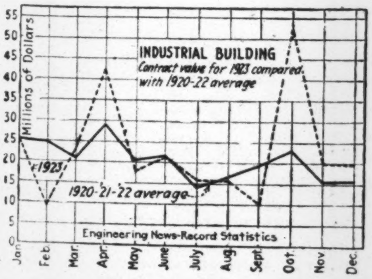
The Construction Barometer

Construction Cost 14 Per Cent Higher Than Year Ago and 20 Per Cent Under 1920 Peak—Upward Trend Will Adversely Affect Volume

WHILE the actual volume of construction is about 10 per cent under that of a year ago, since October, 1923, the curve has conformed very closely to the composite of the years 1920, '21 and '22, as shown in the accompanying chart. Cost of construction has been slowly working downward since July, with the exception of a recent slight upturn due to increased cost of pine lumber. With an increase in money value of contracts awarded on streets and roads, bridges, large commercial buildings and industrial work at the close of the year, and a still greater increase in the issuance of building permits, the only factor threatening the realization of another great construction year is the possible rise of the cost curve to prohibitive levels.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Dec. 20	$22,207,000	$20,068,000	$42,275,000
Dec. 27	12,657,000	11,740,000	24,397,000
Jan. 3	10,163,000	15,275,000	25,438,000
3 weeks	$45,027,000	$47,083,000	$92,110,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

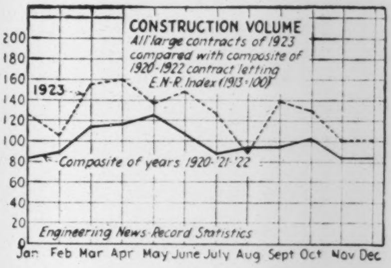
Week Ended	No.	Public Work	No.	Private Work
Dec. 20	17	$7,988,000	28	$16,008,000
Dec. 27	8	3,859,000	16	7,240,000
Jan. 3	10	3,148,000	30	11,480,000
3 weeks	35	$14,995,000	74	$34,728,000

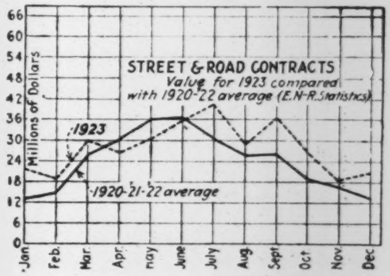
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

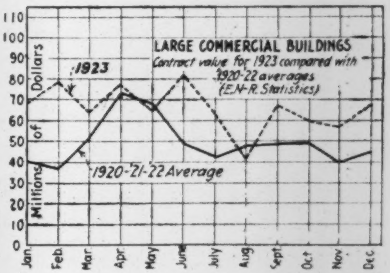
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Dec. 20	29	137	30	22	40
Dec. 27	29	114	27	17	36
Jan. 3	25	117	31	20	30

PINE LUMBER FIRMER—OTHER BASIC PRICES UNCHANGED

	Quoted on Jan. 10, at	Price Was	On
Structurals, Pittsburgh, 100 lb	$2.50	$2.50 @ 2.60	June 21
Cement, Chi., net bbl.	2.10	2.20	Nov. 22
Pine, N. Y., M. ft.	60.00	58.00	Jan. 3
Fir, San Fran., M ft.	38.00	41.00	Dec. 13
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Jan. 12	Milwaukee, Wis.	Jan. 10
Jan. 14	North East, Pa.	Dec. 27
Jan. 14	Milbank, S. D.	Jan. 10
Jan. 15	Oklahoma City, Okla.	Dec. 20
Jan. 16	South Bend, Ind.	Dec. 20
Jan. 17	Kansas City, Mo.	Jan. 10
Jan. 17	Clarksville, Ark.	Jan. 10
Jan. 18	Genoa Junction, Wis.	Jan. 10
Jan. 19	Charlottesville, Va. Adv. Dec. 27 to Jan. 10.	Dec. 27
Jan. 21	Newport Beach, Calif.	Jan. 10
Jan. 24	Louisburg, N. C.	Jan. 10
Jan. 25	Wash., D. C.	Jan. 10
Jan. 26	Fairmont, W. Va.	Jan. 10
Jan. 29	Bloomington, Ind. Adv. Jan. 3 and 10.	Jan. 3
Jan. 30	Greenville, S. C. Adv. Jan. 10.	Jan. 10
Jan. 31	Massachusetts	Jan. 10
Feb 1	Phillips, Wis.	Jan. 10

SEWERS

Bids Close		See Eng. News-Record
Jan. 14	Houston, Tex.	Jan. 3
Jan. 14	Long Island City, N. Y.	Jan. 10
Jan. 15	Tell City, Ind.	Jan. 3
Jan. 15	Versailles, Mo.	Jan. 3
Jan. 16	Baltimore, Md.	Jan. 10
Jan. 17	Clarksville, Ark.	Jan. 10
Jan. 24	Ft. Smith, Ark.	Jan. 10
Jan. 24	Baton Rouge, La. Adv. Dec. 27 and Jan. 10.	Jan. 3
Jan. 25	Wash., D. C.	Jan. 3
Jan. 30	Fostoria, O. Adv. Dec. 27 to Jan. 10.	Jan. 3
Feb. 5	Baton Rouge, La. Adv. Dec. 27 and Jan. 10.	Jan. 3
Feb. 5	St. Louis, Mo.	Jan. 10
Feb. 11	Pleasantville, N. Y. Adv. Jan. 3 and 10.	Jan. 10

BRIDGES

Bids Close		See Eng. News-Record
Jan. 16	Oklahoma City, Okla.	Jan. 10
Jan. 16	West Palm Beach, Fla.	Jan. 10
Jan. 17	New Orleans, La.	Jan. 3
Jan. 22	St. Louis, Mo.	Dec. 27
Jan. 22	Lakefield, Ont.	Jan. 3
Jan. 28	New Jersey Adv. Jan. 10.	Jan. 10
May 1	Tientsen, North China	Oct. 11

DAMS

Bids Close		See Eng. News-Record
Feb. 7	Kingston, N. C.	Dec. 27

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Jan. 14	New York	Jan. 10
Jan. 15	Pueblo, Colo.	Jan. 3
Jan. 15	St. Catharines, Ont.	Jan. 3
Jan. 15	Cape May, N. J.	Jan. 3
Jan. 17	**Rochester, N. Y.**	Dec. 20
	Adv. Dec. 20 to Jan. 10.	
Jan. 17	Ft. Dodge, Ia.	Jan. 10
Jan. 18	**Lake Charles, La.**	Dec. 27
	Adv. Dec. 27 and Jan. 3.	
Jan. 29	St. Louis, Mo.	Jan. 3
	Adv. Jan. 3 and 10.	
Feb. 4	Minneapolis, Minn.	Jan. 10

STREETS AND ROADS

Bids Close		See Eng. News-Record
Jan. 14	Long Island City, N. Y.	Jan. 10
Jan. 15	Brady, Tex.	Jan. 3
Jan. 15	**Michigan**	**Dec. 6**
Jan. 15	**Michigan**	**Dec. 13**
Jan. 15	**Rock Springs, Tex.**	**Dec. 27**
Jan. 15	**Louisiana**	**Dec. 27**
Jan. 15	Maryland	Jan. 3
Jan. 15	Tampa, Fla.	Jan. 10
Jan. 15	Florida	Jan. 10
Jan. 16	Santa Rosa, Calif.	Jan. 3
Jan. 17	Clarksville, Ark.	Jan. 10
Jan. 18	Genoa Junction, Wis	Jan. 10
Jan. 18	Amarillo, Tex.	Jan. 10
Jan. 19	Tonawanda, N. Y.	Jan. 10
	Adv. Jan. 3 and 10.	
Jan. 21	California	Jan. 10
Jan. 21	Newport Beach, Calif.	Jan. 10
Jan. 28	New Jersey	Jan. 10
	Adv. Jan. 10.	
Jan. 21	San Diego, Calif.	Jan. 10
Jan. 22	New Hampton, Ia.	Jan. 10
Jan. 22	Washington	Jan. 10
Jan. 22	Louisiana	Jan. 3
Jan. 22	**St. Louis, Mo.**	**Dec. 27**
Jan. 22	Alexandria, La.	Jan. 10
Jan. 23	Mississippi	Jan. 10
Jan. 23	Winona, Miss.	Jan. 3
Jan. 25	Waterloo, N. Y.	Jan. 10
	Adv. Jan. 10.	
Jan. 29	Uvalde, Tex.	Jan. 10
Jan. 29	Baton Rouge, La.	Jan. 3
	Adv. Dec. 27 and Jan. 10.	
Jan. 29	Virginia	Jan. 10
Feb. 1	Charleston, W. Va.	Jan. 10
Mar. 11	Washington	Jan. 10

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Jan. 15	New York, N. Y.	Jan. 3
Jan. 17	Phila., Pa.	Jan. 10
Jan. 30	Columbus, O.	Jan. 10
Jan. 31	Ray Brook, N. Y.	Jan. 10
Feb. 1	**Peoria, Ill.**	**Dec. 27**
Apr. 30	**Wellington, New Zealand**	**Dec. 6**
May 21	Wellington, New Zealand	Jan. 10
	Adv. Jan. 10.	

BUILDINGS

Bids Close		See Eng. News-Record
Jan. 12	Boston, Mass.	Nov. 29
Jan. 14	**Schuylerville, N. Y.**	**Dec. 13**
Jan. 14	St. Charles, Mo.	Jan. 10
Jan. 15	Norwalk, Conn.	Jan. 10
Jan. 15	San Antonio, Tex.	Jan. 10
Jan. 15	Baltimore, Md.	Jan. 10
Jan. 16	Baltimore, Md.	Jan. 10
Jan. 17	Tyler, Tex.	Jan. 3
Jan. 17	Jonesville, Mich.	Jan. 3
Jan. 18	Ottumwa, Ia.	Jan. 10
Jan. 18	Clairton, Pa.	Jan. 10
Jan. 21	Roslyn, N. Y.	Jan. 10
Jan. 22	Mayville, Wis.	Jan. 10
Jan. 22	Jamaica, N. Y.	Jan. 10
Jan. 22	Creedmoor (Jamaica P. O.), N. Y.	Jan. 10
Jan. 25	Williamsport, Pa.	Jan. 10
Jan. 29	Midland Park, N. J.	Jan. 10
Jan. 29	Bloomington, Ind.	Jan. 10
Jan. 30	Vernon, Tex.	Jan. 10
Jan. 30	Millville, N. J.	Jan. 10
	Adv. Jan. 10.	
Feb. 1	Oklahoma City, Okla.	Jan. 10
Feb. 1	Lambertville, N. J.	Jan. 10
Feb. 1	Dorchester, Mass.	Nov. 29
Feb. 4	Rome, N. Y.	Jan. 10
Feb. 4	**Urbana, Ill.**	**Dec. 13**
Feb. 4	**Columbus, O.**	**Dec. 27**
Feb. 10	**Trenton, N. J.**	**Jan. 10**

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Jan. 14	Clearing Landing — Florence, Ala.	Jan. 3
	Adv. Jan. 3 and 10.	
Jan. 14	**Dredging — New York, N. Y.**	**Jan. 10**
Jan. 14	Dike—Wilmington, Del.	Jan. 10
Jan. 14	Lumber — Leavenworth, Ind.	Jan. 10
Jan. 15	**Filtration Plant, etc.—Wash., D. C.**	**Dec. 20**
	Adv. Dec. 20 to Jan. 10.	
Jan. 16	**Scow and Barge—Milwaukee, Wis.**	**Dec. 20**
	Adv. Dec. 20 to Jan. 10.	
Jan. 16	**Fuel Oil Storage—Mare Island, Calif.**	**Dec. 6**
Jan. 16	**Quarters—San Juan, Porto Rico**	**Jan. 10**
Jan. 19	**Gates—Cincinnati, O.**	**Dec. 27**
	Adv. Dec. 27 to Jan. 10.	
Jan. 21	**Post Office—State College, Pa.**	**Dec. 27**
Jan. 24	**Barges—Portland, Ore.**	**Jan. 10**
Jan. 28	**Snagboat—Wilmington, N. C.**	**Jan. 3**
	Adv. Jan. 3 and 10.	
Jan. 29	Extension—Kansas City, Mo.	Jan. 3
Jan. 30	**Ward—Great Lakes, Ill.**	**Nov. 15**
Jan. 31	Extension — Haverhill, Mass.	Jan. 10
Feb. 1	Steel House—Wilmington, Del.	Jan. 10
Feb. 4	Hospital—Augusta, Ga.	Jan. 10
	Adv. Jan. 3 and 10.	
Feb. 5	Steel Piling — Louisville, Ky.	Jan. 10
Feb. 6	**Storehouse—Pearl Harbor, H. T.**	**Dec. 20**
Feb. 8	Steel and Bolts—Owensboro, Ky.	Jan. 10
Feb. 11	Sub-Post Office—Memphis, Tenn.	Jan. 10
	Adv. Jan. 10.	
Feb. 12	Gasoline Hoist, etc.—Ketchikan, Alaska	Jan. 10

UNCLASSIFIED

Bids Close		See Eng. News-Record
Jan. 15	Levee—Clarksdale, Miss.	Jan. 10
Feb. 15	Subway—Tulsa, Okla.	Jan. 10
Jan. 18	Roadway Columns—New York, N. Y.	Jan. 10
Jan. 19	**Transformers, etc.—Melbourne, Australia**	**Oct. 18**
Jan. 21	Jetty—New Westminster, B. C.	Jan. 3
Jan. 22	Conduit—New York	Jan. 10
	Adv. Jan. 3 and 10.	
Feb. 11	Transformers and Spares—Melbourne, Australia	Jan. 3
Mar. 31	**Hopper Dredge — Brisbane, Queensland, Australia**	**Nov. 1**
Apr. 30	**Headworks—Wellington, New Zealand**	**Dec. 13**

MATERIALS AND EQUIPMENT

Bids Close		See Eng. News-Record
Jan. 14	Pumps—Montpelier, O.	Jan. 3
Jan. 14	Light Trucks, etc.—Houston, Tex.	Jan. 10
Jan. 14	Broken Stone, etc.—Long Island City, N. Y.	Jan. 10
Jan. 14	Road Surfacing Material, etc. —New York, N. Y.	Jan. 10
Jan. 14	Cement—Springfield, Ill.	Jan. 10
Jan. 15	Steam Roller—Kansas City, Mo.	Jan. 10
Jan. 17	Castings, etc.—St. Louis, Mo.	Jan. 10
Jan. 22	Bituminous Patching Material —Trenton, N. J.	Jan. 10
	Adv. Jan. 10.	
Jan. 25	Mining Equipment—Duluth, Minn.	Jan. 10
Feb. 1	Crusher, Elevator, etc. — Oglesby, Ga.	Jan. 10
	Adv. Jan. 10.	

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. J., Atlantic City—Water Dept. plans further development of its artesian and surface water supplies. W. R. Conard, Savings Institution Bldg., Burlington, retained as consultant.

N. J., Pennington—Plans new mains and plugs in various streets. $25,000. H. L. Laning, Pennington, engr.

Fla., Gainesville—Plans extension to mains. $38,633. G. A. Caimes, city engr.

Fla., Madison—Voted $15,000 bonds for waterworks extension.

Miss., Como—Plans water works plant, with oil burning furnaces. $15,000.

Miss., Meridian—Jan. 28, to vote on $80,000 bonds waterworks improvements, incl. reservoirs, pumps, pipes, etc.

La., New Orleans—Sewerage & Water Bd., plans to complete improvements to water plant incl. 3 mi. new mains, three new 20 m.g. pumps and new steam turbine engine, etc. which will now pave way for other greatly needed improvements in Carrolton purification plant, to cost $1,000,000 or more. A. B. Woods, engr. for Sewers and Water Bd.

Tenn., Knoxville—Making surveys for waterworks improvements, incl. pumps, 14 in. main from reservoir, etc., for an additional 2,500,000 gal. high pressure water daily. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.

Ind., Linton—Bd. Trustees plans new water supply system. $15,000. Engineer not selected.

Mich., Highland Park (Detroit P. O.)—Having plans prepared 7 mi. 30 or 36 in. pipe line from Lake St. Clair at Grosse Pointe to Highland Park, steel or c.i. pipe. $1,000,000. L. C. Whitsit, 20 Gerald Ave., engr.

Ia., Eldora—Voted $25,000 bonds for waterworks extension. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Neb., Kearney—Feb. 5, to vote on $132,800 bonds for waterworks. Burns & McDonnell Eng. Co., 401 Interstate Bldg., Kansas City, Mo., engrs.

Neb., University Place (Lincoln P. O.)—Jan. 15 to vote on $30,000 bonds, waterworks extensions. C. Gates, city clk.

Mo., Ava.—Making plans reservoir, water tower, distribution mains, etc. Voted $35,000 bonds for project. Axon & Russell, 404 McDaniels Bldg., Springfield, engrs. Noted Dec. 13.

Mo., Sweet Springs—Making plans waterworks extensions, sanitary sewers and brick paving. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs.

Tex., Bridgeport—Jan. 12, to vote on $50,000 bonds waterworks incl. well, tank and tower, $18,000 bonds sewers incl. disposal plant. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Tex., Dallas—City Com. takes bids this month 2 m.g.d. turbine well pump in Oak Cliff Pumping Station. E. A. Kingsley, city engr.

Tex., Dallas—Dallas Co. Fresh Water Dist. 4 voted $37,500 bonds for waterworks system, North Highlands, incl. 10,500 ft 6 in. and 7,100 ft. 4 in. mains, fire hydrants, etc. Myers & Noyes, Dallas Co. Bank Bldg., engrs.

Tex., Denison—See Streets and Roads.

Tex., Howe—Jan. 19, to vote on $17,500 bonds for waterworks additions.

Mont., Great Falls — Great Falls Park Bd. plans 60,000 gal. tank and pumping equipment at Giant Springs Park. M. L. Morris, city engr.

Okla., Chickasha — Defeated $60,000 bond issue for mains, settling basins and pumping equipment. Project dropped. Noted Dec. 27.

Calif., Montecito (Santa Barbara P. O.)—Montecito County Water Dist. rejected bids laying pipe, incl. trenching and backfilling. Work will probably be done by owner under supervision of Leeds & Barnard, engrs., Central Bldg., Los Angeles. Noted Dec. 27.

Calif., Santa Monica—Voted $1,000,000 bonds for water distributing system. J. A. Morton, comr. Bd. Pub. Wks. Noted Dec. 6.

Calif., Susanville—Plans extensions and improvements to waterworks system. $25,000.

Ont., Brantford—Plans to expend $90,000 for galv. iron pipe, corporation cocks, water meters, etc. F. P. Adams, city engr.

Ont., Welland—Plans extending waterworks, filtration plant, settling basin, etc. $700,000. C. L. Coulson, city engr.

BIDS DESIRED

Massachusetts — Jan. 31, at office of Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, furnishing and laying 11,400 ft. 60-in. steel pipe in Weston and Waltham; also laying 150 ft. c.i. pipe, 900 cu.yd. rock excav., etc. G. L. Rogers, secy.

N. J., South Orange—Jan. 4, by Water Com. drilling 8 in. well, 300 ft. deep and installing air-lift equipment. L. H. Biglow, Jr., chn. Water Comm.

Wash., D. C.—Jan. 25, by Dist. Comrs., 509 Dist. Bldg., 1 motor driven centrifugal pumping unit, capacity 3 m.g. per day.

W. Va., Fairmont—Jan. 26, by Bd. Pub. Wks., filtration plant. $100,000. J. C. Morris. Noted Nov. 15.

N. C., Louisburg—Jan. 24, by L. L. Joyner, mayor and Town Comrs., 1 m.g.d. mechanical filtration plant, rein.-con., one 750 g.p.m. raw water pump, removal of present equipment into old boiler room which is to be rearranged for pump room, piping, etc. W. M. Piatt, Durham, engr.

S. C., Greenville — Jan. 30, by Water Comn., gravity pipe line. H. W. Perry, supt. waterworks; adv. E. N.-R. Jan. 10.

Wis., Genoa Junction—Jan. 18, by T. E. Watson, village clk., reservoir and 30 x 52 ft. pumping station, hollow tile and concrete. $15,000. W. G. Kirchoffer, 22 North Carroll St., engr.

Wis., Milwaukee—Jan. 12, by Central Bd. of Purchases, City Hall, furnishing brass goods, etc., for use of Water Dept., incl. 2,500 $\frac{5}{8}$- to $\frac{3}{4}$-in. corporation cocks, 2,500 $\frac{3}{4}$- to 1-in. curb cocks, 5,000 $\frac{5}{8}$- to $\frac{3}{4}$-in. meter cocks, 10,000 $\frac{5}{8}$- to $\frac{3}{4}$-in. meter couplings. 100 fire hydrants, 30,000 lb. liquid chlorine.

Wis., Phillips—Feb. 1, by C. F. Scheel, city clk., one centrifugal pump, 300 g.p.m. against 175 ft. head and one 1,250 g.p.m. against 275 ft. head, motor driven, one 150

Waterworks (Continued)

hp. oil engine, one 100,000 gal. steel elevated tank, riser pipe. F. Henry, Phillips, engr.

S. D., Milbank—Jan. 14, repairing elevated steel tank, 47,600 lin.ft. 8- to 10-in. c.i. pipe. Dakota Eng. Co., 309 Western Natl. Bank Bldg., Mitchell, engrs.

Mo., Kansas City—Jan. 17, by Fire & Water Bd. 4,234 tons 36 in. c.i. pipe. The above is for feeder line on Prospect Ave.

Ark., Clarksville—Jan. 17, by D. W. Dunlap, secy. Bd. Impvt. Waterworks Dist. 3; waterworks extensions incl. 11,880 ft. 4- to 6-in. c.i. pipe. 890 ft. 2 in. galvanized iron pipe, etc. W. L. Winters, 311-312 Merchants Natl. Bank Bldg., Ft. Smith, engr.

BIDS RECEIVED

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, mains in Hawtree Creek, Lefferts Blvd., Ocean Ave., Hasbrouck, Hutton and Meyer Pds., Gold, North and Silver Sts., also across Dunton Canal between Hawtree Creek and Ocean Ave., here, from Beaver Eng. & Contg. Co., 51 Chamber St., New York, $72,100.

Md., Baltimore—Bd. Awards, Dec. 26, 400,000 lb. pig lead for Water Dept., from N. Trotter & Co., 36 North Front St., Phila., Pa., $8.235 per 100 lb. Noted Dec. 20.

O., Cincinnati—For pipe and c.i. castings for water distribution system in Winton Rd., Froome and Mitchell Aves., from U. S. Cast Iron Pipe & Fdry. Co., Addyston, $94,166. Engrs. est. $100,000. Noted Dec. 13.

Calif., Glendale—City, Dec. 20, constructing 15 m.g. reservoir, from Kinne & Westerhouse, I. W. Hellman Bldg., Los Angeles, $61,650 for grading and rein.-con. construction, $16,540 for roof. Noted Dec. 13.

Md., Baltimore—Mayor and City Council, furnishing and delivering c.i. pipe and fittings for Water Dept., from R. D. Wood & Co., 400 Chestnut St., Phila., Pa., $234,389. U. S. Cast Iron Pipe and Fdry. Co., 1421 Chestnut St., Phila., Pa., $235,923 and $227,000 on centrifugal alternate.

CONTRACTS AWARDED

R. I., Providence—Water Supply Bd., City Hall, clearing, grubbing, earth and rock excav. in preparation for Scituate Reservoir, in Scituate, to J. Livingstone Co., 70 East 45th St., New York City, $254,410. Noted Dec. 27.

N. J., Kearny (Arlington P. O.)—Town Council constructing part of Meadows Water System known as steel main in Jacobus Ave., to Nesto Constr. Co., 635 Broad St., Newark, $52,800. Noted Nov. 22.

W. Va., Keyser—City, new waterworks incl. buildings, tanks and machinery, to Pihl & Miller, Wabash Bldg., Pittsburgh, Pa. Est. cost $150,000. Noted Nov. 8.

O., Columbus—Franklin Co. 2,005 ft. 6 in. c.i. mains, etc. in Sewer Dist. Clinton 2, Contr. 32, to Johnson Constr. Co., Columbus, $13,074. 6,365 ft. 6 and 10 in. c.i. mains in Sewer Dist. Clinton 2, Contr. 27, to H. E. Miller Constr. Co., Columbus, $13,074; 4,446 ft. 8 in. vitr. sewers, etc., in Sewer Dist. Clinton 2, Contr. 31, to Gaty Constr. Co., 3720 North High St., $10,335. Noted Dec. 20.

Mich., Detroit—Bd. Water Comrs. will purchase pipe and lay 1,015 ft. 6 in. c.i. mains in Christy, Hindle and Greenlawn Ave., 5,540 ft. 8 in. mains in Klinger, Harper and Audubon Aves., also 10,147 ft. 8 in. mains in Pepper Rd. Bassett, Helen and Ethel Aves., 2,135 ft. 12 in. mains in Pembroke and Minden Aves., 1,750 ft. 16 in. mains in Whittier Ave., by day labor. G. Fenkell, East Jefferson Ave., genl. mgr.

N D., North Fargo—See "Sewers."

Colo., Denver—For 27,384 ft. 36- to 48-in. pipe, 91, 160 lb. Y branches, 5,130 lb. wood to iron, 145,804 lb. all other specials, to U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, $424,628; twenty-two 24- to 60-in. hub end, two 60 in. hydraulic and two 60 in. electric horizontal valves, to Hendrie & Bolthoff, 1639 17th St., $51,305; 1,484.7 tons 20- to 24- in. pipe, to Colorado Fuel & Iron Co., Boston Bldg., $95,021. Noted Dec. 13.

Colo., Denver—Bd. Comrs. conduit construction exclusive of excavation and back fill to W. O. Morrison, 403 Cooper Bldg., $1.78 per lin.ft.; excavation and back fill only for entire conduit, to E. H. Honne, Box 72, Colorado Springs, $3.28 per lin.ft.; untreated Douglas fir, to Bolcom-Canal Lumber Co., 12th Ave. W. and West Nickerson Sts., Seattle, Wash., $76.75 per M ft.; bands and clips, to Colorado Fuel & Iron Co., Pueblo, lump sum $182,133; shoes, to Amer. Malleable Casting Co., Marion, O., lump sum, $58,176. Noted Dec. 6.

Wash., Seattle—Bd. Pub. Wks., mains in 12th Ave. N. et al., 10,464 ft. 8-in. and 1,512 ft. 6-in. Class C c.i. pipe, to C. Argentieri, 1819 Weller St., $37,537. Engrs. est. $40,995.

Ont., Oshawa—Centrifugal pump 1,025 imp. gal. against 340 ft. head, to Turbine Equipment Co. Ltd., 73 King St. W., Toronto.

Ont., Windsor—Filtration plant to Strain & Emery, Dowler Bldg., $350,000. Noted Nov. 15.

Sewers

PROPOSED WORK

Conn., Hartford—Street Bd. plans 2,000 ft. 12- to 20-in. vitr. clay sewer in Brown St., $25,000; also covering Gully Brook from Greenfield to Westland Sts., $100,000. R. N. Clark, city engr.

Fla., Gainesville—Plans to sell $102,153 bonds for sewers. G. A. Caimes, city mgr. and engr.

Fla., South Jacksonville (Branch of Jacksonville)—Voted $36,000 bonds for sewers. J. L. Crary, South Jacksonville, engr.

Ky., Louisville—Plans election to vote on $5,000,000 bonds for sewers. J. B. F. Breed, 417 West Main St., ch. engr. Sewer Comn.

O., Ironton—Plans 6 mi. sewers in Sewer Dist. 8. $30,145. L. G. Howell, Ironton, engr.

Ind., Evansville — Plans to construct portion Howard Roosa Trunk Sewer. Project complete to cost $1,000,000. W. Elmendorf, mayor.

Ind., Seymour—Plans new sanitary sewerage system, electrically operated pumping equipment, etc. $200,000. C. H. Hurd, 1405 Merchants Bank Bldg., Indianapolis, engr.

Neb., Fremont—Plans election to vote on $100,000 bonds for sewage disposal plant. L. M. Roessler, Fremont, engr.

Mo., Sweet Springs—See "Waterworks."

Tex., Bridgeport—See "Waterworks."

Tex., Cameron—Voted $25,000 bonds for sewage disposal plant. $25,000. J. B. White, mayor. Noted Nov. 29.

Tex., Denison—See Streets and Roads.

Tex., Waco—Voted $350,000 bonds sewage disposal plant and $75,000 bonds for sanitary sewers. V. G. Koch, city engr. Noted Dec. 13.

Okla., Chickasha—Voted $70,000 bond issue for outfall sewer and disposal plant, incl. 10,000 ft. 21 in. vitr. clay pipe, Imhoff tank and filters. J. C. Milliken, Chickasha, engr. Noted Jan. 3.

Calif., Modesto—Having plans prepared, first unit of storm sewerage system, Jones St. between Kimble and McHenry Sts. $25,000. F. W. McCarton, city engr.

Calif., Reedley—Having surveys and estimate made for sewerage system and disposal plant. Plans election to vote on $75,000 to $100,000 bonds. J. S. Bates, Rowell Bldg., Fresno, engr. Noted May 3.

Calif., San Bernardino—Plans deep sewer and enlargement of E St. outfall. $65,000-$70,000. C. E. Johnson, city engr. Noted July 26.

Que., Montreal—Plans 768 ft. 2 x 3 brick sewer in Drolet St. $7,275. 3,142 ft. in St. Donat St. $23,320. E. Gauthier, asst. city clk.

Ont., Brantford—Having plans prepared and takes bids about Jan. 15, storm sewer in St. George St. $30,000. F. P. Adams, city engr.

Ont., Ft. Erie—Ft. Erie and Bridgeburg Councils plan joint construction of sewer in Gilmour and Erie Sts., 5,000 ft. vitr. pipe, 8 in. up. $25,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Ft. William—Plans new sewers in Sprague, Mary and Harkness Sts., $25,000 and repairs to Empire Ave. sewer $8,000. 10,000 ft. vitr. pipe, 8 in. up. C. B. Symes, city engr.

Ont., Guelph—Having plans prepared and takes bids about Jan. 15, extending sewerage system. $40,000. H. S. Nicklin, City Hall, engr.

Ont., Hamilton — Plans prepared storm overflow sewerage system in Birch Ave. Dist., 20,000 ft. vitr. pipe, 8 in. up. $250,000. W. L. McFaul, city engr.

Ont., Hamilton—Having plans prepared storm overflow sewer system in Sherman Ave. Dist. 4½ mi. vitr. pipe, 8 in. up. $260,000. W. L. McFaul, city engr.

Ont., Newmarket—Plans to extend waterworks system incl. 10,000 ft. 6- to 8- in. c.i. pipe, etc. $25,000. Engineer not selected.

Ont., Oshawa — Having plans prepared rein.-con. sewage disposal system. $50,000. W. C. Smith, Municipal Hall, engr.

Ont., Sarnia—Plans to extend sewers in Collingwood St. $28,000. M. D. Stewart, city engr.

Ont., Toronto—York Twp. plans sewer system in St. Clair Ave. Dist from Avenue Rd. to Black Creek, 10 mi. of concrete, rein.-con. and vitr. pipe, 8 in. up. $618,000. James, Proctor & Redfern, Ltd., 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. Y., Long Island City—Jan. 14, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Varian Pl., Harman St., Astoria and Patterson Aves., also across Queens Blvd. at intersection of Whittier Ave., Laurenson and Von Loon Places, etc.

N. Y., Pleasantville—Feb. 11, by Bd. Sewer Comrs., purification and disposal works, Contr. 1. J. O. Derby, engr.; adv. E. N.-R. Jan. 10.

Md., Baltimore—Jan. 16, by City Register, 400,000 lb. manhole, sewer inlet and similar iron castings. S. Purcell, ch. city engr.

Ala., Talladego—See "Streets and Roads."

Mo., St. Louis—Feb. 5, by Bd. Pub. Serv., 208 City Hall; 505 ft. 10- to 12-in. vitr. clay sewer in Clifton Heights Sewer 4,500 cu. yd. excav., etc., $3,000; 6,505 ft. 8- to 27-in. vitr. clay and 1,725 ft. 36- to 66-in. brick in concrete or 2 ring segmental block sewer in Glaise Creek Dist. Sewer 19, 7,720 cu.yd. excav., etc., $47,510; 1,065 ft. 8- to 21-in. vitr. clay sewer in Glaise Creek Dist. Sewer 23,600 cu.yd. excav., $3,920; 2,100 ft. 12- to 24-in. vitr. clay sewer in Glaise Creek Dist. Sewer 24, 1,470 cu.yd. excav., $9,400. W. W. Horner, City Hall, engr. Noted Dec. 13.

Ark., Clarksville—Jan. 17, by D. W. Dunlap, secy. Sewer Dist. 4, 11,650 ft., 6- to 8-in.-vitr. clay pipe, three hundred and forty 6- to 8-in.-Y's, etc. W. L. Winters, 311-312 Merchants Natl. Bank Bldg., Ft. Smith, engr.

Ark., Ft. Smith—Jan. 24, by G. F. Carnall, secy. Bd. Impvt. Sewer Dist. 4, sewer improvement incl. 37,710 ft. 8- to 18-in. vitr. pipe, 4,320 ft. trench under 4 ft. deep excavated and refilled, 13,900 lin.ft. 4- to 6-ft., 12, 750 6- to 8-ft., 5,270 8- to 10-ft., 1,190 10- to 12-ft. and 300 ft. 12- to 14-ft. trench, 1,000 cu.yd. rock excav., etc. W. H. Evans, City Hall, engr., W. L. Winters, 311-312 Merchants Natl. Bank Bldg., consult. engr.

Okla., Stroud—Jan. 14, by W. B. Kirtley, city clk., 8 mi. sanitary sewerage system and disposal plant, 31,540 ft., 8 in.- to 15 in.- vitr. clay pipe, 17,000 cu.yd. earth 8,700 cu.yd. rock trenching Benham Eng. Co., Gumble Bldg., Kansas City, Mo., engrs. Noted Nov. 15.

Calif., Covina—City Trustees receiving bids 6,000 ft. 8 in., 3,600 ft. 10 in. and 200 ft. 12 in. concrete or vitr. sewer pipe, 49 manholes, one flushtanks and 220 service connections.

Calif., Orange—City Trustees taking bids 17,200 lin.ft. 24 in. and 2,000 lin.ft. 27 in. outfall sewer from present septic tank to point of junction with Anaheim and Fullerton system near Garden Grove. C. C. Bonebreak, city engr.

BIDS RECEIVED

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., Dec. 27, (1) 24 in. tile sewer in south side of Amherst St. (2) 10 in. tile sewer in Brunswick Blvd. (3) 10 and 12 in. tile sewer in Houston St. (4) 10, 12 and 15 in. tile sewer in Payne Ave. (5) 10, 12 and 15 in. tile sewer in Roland Ave. (6) 10 and 12 in. tile sewer on north side of Taunton Pl., from L. D. Pasquaie, 126 Erie St., (1) $13,050 and $14,727, winter work $15,050 and $16,727 (2) $1,399 (4) $2,512; Batt Co., Inc., 955 Michigan St., (3) $2,170; J. M. Fahning, 460 Leroy Ave., (5) $2,190; Dark & Co., 306 Franklin St., (6) $2,100. Noted Dec. 20.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Jan. 4, sewers in (1) 159th St. (2) Suwanee Ave. A and B (3) 90th St. A and B, from J. F. Clancy, Inc., 460 Lockwood St., Astoria, (1) $2,649 (3b) $13,425; E. J. Kelly, Jr., (2a) $31,764 (2b) $31,309; Green Contg. Co., 734 Vernon Ave., Astoria, (3a) $15,254. Noted Jan. 3.

Pa., Wilkes-Barre—East End Sewerage System, 3,100 ft. 4 and 5 ft. circular brick, from Higgins & Reilly Constr. Co., Phila., $62,609.

Mich., Detroit—Dept. Pub. Wks., furnishing and installing sewage pumps, motors and air compressors, electrical equipment, piping, valves, etc., two motor driven centrifugal 24 in. pumps, two 15 in. pumps, etc., from Miller & York, 1523 East Congress St., $74,900. Noted Dec. 6.

Calif., La Jolla — See "Streets and Roads."

Que., Montreal—Constructing 2 x 3 brick sewers in 396 ft. Notre Dame de Grace Ave. from Girouard to Marcil Aves., and 966 ft. from Wilson to Hampton Aves., from A. Thezaud, 885 St. Catherine St. E., $3,091 and $6,660 respectively; 954 ft. Notre Dame de Grace Ave. from Madison to Beaconfield

Sewers (Continued)

and from Kingston to Sherbrooke Sts., from Toussaint Bros., 2353 St. Denis Blvd., $6,849; 675 ft. in Boyce St. from S. Ricci, 2742 Drolet St., $4,003; 723 ft. Belanger St. from C. Perluzzi, 407 Labrecque St., $5,338.

Ont., North Bay—For 15,000 ft. vitr. tile storm sewers, 8 in. up, in various streets, from Derosa & Demarco, North Bay, $45,995. Noted Nov. 22.

CONTRACTS AWARDED

N. Y., Johnson City—Bd. Village Trustees 8,060 ft. 24- to 42-in. rein.-con., 90 ft. 20 in. c.i., and 712 ft. 8-20-in. vitr. clay sewers and 690 ft. 6 in. vitr. clay laterals in Riverside Dr. to Willow, Grand. Linco'n and Division Sts., Burbank and Farr Aves., to C. Rose, 807 Chenango St., Port Di kinson, $64, 138. Engrs. est. $65,000. Noted Dec. 27.

Md., Baltimore—Bd. Awards, 6,400 ft. 8- to 48-in. sanitary sewers and storm drains, in Dists. 50 and G-11, Storm Water Contr. 63, to A. J. Boyle, 314 American Bldg., $48,910. Engrs. est. $70,000. Noted Jan. 3.

W. Va., Bluefield—Sanitary sewers, inlets, etc., to J. W. Vaughan & Co., Roanoke, $200,000; ditch work, etc., to Pace Constr. Co., Roanoke, $15,000. Noted Nov. 22.

O., Akron—W. F. Peters, dir. Pub. Serv., Hawkins Ave. interceptor sewer, about 1 mi. long, 70 ft. underground, to T. E. McShaffrey Constr. Co., 171 South Forge St., $415,000. Engrs. est. $400,000. Noted Nov. 22

O., Columbus—See "Waterworks."

O., New Philadelphia—Sewers in Bway. and High Sts., to H. C. Schneider, New Philadelphia, $25,630. Noted June 14.

N. D., North Fargo—Sanitary sewer in 15th Ave. N. and 4,504 lin.ft. 6 in. c.i. water mains in various streets, to Haggart Constr. Co, Fargo, $47,919 and $10,842.

Mo., Maplewood (St. Louis P. O.)—For 9,800 ft. 8- to 36-in. vitr. clay, and 200 ft. 42 in. segmental block sewer in Laclede Rd. Dist. Sewer 1, to Blackburn & Crean, Chouteau Trust Bldg., St. Louis, $90,635. Noted Dec. 20.

Tex., Dallas—Addition to present disposal plant, 12 Imhoff tanks, and sewer lines, to R. J. Estep Co., Deere Bldg., $148,297. Engrs. est. $178,000.

Wash., Aberdeen—City Council, sanitary sewers in South Aberdeen Dist., vitr. pipe, to K. A. Keasal Constr. Co., Aberdeen, $39,500. Engrs. est. $40,000.

Calif., Los Angeles—Bd. Pub. Wks., constructing following sections North Outfall Sewer, 11,050 lin.ft. semi-elliptical sewer, 10 ft. 6 in. depth, Sect. 4, to Ross Constr. Co., Van Nuys Hotel, $303,300; 15,197 lin. ft. semi-elliptical sewer, Sect. 6, to Callahan & Cooney, Laughlin Bldg., $298,000; 10,906 lin.ft. semi-elliptical sewer, Sect. 8, to L. S. Atkinson, Jr., Chapman Bldg., $249,500; 6,294 lin.ft. semi-elliptical type, Sect. 9, to T. Kelly & Sons, 815 Hill St., $165,516. Noted Jan. 3.

Waste Disposal

PROPOSED WORK

Md., Baltimore—Mayor and City Council plan concrete incinerators. $300,000. S. Purcell, City Hall, ch. engr.

Bridges

PROPOSED WORK

Conn., Rockville—See "Railways" under Connecticut.

N. Y., Le Roy—Plans 2 span steel and concrete bridge, 110 ft. long, Clay St. $60,000. Engineer not selected. Will be presented to voters in near future upon completion of plans.

N. Y., Port Washington—North Hempstead Twp. and Long Island R.R., Pennsylvania Sta., New York City, plan 4 span concrete bridge, 24 ft. concrete roadway, and 5 ft. passageway on each side, Willowdale Ave. L. V. Morris, Jamaica, ch. engr.

Pa., Pittsburgh—Allegheny Co., Court House, having plans prepared removing old bridge and constructing 848 ft. bridge with two 215 ft. spans and one 418 ft. span, over Allegheny River, 7th St. $1.125,000. V. R. Covell, City County Bldg., co. engr. E. F. Wood, Century Bldg., designing archt.

North Carolina—State Hy. Comn., Raleigh, plans constructing bridges (**S. P. means State Project**) steel and rein.-con. bridge over Pee Dee River, on S. P. 610, Anson Co., $275,000; steel and rein.-con. bridge over Deep River, on S. P. 404-C, Chatham Co., $70,000; rein.-con. bridges and culverts on S. P. 212, Craven Co., $45,000, on S. P. 720, Caldwell Co., $50,500, on S. P. 472-B, Vance Co., $30,000. C. K. Upham, state highway comr.

North Carolina—See "Streets and Roads."

Fla., Jacksonville—Rejected bids two rein.-con. bridges with steel draw spans, $450,000. Plans may be revised and work readvertised. Harrington, Howard & Ash, 1001 Orear-Leslie Bldg., Kansas City, Mo., engrs. Noted Sept. 27.

O., Chillicothe—City negotiating with Baltimore & Ohio R.R., Central Union Depot, Cincinnati, for building of 1,300 ft. viaduct, Main St. $400,000. A. Richards, city engr.

Minn., Austin—Plans 195 ft. steel and concrete bridge, 52 ft. wide, with 2 arched spans, over Cedar River. $50,000. F. R. Smith, clk.

Missouri—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, plans bridges over stream on Stations 1750 plus 08, 1800 plus 89, 1425 plus 21 and 1704 plus 36, Bates Co.; over Fabins Creek, Schuyler Co.; over stream, Warren Co.; over Sinking Creek and Current River, Shannon Co.; over Beaver Dam Creek, Audrain Co.; over Salt Fork, Saline Co.; over Elk Fork, Randolph Co., B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans bridges over Little Pike Creek, over stream on Sta. 1705 plus 00, and over stream on Sta. 1727 plus 00, Carter Co.; over stream on Stations 552 plus 56, 494 plus 75, 605 plus 18, 159 plus 95, 230 plus 84, 351 plus 23, and 453 plus 21, Barton Co.; over Lamine River, also over overflow of Lamis River, Cooper Co.; over stream on Stations 668 plus 08 and 783 plus 98, Crawford Co.; over Middle Fork of Eleven Points River, over Eleven Points River, and over Barren Fork River, Oregon Co.; over Wildcat Creek, Platte Co.; over Niangua Creek and Northview Branch, Webster Co. B. H. Piepmeier, state highway engr.

Mo., Springfield—City and St. Louis & San Francisco R.R., 210 South Jefferson St., plan rein.-con. viaduct over railroad tracks. Election soon to vote on $300,000 bonds.

Tex., Houston—Harris Co. had plans prepared concrete bridges and culverts on State Highways $125,000; concrete culverts and bridges on county roads $475,000. Howe & Wise, co. engrs.

Okla., Sayre—Beckham Co. defeated $300,000 bond issue for bridges. Project dropped. Noted Nov. 22.

Calif., Sherman Island—Delta Bridge Corp., foot of Hyde St., San Francisco. O. H. Klatt, secy., plans bridge between here and Antioch, from Sacramento to Contra Costa Co., incl. 850 lin.ft. trestle, 2,000 lin. ft. 100 ft. spans (20 spans), 300 lin.ft. cantilever lift span, 270 ft. clearance, 100 lin.ft. span, 125 lin.ft. span, and 850 lin.ft. trestle on Sacramento Co. side. J. Little and R. E. Dodge, 251 Kearny St., San Francisco, engr.

Que., Montreal—Montreal Harbor Comrs. in conjunction with Union of the Municipalities of Quebec, have prepared plan to be presented to Provincial and Federal Governments, for constructing bridge across St. Lawrence River to connect city with south shore, to be built in 2 sections, one section from foot of Delormier Ave. to St. Helens Island, comprising a cantilever suspension bridge with channel span 1,280 ft. long, total length 2,160' ft. and 3 deck spans 230 ft. each, other section from St. Helens Island to the south shore is made up of 7 deck spans and 7 through spans, 3,270 ft. long, 60 ft. roadway, total length of bridge 6,938 ft. $5,000,000. M. P. Fennell, genl. mgr.

Ont., Brampton—Plans 60 ft. concrete bridge, 45 ft. roadway, on Main St. over Etobicoke Creek. $25,000. W. Treadgold, town engr.

Ont., Pembroke—Plans highway bridge over Muskrat River, three 90 ft. spans, 20 ft. roadway, steel on concrete piers and abutments. $75,000. J. P. Howe, town engr.

BIDS DESIRED

New Jersey—Jan. 28, by State Hy. Dept., Trenton, repairing and strengthening turntable of center rim of bearing of draw span 395 ft. long, 59 ft. wide, rim bearing parts of steel, to be removed and replaced with new in shortest time possible, while maintaining traffic on bridge over Passaic River, M. P. 56.7, State Highway Route 1, Lincoln Highway Sect., in municipalities of Newark and Kearny, Essex and Hudson Counties. A. L. Grover, ch. clk.; adv. E. N.-R. Jan. 10.

Virginia—See "Streets and Roads."

Fla., West Palm Beach—Jan. 16, by C. H. Holstlaw, engr. Palm Beach Co., double leaf deck plate girder bascule draw span, 2 deck plate girder approach spans and substructions over Palm Beach Canal on Military Trail; bridge over Lake Worth at Lantana, complete wood pile trestle, steel swing draw span.

Mississippi—See "Streets and Roads."

Oklahoma—Jan. 16, by W. C. Burnham, state highway engr., Oklahoma City, bridge over North Fork of Canadian River north of El Reno, Federal Aid Project 113, four 120 ft. steel spans on concrete piers and abutments; bridge over Salt Fork of Arkansas River, near Ponca City, Federal Aid Project 123, four 96 ft. and one 20 ft. steel spans.

BIDS RECEIVED

Mass., Haverhill—Haverhill Lower Bridge Rebuilding Comn., Court House, Salem, constructing channel span at Haverhill Lower Bridge, here, from Amer. Bridge Co., 71 Bway., New York City, bascule $125,000, 3 hinged arch $59,000. Noted Nov. 8.

N. Y., Buffalo—Bd. Pub. Wks., Municipal Bldg., Dec. 26, reconstructing, renewal and protection of viaduct over tracks of Lake Shore, & Michigan Southern R.R., Fulton St., from Lackawanna Steel Const. Corp., Walden Ave., Cheektowaga, $6,434; new truss span for Elk-Abbott viaduct over tracks of Erie R.R., etc., and replacing 3 old truss spans with 3 new ones on Elk St. viaduct, etc., from Independent Bridge Co., May Bldg., Pittsburgh, Pa., $63,900 and $156,900 respectively; replacing 1 old truss with one 113 ft. 6 in. new truss span on Elk-Abbott viaduct, etc., and old truss span with one 105 ft. new truss span on Van Rensselaer St. viaduct, etc., from Amer. Bridge Co., Inc., 1509 Guardian Bldg., Cleveland, O., $70,975 and $49,620, respectively. Noted Dec. 20.

Alabama—State Hy. Dept., Montgomery, 3 bridges on road from Uniontown to Browns Station, Federal Aid Project 142, Perry Co., treated timber from C. W. Cooper, Anniston, $28,053; concrete from Lamb & McLemore, Eutaw, $58,041. Noted Nov. 15.

Tex., Hemphill—See "Streets and Roads."

California—State Hy. Comn., Sacramento, constructing six bridges and approaches across Mill Race, Salt Creek, Craig Creek, Salt Creek Overflow, Butler Slough and New Creek in Tehama Co., (a) 880 cu.yd. Class A Portland cement concrete in superstructures (b) 535 cu.yd. Class A Portland cement concrete in frame bents (c) 2,600 cwt. reinforcing steel, (d) one hundred 30 ft. rein.-con. piles (e) twenty four 34 ft. rein.-con. piles from McKenzie & Pollard, Gerber, (a) $17.25 (b) $17.25 (c) $5.75, total with frame bents $48,646; T. H. and M. C. Polk, Chico, (a) $21 (b) $20.35 (c) $5.67 (d) $110 (e) $120, total with frame bents $53,999, with rein.-con. piles $54,904. Noted Dec. 6.

CONTRACTS AWARDED

Pa., Pittsburgh—Allegheny Co., bridge over Jacks Run between here and Bellevue, to J. F. Casey Co., Union Arcade, (alternate bid) $381,932.

Ky., Pikeville—Comrs. Pike Co., 5 small bridges over Levisa River, to J. A. Steele, Jr., 531 South Gay St., Knoxville, Tenn. Est. cost to exceed $25,000. Noted Dec. 6 under Streets and Roads.

Ia., Correctionville—Woodbury Co., (Sioux City), steel and concrete bridge, three 90 ft. and two 50 ft. spans, 20 ft. roadway, over Little Sioux River, here, to Des Moines Steel Co., 5th and Tuttle Sts., Des Moines, $40,000. Noted Nov. 22.

Okla., Watonga—Blain Co., six 70 ft. steel spans incl. approaches over North Canadian River, Federal Aid Project 118, Sect. A, here, to A. A. Davis & Co., Grain Exch. Bldg., Oklahoma City, $76,473.

Ontario—Toronto Eastern Ry. Co., Toronto St., Toronto, rebuilding wooden railway trestles at Whitby, Oshawa and Bowmanville, to W. H. Harvey, Deseronto.

Dams

PROPOSED WORK

Tex., Brownwood—See "Excavation, Drainage, Irrigation."

Tex., San Saba—See "Excavation, Drainage, Irrigation."

Ont., Morrisburg—See "Unclassified."

Railways

PROPOSED WORK

Connecticut—New York, New Haven & Hartford R.R., New Haven, plans to lay new tracks, enlarge freight yards and build bridge over Hockanim River, at Rockville. $150,000. E. Gagel, ch. engr.

Railways (Continued)

Alabama—Louisville & Nashville R.R. Co., 10th and Bway. plans 5 mi. second tracking from Montgomery to Cotoma. $250,000. W. H. Courtenay, ch. engr.

Indiana—See "Industrial Works," under Hammond.

CONTRACTS AWARDED

Oregon—Southern Pacific R.R. Co., 65 Market St., San Francisco, constructing 25 mi. unit of Natron Cutoff in Klamath Co., to Utah Constr. Co., Phelan Bldg., San Francisco.

Excavation, Drainage Irrigation

PROPOSED WORK

Tex., Brownwood—P. A. Glanville interested in formation of irrigation district along Leon River, to irrigate 40,000 acres incl. 2,000 ft. dam. Probable cost over $1,500,000.

Tex., San Saba—San Saba Co. Recl. & Conservation Dist. 1 plans election at once to form district, $2,000,000 dam and irrigation system planned. F. Porter, 3525 Hall St., Dallas, engr. Noted Oct. 11.

Ont., Morrisburg—See "Unclassified."

Ont., Port Hope—Dept. Pub. Wks., Parliament Bldgs., Ottawa, plans to dredge and deepen Port Hope Harbor. $30,000. K. M. Cameron, ch. engr.

BIDS DESIRED

New York—Jan. 14, by J. A. Delaney, comr. Docks Pier "A" foot of Battery Pl., New York City, dredging channel, constructing dikes, placing fill on West Island in connection with improvement of Jamaica Bay, Queens Boro. Noted Dec. 13.

O., Blackford — Cambria Clay Products Co., taking bids 60,000 cu.yd. steam shovel excav. to extend sewer pipe stock yard.

Ia., Ft. Dodge—Jan. 17, by Joint Bd. Supervs. Webster, Boone and Greene counties, at Court House, here, constructing Joint County Drain 3, 12,923 cu.yd. excav., 4,195 ft. 46 in., 2,655 ft. 44 in., 1,600 ft. 42 in., 2,150 ft. 36 in., 558 ft. 24 in., 130 ft. 12 in., 481 ft. 8 in. and 1,178 ft. 6 in. tile, etc., $53,700.

Minn., Minneapolis—Feb. 4, by Bd. Park Comrs., City Hall, dredging in Powderhorn Lake at 15th Ave. S. and 34th St., 140,000 cu.yd. excav. $35,000. A. C. Godward, c/o Board Park Comrs., engr.

BIDS RECEIVED

N. Y., Brooklyn—J. H. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York, Dec. 29, dredging 52nd St. pier, Contr. 1823, and at Bay Ridge Ave., Contr. 1824, here, from Columbia Dredging Corp., 30 Church St., New York, $6,650 and $2,450 respectively. Noted Dec. 20.

Streets and Roads

PROPOSED WORK

Conn., Hartford — Street Dept. plans widening Farmington Ave. $25,000. R. N. Clark, city engr.

N. Y., Owego—Plans construction 7 mi. town-county roads, incl. Barton, Berkshire, Nichols, Candor, Newark and Owego Rds. $250,000. Engineers name withheld.

N. J., Freehold — Monmouth Co. plans concrete paving 2⅝ mi. West Freehold-Smith Rd. G. K. Allen, 60 Broad St., Red Bank, engr.

Pa., Ebensburg—Comrs. Cambria Co. plan to reconstruct 25,400 ft. Route 221, from Dysart to Buckhorn, Dean Twp., brick or rein.-con., $200,000, 3,000 ft. Millcreek Rd. and Luzerne St., rein.-con. or brick in Southmount Boro., $30,000, 2,600 ft. brick highway on Powell Ave., leading from Cresson to Wm. Penn Highway, $30,000. D. W. Dillman, Altoona Trust Bldg., Altoona, engr.

Pa., Ebensburg—Comrs. Cambria Co. plan 1 mi. brick highway on High St., here. $50,000. County appropriates $35,000. F. H. Dorr, Trust Bldg., engr.

W. Va., Bluefield—Plans paving about 30 blocks and repaving 8 blocks, various streets, mainly College Ave., 4th and Augusta Sts. To exceed $25,000. C. E. Ridley, city mgr.

W. Va., Grantsville—Calhoun Co., Centre Dist., plans election vote on $100,000 bond issue improving roads. J. W. McKinney, Grantsville, engr.

North Carolina—State Hy. Comn., Raleigh, plans improving roads (S. P. means State Project) grading and concrete or asphaltic surfacing 11.989 mi. S. P. 381, Pender Co., $388,500, 2.311 mi. S. P. 352, New Hanover Co., $85,400, 10.008 mi. S. P. 222, Duplin Co., $325,100, 10.76 mi. S. P. 212, Craven Co., $408,400, 11.5 mi. S. P. 106-B, Bertie Co., $345,000, 6.85 mi. S. P. 111, Camden Co.; $144,200, 9.51 mi. S. P. 836-B, Henderson Co., $306,850, 12.5 mi. S. P. 720, Caldwell Co., $471,300, 8.072 mi. S. P. 732-B, Davie Co., $263,400; grading and topsoiling 6.1844 mi. S. P. 662, Richmond Co., $48,700, 4.651 mi. S. P. 472-B, Vance Co., $42,600; grading 16.965 mi. S. P. 912, Cherokee Co., $114,100; grading, topsoiling and bridging 5.336 mi. S. P. 714 Ashe Co., $55,000, 3.134 mi. S. P. 449-A, Lee Co., $27,600; grading and bridging 1.513 mi. S. P. 992, Transylvania Co., $65,700; grading, concrete or asphaltic paving and bridging 5.152 mi. S. P. 536, Guilford Co., $168,400. C. M. Upham, state highway comr.

Fla., Bushnell—Sumter Co. election Jan. 30 to vote on $143,000 bonds grading and paving 13 mi., Wildwood west to Rutland Bridge and on; $54,166, 6 mi., Coleman toward Leesburg; $43,333, 8 mi., Sumterville to outlet Big Lake Panasoffkee; $43,333, 7 mi., Bushnell to Withlacoochee River (Birdell); $54,170 roads in Comr. W. O'Dells Dist., to be named later; $70,416, 6 mi., Comton Hill to Sloan Ridge; $57,416, 4 mi., Sloans Bridge to Nortons Crossing; $130,000 13 mi. Bushnell to Weeds Landing. $54,166, 7 mi. finishing, Sloans Bridge to Tarrytown.

Fla., Gainesville—Plans to sell $371,118 bonds improving various streets. G. A. Caimes, city engr.

Fla., South Jacksonville (Branch of Jacksonville)—Voted $112,000 for street improvements. J. L. Crary, South Jacksonville, engr.

Fla., Tavares — Lake Co. sold $65,000 bonds for improvements in Eustis-Tavares Special Road & Bridge Dist.; $40,000 bonds for Special Road & Bridge Dist 3. G. E. Heller, Tavares, engr.

Alabama—State Hy. Comn., Montgomery, soon takes bids asphalt paving 34 mi. Montgomery-Birmingham Highway, Chilton Co., 20 ft. $250,00. W. S. Keller, state highway engr.

Tenn., Bristol—Plans asphalt paving Ashe St. $25,000 to $30,000. L. H. Gammon, mayor.

Ky., Louisville—Bd. Pub. Wks. plans resurfacing with concrete or bituminous macadam Chestnut St. between 2nd and 3rd Sts. A. A. Kreiger, city engr.

O., Canton—Bd. Control plans paving 7 blocks Smith Ave. N. W., 40 to 50 ft., $50,000-$75,000, about 1 mi. Cherry Ave. N. E., 60 ft., $100,000, also 6 blocks Gross Ave. N. E., 50 ft., $60,000, asphalt; repaving Cleveland Ave. N. W., 60 ft., brick, $100,000 or more; constructing Serpentine Rd., 40 ft., $150,000. W. E. Sarver, City Hall, engr.

O., Canton—Bd. Control takes bids in spring improving ½ mi. Plain St. N. E., 50 ft., asphalt, $50,000-$60,000; 6 blocks Glendale Ave., 40 ft., brick, $27,500. W. E. Sarver, City Bldg., engr.

O., Cleveland—Takes bids in spring grading, curbing and paving Alabama and Benton Courts, Buckeye and Clearaire Rds., Arcade, Adelaide, Almira, Angelus, Aspinwall, Barrington, Bartlett, Calcutta, Central, Carnegie, Cassius, Castalia, Calirdoan and Coronado Aves. R. Hoffman, City Hall, engr.

O., Cleveland—Cuyahoga Co. takes bids in spring paving Som Center Rd. to east line of Chagrin Village, brick or concrete, $83,000; Ridge Rd. (Parma Heights), brick, $96,400; road from Bedford to Tinkers Creek, $273,800, and 2.89 mi. road from west side of Maple Heights Village to east line, $309,100, both brick or asphalt; grading, curbing and brick paving Avery Rd., $315,000. F. Lander, Court House, engr.

O., Cleveland—Cuyahoga Co. takes bids in spring improving 3.5 mi. State Rd., rein.-con., $184,663; Brecksville Rd., brick, $100,259; 2.52 mi. Miles Rd., warrenite bitulithic-asphalt, $168,888. F. Lander, Court House, engr.

O., Massillon—Plans paving and laying storm sewers in Green St. and Jarvis Ave. $125,000. C. E. Rice, City Hall, engr.

O., New Philadelphia — Tuscarawas Co. plans improving 3 mi. Stonecreek-New Comerstown Rd., 20 ft., $200,000; 3.52 mi. Park Valley Rd., Mill and Rush Twps., 20 ft. $150,000-$200,000.

O., Ravenna—Portage Co. takes bids in spring improving 2 mi. Brady Lake Rd., 20 ft. $210,000. Franklin Twp. will pay 30%, County 30% and property owners 40% of cost.

Ind., Evansville — Plans paving Green River Rd. and Washington Ave., probably sheet asphalt. W. Elmendors, mayor.

Ill., Durand—Plans grading and rein.-con. paving 4,900 ft. Main and Howard Sts. $50,000. A. R. Carter, Court House, Rockford, engr.

Ill., South Jacksonville (Jacksonville P. O.)—Plans grading and paving with asphalt on concrete, 6,000 ft. various streets, 30 ft. $64,000. Caldwell Eng. Co., Ayres Bank Bldg., Jacksonville, engrs.

Wisconsin—Following are county appropriations for road work during 1924. Vilas Co. $32,723, W. F. Hunter, Eagle River, comr.; Oneida Co. $40,698, B. L. Horr, Rhinelander, comr.; La Crosse Co. $280,059, J. Hintgen, La Crosse, comr.; Forest Co. $69,168, B. McGinley, Crandon, comr.

Wisconsin—County Bds. of counties in Div. 2 authorized following gravel road construction. Fond du Lac Co. 31.8 mi County Trunks D, W, Q, V and H, G. W. Treleven, Fond du Lac, comr.; Kenosha Co., 25.5 mi. County Trunks B, O, J, F, K, E, N, and H, also on Silver Lake—Wilmot Rd. and North County Line, J. Herzog, Kenosha, comr.; Ozankee Co., 19.1 mi County Trunks A, M, D, B and K also in village of Waubeka, W. J. Ubbink, Port Washington, comr.; Racine Co., 15.6 mi. County Trunks E, J, F and G also County Line Sect. 33, W. A. Bechthold, Racine, comr.; Sheboygan Co. 29 mi. County Trunks A, B, C, J and N, also State Trunk Highway 57, G. W. Ubbelohde, Sheboygan, comr.; Washington Co. 20.2 mi. County Trunks Z, P and Q, C. Johnson, Brenham, co. comr.; Waukesha Co. 35.1 mi. County Trunks J, CC, G, H, F and E, also Road west line Sect. 12-13-24, C. J. Hahn, Waukesha, comr.

Wis., Ladysmith—Plans paving 7 blocks. Bids will be asked on various types, incl. concrete. $33,000. C. C. Kile, city clk. Engineer not selected.

Ia., Belle Plain—Plans paving 12 blocks or more. $40,000. E. N. Brown, clk.

Ia., Clinton — Clinton Co. plans paving 1.586 mi. Federal Aid Project 205, $52,519. Federal Government pays $23,700 toward cost. Ia. Hy. Comn., Ames, engrs.

South Dakota—State Hy. Comn., Pierre, plans to grade 13 mi. Federal Aid Project 171, Roberts Co. Will let contract in early spring. F. D. Hudgins, state engr.

S. D., Huron—Plans paving 32 ft. strip in center and graveling 14 ft. strip on each side of East 3rd St. from Iowa Ave. to Lawn Ridge. $30,000. T. K. White, city engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 19.5 mi. roads in Knox, Putnam, Jasper, Dent, Washington and Ralls Counties; also bridges over Long Branch, Cooper Co., over Crooked Creek, Monroe Co., over stream, Jasper Co., and over stream, Texas Co. B. H. Piepmeier, state highway engrs.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, rejected bids Dec. 26, granite curbing and refined asphalt or warrenite paving 9,095 sq.yd. Laclede Ave. $66,000. Noted Jan. 3.

Mo., Sweet Springs—See "Waterworks."

Ark., Fayetteville—Had plans prepared paving with 2 in. asphaltic concrete on broken rock 2,000 sq.yd. in East Center St. Impvt. Dist., 6,500 sq.yd. in South College Ave. Impvt. Dist., 4,000 sq.yd. in Annex 2 to West Lafayette Impvt. Dist., 5,000 sq.yd. in Annex 1 to University Impvt. Dist. 1, 6,500 sq.yd. in Annex 1 to Monte Nord Impvt. Dist., 5,000 sq.yd. in Annex 1 to West Lafayette Impvt. Dist.; asphaltic concrete resurfacing 8,000 sq.yd. in Wall St. Impvt. Dist.; asphaltic concrete on concrete 20,000 sq.yd. in University Impvt. Dist.

Ark., Hot Springs—Preparing plans street improvements in various districts, 25,500 sq. yd. concrete work. C. Smith, city engr.

Ark., Hot Springs—Had plans prepared rein.-con. paving 7,000 sq.yd. in Impvt. Dist. 70, 15,000 sq.yd. in Impvt. Dist. 71, 7,000 sq.yd. in Impvt. Dist. 72, and 3,500 sq.yd. in Impvt. Dist. 73.

Ark., Pine Bluff—Plans grading and rein.-con. surfacing 30 blocks East 6th, East 7th, Utah, East 8th, 7th, 8th and Florida Sts.

Tex., Anderson—Grimes Co. election Jan. 12, to vote on $200,000 bonds for highway improvements in Rd. Dist. 3. R. M. West, co. judge.

Tex., Baird—Callahan Co. making plans bituminous macadam paving 23.3 mi. highway, 16 ft., $374,250; 9.7 mi. Bankhead Highway, State Highway 1, 16 ft., $182,750. T. H. Webb, co. engr.

Tex., Beaumont—Making plans paving Emma St., 1 in. asphalt on 5 in. concrete. $25,000. W. L. Fulweiler, city engr.

Tex., Coleman—City, c/o G. Woodward, plans asphalt paving 8 blocks Main St., Square, etc. $75,000. Engineer not announced.

Tex., Colorado—Mitchell Co. defeated $650,000 bonds for paving Bankhead Highway and lateral roads. F. F. Du Bose, co. engr. Noted Dec. 6.

Tex., Crockett—Rd. Dist. 1, Houston Co., defeated $80,000 bonds for highway improvements. Noted Dec. 6.

Tex., Crockett—Houston Co. election Jan. 22, to vote on $240,000 bonds, $144,000 of which will be used for hard surfacing highways, remaining $96,000 to retire present bonds. L. Moore, co. judge.

Streets and Roads (Continued)

Tex., Denison—Having plans prepared miscellaneous street paving, water main and sewer extensions. $175,000. D. C. Lipscomb, city engr.

Tex., Gonzales—Gonzales Co. defeated $125,000 bonds for highway improvements. Will hold new election later. This corrects report in Jan. 3 issue.

Tex., Goose Creek—Voted $100,000 bonds permanent paving various streets. Address Mayor.

Tex., Harrold—Comrs. Precinct 4 Harrold Rd. Dist. plan election Feb. 2, to vote on $150,000 bonds paving 8 mi. Colorado-Gulf Highway, Wilbarger Co. J. B. Nabors, Vernon, co. engr.

Tex., Houston—Making plans widening and paving Walker St. from Austin St. to Sam Houston Park, bituminous. $25,000. J. C. McVea, city engr.

Tex., Houston—Harris Co. had plans prepared paving Washington Ave. $50,000. Howe & Wise, co. engrs.

Tex., Huntsville—Making plans paving 1 mi. Burton and Tyler Sts., concrete, bituminous or brick. $25,000.

Tex., Karnes City—Karnes Co. making plans improving 9 mi. highway, 16 ft. $125,000. O. N. Powell, Kennedy, engr.

Tex., Laredo—Webb Co. had plans prepared and soon takes bids reshouldering, widening base from 16-18 ft. and bituminous topping 8.76 mi. State Highway 2, north from here, $50,200, 9.88 mi. State Highway 2 from Cactus to La Salle Co. Line, $83,000; 8.16 mi. State Highway 2 from point 9 mi. north of here to Webb, $63,000, 8.75 mi. State Highway 2 between Webb and Cactus, $73,250. T. E. Huffman, co. engr.

Tex., Linden—Cass Co. defeated $1,000,000 bonds for highway improvements. New election planned. F. E. Hess, Medical Arts Bldg., Dallas, co. engr.

Tex., Paducah—Cattle Co. election Jan. 12, to vote on $50,000 bonds, grading and gravel surfacing State Highway 4. Cost approximately $100,000. J. M. Whatley, co. judge. Engineer not selected.

Tex., Palo Pinto—Palo Pinto Co. had plans prepared and soon takes bids grading and surfacing with bituminous macadam 4.97 mi. State Highway 24, 18 ft. $100,260. G. W. Courter, co. engr.

Tex., San Antonio—Preparing plans widening Market and various other streets. $200,000. I. Ewig, city engr.

Tex., Seymour—Baylor Co. voted $500,000 bonds for improving 90 mi. state highways and county roads, 18 ft. State and Federal aid $1,000,000. E. Tibbets, co. judge. Noted Dec. 13.

Tex., Marshall—Having plans prepared paving 11 streets, bituminous or brick. $50,000. Elrod Eng. Co., 3125 Elm St., Dallas, engrs.

Tex., Uvalde—Uvalde Co. rejected bids gravel surfacing Rock Springs Rd. $148,000. M. B. Hodges, co. engr. Noted Dec. 6.

Tex., Zenith—Jan. 15, to vote on $25,000 bonds for street paving. A. F. Hughes, mayor.

Okla., Hennessey—Voted $93,500 bonds grading and concrete paving 11 blocks Main St., 36 to 76 ft. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Nov. 15.

Colo., Denver—Plans asphalt paving 12 blocks in each of following districts, East Denver Paving Dists. 10, 11, 12, 13 and 14. Capitol Hill Paving Dists. 3, 4, 5, 6, 7, 10 and 11, West 44th Ave. Paving Dist. 2. $568,823. A. K. Vickery, City Hall, engr.

Idaho—Highway Bureau, Boise, takes bids about Mar. 1, improving 8.28 mi. highway in Cassia Co. $65,000. H. W. Gregory, dir.

Washington—State Hy. Dept., Olympia, plans to expend $1,000,000, improving Inland Empire Highway. Plans include paving 10 mi. between Spokane and Colfax, $300,000. J. Allen, state highway engr.

Calif., Los Angeles — Voted $430,000 bonds for 10 mi. street paving in Westgate Dist. R. Dominguez, city clk. Noted Nov. 29.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving portions of Las Flores Canyon and Hume Rds., incl. 91,600 cu.yd. earth excav., 21,418 lin ft. shaping roadbed, 38,076 sq.yd. oil and sand surface; Washington Blvd. 6,517 sq.ft. gutters, 4,235 sq.ft. walks, 5,125 sq.yd. concrete base, 5,126 sq.yd. asphalt concrete top; portions Pacific, Hanford and Barbara Sts., etc., 69,422 cu.yd. excav. 25,791 lin. ft. concrete curb, 104,066 sq.ft. walks, 452,000 sq.ft. oil and screenings surface. Noted Dec. 27.

Calif., Oroville—Rejected bids improving Pine St., et al., 4,100 cu.yd. excav., 170,400 sq.ft. 2½ in. asphaltic concrete base with 1½ in. warrenite bituminous surface, 1,100 lin.ft. curb, 1,100 sq.ft. concrete gutter, etc. Noted Jan. 3.

Calif., Salinas—Had plans prepared paving portion Main St., incl. removal 110,980 sq.ft. bituminous pavement, etc., 110,980 sq.ft. 1½ in. warrenite bituminous surface pavement; portions North Main and Market Sts., 55,326 sq.ft. grading, 55,326 sq.ft. warrenite bituminous surface pavement, 500 tons base rock, etc. To exceed $35,000.

Calif., San Diego — Common Council plans to improve Union, Curlew and Brant Sts., incl. 175,549 sq.ft. paving, 1½ in. sheet asphalt wearing surface on 2½ in. bituminous base, 5,809 sq.ft. cement concrete sidewalk, etc.; Burlingame Dr., Maple, Laurel and 32nd Sts., San Marcos, Dulzura and Pamo Aves., 188,079.84 sq.ft. paving, 1½ in. sheet asphalt wearing surface on 4 in. Portland cement concrete base, 2,344 sq.ft. cement concrete sidewaik, etc. F. A. Rhodes, city engr.

Ont., Hamilton—Plans 7,000 sq.yd. asphalt on concrete, and 5,000 lin.ft. concrete curbs and gutters on Orchard Hill, Cottage and Dunsmore Ave., $30,000; 20,000 sq.qd. asphalt on concrete, 10,000 lin.ft. concrete curbs and gutters on Main St., $83,000. W. L. McFaul, city engr.

Ont., Hamilton—Preparing plans paving Main St., Kenilworth and Sanford Aves., asphalt on concrete. $273,000. W. L. McFaul, city engr.

Ont., London—Plans concrete and asphalt pavements on Wharncliffe Rd., Oxford and Dundas Sts. $60,000. Prices wanted on all materials. W. A. Near, city engr.

Ont., Niagara Falls—Plans 1½ mi. asphalt pavement on Victoria Ave., 30,000 sq.yd. asphalt, 16,000 lin.ft. concrete curbs and gutters. $120,000. T. S. Scott, city engr.

Ont., North Bay—Having surveys made 15,000 sq.yd. asphalt, concrete or bituminous concrete pavements on Fisher St. $60,000. W. Mackie, city engr.

Ont., Port Perry—Having plans prepared 15,000 sq.yd. tar bound macadam roadway on main streets. $30,000. D. J. Kean, Whitby, engr.

Ont., Stratford — Plans concrete pavements on Nile, Nelson, Elm and Ash Sts. $55,000. A. B. Manson, city engr.

Ont., Toronto—Having plans prepared asphaltic concrete pavements on Austin Terrace $5,835, Nelles Ave. $7,436, Norwood Terrace $9,701, Riverdale Ave. $13,130, Rosenthorn Ave. $12,436, St. Johns Rd. $2,930, Cluny Dr. $5,532; asphalt pavements on concrete on Breadalbane St. $11,157, Cluny Ave. $4,344, Front St. $18,199, Glen Rd. $13,131, Hayden St. $16,241, Isabella St. $19,682, Poplar Plains Crescent $8,821, Powell Ave. $5,532, St. Albans St. $24,430, St. Joseph St. $14,039, St. Mary St. $18,871, Wood St. $5,260; asphalt surface on Front St. E. $18,172; concrete sidewalks on Brookdale Ave. $3,851, Indian Grove $2,114, Riverdale Ave. $2,424, Rosethorn Ave. $5,152, West Lynn Ave. $1,091, Clendanan Ave. $5,678. R. C. Harris, city engr.

Ont., Toronto—Plans to repave Weston and Davenport Rds., Dundas and Keele Sts., 40,000 sq.yd. asphalt on concrete. $175,000, also grading Norway, Belfair and Wheeler Aves., $175,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Long Island City—Jan. 14, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing, laying sidewalks, etc., in Chauncey St., etc.; grading, curbing and laying sidewalks on 77th and 90th Sts.; permanent paving Chauncey and 77th Sts., etc.

N. Y., Tonawanda—Jan. 19, by Town Bd. at Village Hall, Kenmore, concrete paving, etc. Elmwood Ave. G. C. Diehl, 577 Ellicott Sq., Buffalo, town engr.; adv. E. N.-R. Jan. 10.

N. Y., Waterloo—Jan. 25, by Bd. Village Trustees, paving certain streets, bituminous macadam, penetration method. A. H. Moore, village clk.; adv. E. N.-R. Jan. 10. Noted Dec. 13.

New Jersey—Jan. 28, by State Hy. Dept., Trenton, paving Route 5, Sect. 11, Delaware-Belvidere Rd., Warren Co., reinforced cement concrete. A. L. Grover, secy.; adv. E. N.-R. Jan. 10.

Virginia—Jan. 29, at offices of State Hy. Dept., 413 North 10th St., Richmond, constructing 5 mi. Project F-118-A, Roanoke Co., 5 mi. Project F-118-E, Franklin Co., 4.9 mi. Project F-166-C, 9.5 mi. Project F-188, 5.9 mi. Project S-297, Albemarle Co., 5.1 mi. Project S-317, Mecklenburg Co., 4 mi. Project F-321, Frederick Co., 6.6 mi. Project S-323, Charlotte Co., 13.5 mi. Project S-326, Nansemond Co., 2 mi. Project S-327, Russel Co., 3 mi. Project S-349, Gloucester Co., 12.2 mi. Project S-350, Nansemond Co.; bridge over Little Otto River, Project S-143-C, Bedford Co. H. G. Shirley, chn.

W. Va., Charleston—Feb. 1, by Kanawha Co. grading 7 mi. road. R. N. [illegible], clk.; adv. E. N.-R. Jan. 10.

Florida—Jan. 15, by State Rd. Dept., Tallahassee, hard surfacing; plain cement concrete, asphaltic concrete, sheet asphalt and bituminous macadam on 8 in. rock base, concrete curbs and gutters 7.3 mi., Project 572; 9.1 mi. Project 594 and 5.1 mi., Project 607, Bradford Co. J. L. Cresap, State highway engr.

Fla., Tampa—Jan. 15, by City Comn., grading, paving and curbing Cayuga, 26th, Buffalo and Jefferson Sts., incl. 16,260 sq.yd. 2½ in. asphalt blocks and 11,550 ft. granite curbing. $45,000. R. D. Martin, City Hall, engr.

Ala., Parrish—Receiving bids and open same about Feb. 5, grading, asphalt paving, building concrete gutters and cement sidewalks, etc., on 6 blocks Main St., 50 ft. $50,000.

Ala., Talladego—Jan. 15 by M. R. Joiner, pres. city comn., grading, curbing, guttering, sidewalks, storm and sanitary sewers and 17,000 yd. paving plain and rein.-con. Warrenite bitulithic, asphaltic concrete or vitr. brick. R. L. Totten, B-M Bldg., Birmingham, engr.

Mississippi—Jan. 23, by State Hy. Dept., Jackson, grading, gravel surfacing and bridging, etc., 12.026 mi. road, Montgomery Co. $172,839. H. C. Dietzer, state highway engr.

La., Alexandria—Jan. 22, by Police Jury, Rapides Co., grading and concrete paving 1.25 mi. Glenmore-Westport Highway. W. H. Sylvester, Alexandria, engr.

Wis., Genoa Junction—Jan. 18, by T. E. Watson, village clk., rein.-con. paving 8,531 sq.yd. Walworth and Freeman Sts., incl. 7,757 lin.ft. concrete curbs and gutters. $25,000. H. J. Peters, c/o Court House, Elkhorn, engr.

Ia., New Hampton — Jan. 22, by S. L. Parker, city clk., approximately 40,000 sq. yd. paving. C. L. Pillsbury Co., 1200 2d Ave. S., Minneapolis, Minn., engrs. $140,000. Noted Oct. 25.

Ark., Clarksville—Jan. 17, by D. W. Dunlap, secy. Bd. Impvt. Paving Dist. 3, paving, storm sewers, curbs and gutters incl. 4,300 cu.yd. earth excav., etc., Alternate A. 13,860 sq.yd. 2 in. asphaltic concrete paving Topeka mix on 4 in. concrete or 2 in. Topeka mix on 5 in. concrete, 11,200 lin.ft. straight curb and gutter, 1,180 ft. straight curb. Alternate B, 14,070 sq.yd. 6 in. plain concrete paving, 11,200 ft. concrete curb and gutter, 1,280 ft. concrete curb. Alternate C, 17,180 sq.yd. 6 in. vibrolithic concrete with 6 in. integral curb. W. L. Winters, 311-312 Merchants Natl. Bank Bldg., Ft. Smith, engr.

Tex., Amarillo—Jan. 18, by S. B. Motlow, judge Potter Co., grading and gravel surfacing 6.06 mi. State Highway 33, Federal Aid Project 421, 18 ft. $76,536. O. A. Seward, co. engr. Noted Dec. 20.

Tex., Uvalde—Jan. 29, by H. C. King, judge Uvalde Co. grading and gravel surfacing 5.88 mi. State Highway 3, Federal Aid Project 360-A, 18 ft., $89,420 incl. bituminous topping which will be let later. Gravel will be furnished by county. Noted Dec. 20.

Washington—Jan. 22, by J. Allen, state highway engr., Olympia, clearing 10.1 mi. Olympic Highway, 60 ft., from Lunch Creek westerly, Jefferson and Grays Harbor Counties, and 22.4 mi. from Hoh River to north line of Indian Reservation at Quinault, Jefferson Co.; crushed rock surfacing 10 mi. Inland Empire Highway from Spangle northerly, Spokane Co.

Washington — Mar. 11, by State Hy. Comn., Olympia, grading 4 mi. Pacific Highway from Marysville to Everett, Snohomish Co., 8 mi. Navy Yard Highway from Port Orchard to Gig Harbor, Kitsap Co., and 7 mi. Inland Empire Highway from Waitsburg to Dayton, Columbia Co.; paving 5 mi. Olympic Highway from Elma to McCleary, Grays Harbor Co.; concrete paving 10.6 mi. Olympic Highway from Perry Creek north, Thurston and Grays Harbor Counties; 14.3 mi. Everett-Seattle Highway, extension of Pacific Highway, King and Snohomish Counties. J. Allen, state highway engr. Noted Dec. 6.

California—Jan. 21, by State Hy. Comn., Sacramento, grading 15.1 mi. and paving with Portland cement concrete 9.8 mi. between south boundary and Camarillo, Ventura Co.

Calif., La Jolla—La Jolla Properties Co., Inc., 655 Spreckels Bldg., San Diego, receiving bids improving streets in Hermosa Dist., incl. grading, paving, laying c.i. pipe culverts, etc., concrete and corrugated pipe lines, etc., installing complete sewerage system with disposal plant. To exceed $125,000.

Streets and Roads (Continued)

Calif., Newport Beach—Jan. 21, by City Trustees, improving Ocean Blvd., et al., incl. 91,000 sq.ft. clay and gravel surface, 152,000 sq.ft. of 6 in. concrete pavement, 201,000 sq.ft. of 8 in. concrete pavement, curbs, walks, etc. P. E Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., San Diego — Jan. 21, by A. H. Wright, city clk., improving Reynard Way, State and Goldfinch Sts., 40,066 sq.ft. paving, 2 in. sheet asphalt on 4 in. cement concrete base, 144,738 sq.ft. paving, 5 in. cement concrete, etc.; 25th and Crosby Sts., 321,382 sq.ft. paving, 1½ in. asphalt concrete wearing surface, 2½ in. bituminous base, etc.; Granada Ave., 29th, Dale and Palm Sts., also alley in Blk. 1, Blairs Highlands, 215,143 sq.ft. paving, 1½ in. sheet asphalt wearing surface on 2½ in. bituminous base, 9,581 sq.ft. paving, 4 in. cement concrete, 1,071 lin.ft. cement concrete curb, 1,103 sq.ft. cement concrete sidewalk, etc. F. A. Rhodes, city engr. Noted Nov. 15 and 29.

BIDS RECEIVED

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., Dec. 21, paving with (a) asphalt (b) brick (1) Barnard St. (2) Darien Pl. (3) Josephine St. (4) Nottingham Terrace (5) Stockbridge Ave. (6) Wilbury Pl., from Rock Asphalt & Constr. Co., Morgan Bldg., (a1) $19,233 (a2) $4,420 (a3) $15,175 (a4) $57,439 (a6) $21,554; Erie Contg. Co., Morgan Bldg., (b1) $20,-484 (b2) $5,052 (b3) $16,250 (b5) $40,914; H. P. Burgard Co., Fillmore Ave., (a2) $4,420 (a5) $40,550. Noted Dec. 13.

Virginia—State Hy. Dept., Richmond, constructing 5.2 mi. Project F-295-C, Henrico Co., inc. 54,797 sq.yd. pavement, from L. Colbert, Fredericksburg, $157,794, McGuire & Rolfe, Inc., Richmond, $162,288 alternate $150,177; grading 1.6 mi. Project S-293-C, Giles Co., from Warden Constr. Co., Pulaski, $20,649; concrete road and bridges 12.3 mi. Project S-279, Norfolk Co., from Noland Clifford Co. Inc., Newport News, $455,836, bituminous macadam road 3 mi. Project S-146-C, Montgomery Co., from Pendleton Constr. Co. and Albert Bros., Shawsville, $87,831; gravel road 13 mi. Project S-322, New Kent Co., from Battershill & Goode, Charlottesville, $88,974. Noted Dec. 6.

Alabama—State Hy. Dept., Montgomery, grading and surfacing 3.818 mi. Garden City-Warrior Rd., Federal Aid Project 126, Blount and Jefferson Counties, from J. W. Gwin, Hamilton Station, Birmingham, $110,477. Noted Oct. 4.

Indiana—State Hy. Comn., Indianapolis, Jan. 2, paving 60,000 sq.yd. Federal Aid Rd. 21, Sect. B, Clark Co., concrete, from H. A. Carpenter, Cloverland, $161,734, engrs. est. $175,255; Federal Aid Rd. 65, Sect. B, Gibson Co., 61,038 sq.yd. concrete, from J. R. Feigel, Evansville, $149,361, engrs. est. $165,676; Federal Aid Rd. 67, Sect. A, Lagrange Co., 81,017 sq.yd. concrete, from R. Doaust, Defiance, O., $181,282, engrs. est. $199,903; Federal Aid Rd. 67, Sect. B, Lagrange and Elkhart Counties, 87,348 sq.yd. concrete, from C. E. Holderbaum & Co., Columbia City, $203,169, engrs. est. $229,813; Federal Aid Rd. 68, Sect. B, Parke Co., widening and grading, 78,067 cu.yd. earth excav., from P. O. Leary, Terre Haute, $46,653, Federal Aid Rd. 68, Sect. A, Parke Co., 92,727 cu.yd. earth excav., from J. A. and J. R. Wright, Clinton, $62,423, engrs. est. $78,647; Federal Aid Rd. 68, Sect. C, Parke, Co., 149,267 cu.yd. earth excav., from Ellis & Scammahorn, Rockport, $93,179, engrs. est. $110,702; Federal Aid Rd. 74, Sect. A, Booner Co., 76,755 sq.yd. concrete, Sect. B, Boone and Clinton Counties, 56,871 sq.yd. concrete, Sect. C, Clinton and Tippecanoe Counties, 86,039 sq.yd. concrete, and Sect. D, Tippecanoe Co., 80,498 sq.yd. concrete, from J. M. Snyder, Frankfort, $155,938, $112,955, $158,333 and $152,206 respectively, engrs. ests. $178,072, $127,219, $201,048 and $178,389. Noted Dec. 20.

Mo., North Kansas City—M. H. Raming, purch. agt., City Hall, Kansas City, grading for railroad siding about ¾ mi. long, relocated electric railroad and highway about ¾ mi. long, incl 16 ft. span rein.-con. highway bridge, 18 ft., north of here, from Spitcaufsky Bros., Kansas City, $342,225. Noted Dec. 20.

Tex., Corpus Christi—Nueces Co. grading and concrete surfacing 10.09 mi. State Highway 12, Federal Aid Project 340, 18 ft., from Smith Bros., Inc., Amer. Natl. Exch. Bank Bldg., Dallas, $288,062. Noted Dec. 6.

Tex., Hemphill—Sabine Co. grading and gravel surfacing and bridging (a) timber pile trestles, (b) concrete pile trestles, on 14.69 mi. State Highway 8, Federal Aid Project 327-B, 12 ft., from George & Kerr, Lufkin, (a) $80,425 (b) $105,119. Noted Dec. 6.

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	Number of items published			
	Bids Desired		Proposed Work	
	1923	1922	1923	1922
Water-Works	569	490	1,132	713
Sewers	510	487	802	642
Bridges	374	472	457	406
Waste Disposal	30	17	42	33
Dams	26	24	80	57
Railways	21	13	180	74
Excavation & Dredging	188	164	232	215
Streets & Roads	2,163	2,098	3,098	2,184
Industrial Work	567	530	2,628	1,789
Buildings	1,548	1,510	4,861	3,749
Federal Gov't Work	483	469	272	262
Unclassified	657	632	919	668
	7,136	6,906	14,703	10,792

In addition to 7,136 jobs on which bids were desired and 14,703 items on proposed work, we published 2,278 reports of bids received and 8,900 announcements of contracts awarded.

A total for 1923 of................33,017 reports
Against the 1922 record of 27,515 reports
A gain of................................ 5,502 reports

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Streets and Roads (Continued)

Tex., La Grange—Fayette Co. grading and gravel surfacing 5.84 mi. State Highway 3-B, Federal Aid Project 285, 573 cu. yd. concrete, 43,050 cu.yd. roadway, 26,583 cu.yd. borrow, 4,320 cu.yd. loose and 12,090 cu.yd. solid rock excav., 41,772 lb. reinforcing, etc., from W. H. Davis, 518 Burnett St., San Antonio, $96,209; 17,571 cu.yd. gravel to be furnished by county. Engrs. est. $99,822. Noted Dec. 13.

Calif., Glendale—City, improving Sycamore Canyon Rd., California Ave., etc., 758,000 sq.ft. grade, 16,750 sq.ft. B curb, 32,480 sq.ft. concrete gutter, 476,000 sq.ft. asphaltic concrete base with 1½ in. National surface, three culverts and water piping (latter item, about $13,000), from Thompson & Heuser, Loew State Bldg., Los Angeles, $194,124.

Calif., Los Angeles—Bd. Pub. Wks., grading Alvarado St. between Glendale and Ocean View Aves., from W. Liddington, 420 East 60th St., lump sum grading $14,990. 28,754 ft. asphalt pavement $0.30, 447,856 ft. 7 in. concrete pavement $0.265, 18,559 ft. of 6 in. concrete pavement $0.23 8,000 ft. bituminous pavement $0.12, 870 ft. curb $0.70, 485 ft. gutter $0.32, 2,142 ft. house sewers $1.40, storm drain $350, sanitary sewer $2,478. Noted Dec. 20.

CONTRACTS AWARDED

Massachusetts—Dept. Pub. Wks., Div. Highways, Boston, paving 15,770 ft. highway, 18 ft., in Norwood and Walpole, rein.-con., to Alco Contg. Co., 73 Tremont St., Boston, $203,130; 12,712 ft., 18 ft., in Lenox, rein.-con., to C. W. Blakeslee & Sons, 58 Waverly St., New Haven, Conn., $154,017; 5,000 ft., 18 ft., in Plymouth, bituminous macadam, to R. H. Newell Co., Main St., Uxbridge, $47,595; 34,237 ft. in Nantucket, resurfacing and widening, bituminous concrete, to M. M. Roach, East Bridgewater, $100,115. Noted Dec. 13.

Conn., New Britain—State Bd. Educ., Hartford, grading and laying concrete walks around new Normal School, here, to Battaglia & Leardi, 737 West Main St. Engrs. est. $30,000. Noted Dec. 6.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, asphalt repaving Throop Ave. and Empire Blvd., to Sicilian Asphalt Paving Co., 41 Park Row, New York, $22,024 and $29,725 respectively. Noted Dec. 6.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving Liberty Ave., permanent asphalt on 6 in. concrete, to Borough Asphalt Co., 1301 Metropolitan Ave., $82,270. Noted Jan. 3.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, etc., for width of 60 ft. centrally located Neill Ave. from Bronxdale to Matthews Aves., for its full width from Matthews to Paulding Aves., to I. F. Cavaluzzo, 1538 Walton Ave., $31,350. Noted Jan. 3.

Pennsylvania—State Hy. Dept., Harrisburg, constructing 13,453 ft. Route 187 Sect. 4A, Westmoreland Co., and 25,693 ft. Route 187 Sect. 4B, Westmoreland Co., to Corrado & Galliardi, Connellsville, $146,702 and $261,844 respectively; 18,421 ft. Route 54, Indiana Co., to M. Bennett & Sons, Indiana, $201,989; 16,948 ft. Route 109, Application 2678 and 2710, Greene Co., to S. Gamble Co., Glass St., Carnegie, $227,097; 1,805 ft. Route 180, Delaware Co., to Juniata Co., Empire Bldg., Phila., $33,124; 7,424 ft. Route 1, Application 2136 Northumberland Co., to Reitz Bros., Sunbury, $52,024; 4,151 ft. Application 4151, Jefferson Co., to G. I. Thompson Co., Clearfield, $39,710; 10,530 ft. Route 204, Beaver Co., to W. S. Morrison, New Brighton, $119,816. Noted Dec. 20.

Pa., Waynesburg—Greene Co., 11,050 ft. rein.-con. on Holbrook Rd., Route 111, to E. E. Morris, Waynesburg, $165,414; 5,950 ft. Pursley Creek Rd., bituminous surface or asphalt, to Reed & Moore, Waynesburg, $71,111.

W. Va., Logan—Logan Co., grading 5 mi. road from Rum Creek to Wilburn, to E. K. Newell Constr. Co., Maysville, Ky., $34,000; 3 mi. road from Henlawson to Pecks Mill, to P. Mino Hi, Logan, $28,000.

W. Va., Wayne—Comrs. Wayne Co., grading 4 mi. road from Wayne to Kenova, to Billup & Wellman, Huntington, $39,500.

Fla., Miami — City, 15,486 sq.yd. bituminous macadam paving and grading, 21,844 lin.ft., curbs and gutters, to J. J. Quinn, Miami, $27,055. Noted Dec. 6.

Fla., Tampa—Hillsborough Co., to Gone Bros., Tampa, grading and paving with 2½ in. asphalt blocks 6,450 lin.ft. Lacon, San Juan Ferdinand, Algoma, Dunwoodie, Ravislow, Aquacoome and Mardotum Rds., 20 ft., 11,480 sq.yd. wood block, engrs. est. $28,000, 9,100 ft. Roosevelt Rd., 24 ft., 20,250 sq.yd. asphalt blocks, engrs. est. $50,000 and 2,375 lin.ft. San Pedro, Obispo and Grandad Rds., 20 ft., 13,126 sq.yd. asphalt block, engrs. est. $30,000. Unit prices on all projects as follows: earthwork $0.49 per cu.yd., concrete curb and gutter, $1.24 per lin.ft., rock base $0.84 sq.yd., 2½ in. asphalt blocks $2.29 sq.yd., 4 in. subdrain $0.59 lin.ft., 6 in. subdrain $0.62 lin.ft. Noted Dec. 18.

Fla., Vero—Grading and paving 8 mi., asphalt treated macadam, to H. L. Clark & Sons, Vero, $228,000.

Alabama—State Hy. Dept., Montgomery, grading and graveling 8.3 mi. highway 20 ft., from Brown Station to Uniontown, Perry Co., to W. C. McCoy, La Fayette, $110,781.

La., New Orleans—Bd. Port Comrs., New Court House Bldg., concrete floor slab grading and paving at Claiborne Ave. landing, to J. Reiss, Carondelet Bldg., $155,635. Noted Jan. 3.

Mississippi — State Hy. Dept., at engineers office, Jackson, concrete paving 150,000 yd. highway from Yazoo Co. line, Midnight to Belzoni, to S. A. Gano, Maison Blanche Bldg., New Orleans, La., $2.04 per yd., total $306,000.

Ky., Pikeville—Pike Co. grading 9 mi. road from The Forks to Grapevine Creek, to Eagle Constr. Co., Pikeville, est. cost $75,000. Noted Dec. 6.

Ky., Pikeville—Pike Co. grading 4½ mi. road from here to Phelps, to H. M. Waugh, Bluefield, W. Va. Est. cost $40,000.

O., Toledo—Lucas Co., Court House, concrete paving, 14,475 sq.yd. Howard Rd., 6,360 sq.yd. Richards Rd., and 13,380 sq.yd. Deveaux Park Rds., to F. Judge, Vassar Dr., $43,369, $17,428 and $44,905 respectively; 1546 sq.yd. Evens St. and 1,900 sq.yd. Macomber St., to J. Horan, Valentine Bldg., $6,173 and $8,114 respectively. Noted Dec. 13.

Ill., Duquoin—Grading and rein.-con. surfacing approximately 9,000 ft. South Washington St., etc., 30 ft., to Southern Illinois Quarry and Constr. Co., Murphysboro, $97,231.

Michigan—State Hy. Dept., Lansing, grading 4.655 mi. State Trunk Line Rd. 35-5, Sect. B-2, Marquette Co., to M. J. Bacco, Iron Mountain, 29,400 cu.yd. excav. $0.57, 452 cu.yd. 1:2:4 concrete $28, 30 cu. yd. 1:3:6 concrete, $26, etc., total $51,216.

Wyo., Cheyenne—Paving streets in Dist. 4, with 6 in. concrete base and 3 in. bituminous top, and with 6 in. base and 2 in. top, to A. H. Read Co., Omaha, Neb., $329,232. Engrs. est. $400,000.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, to Higgins-Wall-Dyer Constr. Co., International Life Bldg., concrete curbing and refined asphalt paving Magnolia Ave., Pearl, North Magnolia and South Magnolia Sts $27,687, St. Louis Ave. $28,656, Compton Ave. $3,917, Dewey Ave. $12,886, Ray Ave. $9,521, Keokuk Ave. $11,271, Henry St. $6,582, Lansdowne St. $25,916, Marmaduke St. $24,511, Smiley Ave. $17,632; to Granite Bituminous Paving Co., Ry. Excn. Bldg., Kingsbury St. $9,121. Noted Jan. 3.

Tex., Houston—Paving and widening McKinney Ave. from Chenevert to Belt Sts. and Terminal R.R., Uvalde rock asphalt, to Uvalde Paving Co., West Bldg., Houston, $75,942; paving Bell St. from Louisiana to Crawford Sts., warrenite bitulithic, to Gulf Bitulithic Co., Kress Bldg., $59,670. Noted Jan. 3.

Tex., McKinney—Collin Co., grading and surfacing with rein.-con. 6.19 mi. State Highway 6, Federal Aid Project 402, 18 ft., to Tibbetts Constr. Co., 209 West 8th St., Ft. Worth, $220,119. Engrs. est. $263,040. Noted Dec. 27.

Tex., Marlin—Falls Co. grading, gravel surfacing and concrete paving 1.84 mi. State Highway 2, 18 ft., to P. M. Skinner, Reiger St., Dallas, $59,684. Noted Jan. 3.

Okla., Marlow—Concrete paving 14 blocks city streets, to Stephens County Constr. Co., Marlow, $60,001.

Okla., Sapulpa—Grading and paving 6 blocks Hickory St., 6,300 sq.yd. concrete, 3,800 lin.ft. curbing, 2,400 cu.yd. excav., to Klinglesmith Constr. Co., Drumright, Okla., $30,481.

Calif., Los Angeles—Improving Hi-Point St. between Pico and Airdrome Sts., to Chalmers & Ford, H. W. Hellman Bldg., grading, (lump sum) $14,851; 153,194 sq. ft. oil and roll $0.06, 11,183 ft. curb $0.60, 23,648 sq.ft. concrete gutter, $0.32 ft., etc., total $48,500.

Calif., Los Angeles—Los Angeles Co., improving Orange and Olive Aves. 5,000 cu.yd. concrete, 175,000 lb. steel, removing 2,000 sq.ft. old pavement, 2,000 cu.yd. gravel for shoulders, to Basich Bros., 2103 West 28th St., Los Angeles, $43,295.

Calif., San Diego—Common Council, (1) improving Redwood, Spruce, 3rd and Front Sts. (2) paving 1st, 2nd and 3rd Sts., to Griffith Co., 25 14th St., (1) $21,628 (2) $55,541; (3) paving Girard St. and Coast Blvd., (4) paving Maryland St. between Madison and Vanburen, to G. R. Daley 4430 Boundary St., (3) $35,467 (4) $20,945. Noted Jan. 3.

Calif., San Diego—Improving 24th, 25th and B Sts., 253,819 sq.ft. paving, eight 8 in. cement concrete sewer laterals, 746 lin.ft. cement concrete curbing, to Griffith Co., 25 14th St., $42,467; improving Louisiana St. between Upas and Lincoln, 139,576 sq.ft. paving with 1½ in. asphalt concrete top on 3 in. bituminous base, seven 6 in. and five 4 in. cement concrete sewer laterals, etc., to G. R. Daley, 4430 Boundary St., $26,282. Noted Dec. 27.

Calif., Stockton — C. Moreing & Sons, (owners and paving contractors), Commercial & Savings Bank Bldg., will pave streets west of Oxford St. adjoining Yosemite Lake, by day labor. $175,000 to $200,000.

Industrial Works

PROPOSED WORK

Mass., Cambridge (Branch of Boston)—Factory—J. F. Linchman, 33 Edinboro St., Boston, rejected bids 5 story and basement, 100 x 150 ft., rein.-con. and brick, wood pile foundation, here. Project abandoned. Noted Dec. 20.

R. I., Cranston—Factory—Hill & Lacross, 1198 Pontiac Ave., plan large braid manufacturing mill, Reservoir Ave. Will mature in spring. Engineer and architect not selected.

Conn., Hartford—Garage and Loft—J. Rome, 59 Adams St., plans 2 or 3 story, brick and steel, plain foundation, Ann St. $55,000. F. C. Waltz, Trumbull St., archt.

Conn., Hartford—Printing, etc.—Catholic Transcript, State St., plans 3 story, 60 x 110 ft., brick and steel, plain foundation, Asylum Ave. $150,000.

Conn., Jewett City—Substation—Eastern Connecticut Power Co., Williams St., New London, plans 3 story, brick and steel, plain foundation, here. $60,000. Private plans.

Conn., New London—Storage—L. Lubchansky, 45 Howard St., takes bids about Jan. 12, 3 story, 40 x 100 ft., brick and steel, plain foundation, Howard St. $50,000, F. De Gange, 28 Ocean Ave., archt. Noted Nov. 29.

Conn., Stamford—Shed—New York, New Haven & Hartford R.R., New Haven, plans repair shed, sheet metal, plain foundation, here. $60,000. E. Gagel, ch. engr.

Conn., Torrington — Factory — Fitzgerald Mfg. Co., North Main St., plans 2 story, 110 x 200 ft., North Main St., $70,000. Private plans.

N. Y., Batavia—Plant—Western New York Utilities Co., Inc., plans power plant on 2½-3 acre site, Franklin St. H. K. Stein, supt.

N. Y., Binghamton—Factory—Cloverdale Farms Co., 60 Exchange St., plans 3 story, 60 x 100 ft. factory. $150,000 incl. equipment. Engineer and architect not announced.

N. Y., Cohoes—Plant—Cohoes Power & Light Co., 45 North Mohawk St., had plans prepared aditional unit of 14,000 hp. capacity to present 40,000 hp. 4 unit hydro-electric plant. C. A. Davis, vice pres. and genl. mgr. Private plans.

N. Y., Horseheads—Shop—See "Unclassified."

N. Y., Lackawanna (Buffalo P. O.)—Garage—J. W. O'Connor plans 2 story, 150 x 200 ft., rein.-con. and brick, Ridge Rd. $50,000.

N. Y., Poughkeepsie—Plant—Ford Motor Co., Highland Park, Detroit, Mich., having plans prepared power plant, here. $250,000. Private plans.

N. J., Hutchinson Mill (Mercerville P. O.)—Pottery—T. Maddocks Sons Co., Perry St., Trenton, plans several buildings, here. $500,000.

Pa., Edgely—Power Plant—Phila. Suburban Gas & Electric Co, Washington Sq., Phila., plans large power plant, here.

Pa., Pittsburgh—Factory—Zang Lesher Corp., 5474 Penn Ave., plans 1 story, 74 x 106 ft. brick factory. $40,000. Private plans.

W. Va., McMechen — Plant — Standard Slag Co., Steubenville, O., plans cement plant, here, to exceed $40,000.

Fla., Miami—Garage—Ungar Brick Motor Co., plans 84 x 200 ft. $60,000. Pfieffer & O'Reilly, Lemon, engrs.

Fla., South Jacksonville (Branch of Jacksonville)—Electric Light Plant—Plans to build and equip electric light plant. $125,000.

Tenn., Chattanooga—Plant—International Harvester Co. plans addition to factory, Chester St. To exceed $40,000.

Industrial Works (Continued)

Tenn., Knoxville—Garage—Clinch-Locust Garage Co. plans 2 story, 70 x 120 ft., concrete and steel, West Clinch Ave. $75,000.

Tenn., Knoxville—Plant—Stone Fizz Co. of America, 1107 Chestnut St., Chattanooga, plans 1 story, 150 x 180 ft. bottling plant, here. $50,000.

Tenn., Nashville—Foundry—Gray & Dudley Co., 222 3rd Ave., plans addition to foundry. $50,000.

Tenn., Nashville — Plant — Cumberland Presbyterian Publishing Co., plans plant on 8th Ave. $40,000.

Ky., Louisville—Foundry and Factory—Standard Sanitary Mfg. Co., 6th and A Sts., having plans prepared by Joseph & Joseph, Francis Bldg., 4 story and basement, 160 x 450 ft., rein.-con., 7th St. $750,000. Foregoing is first unit of recent plan for $1,500,000 plant. Noted Nov. 22.

Ky., Louisville—Garage and Apartment—Consolidated Realty Co., 229 5th St., plans 3 story, 60 x 100 ft., 428 West Chestnut St. $50,000.

Ky., Louisville — Warehouse — Inland Waterways Co., 316 West Jefferson St., plans 100 x 180 ft., brick, on river front. $100,000.

Ky., Louisville — Warehouse — Reynolds Tobacco Co., Swan and Kentucky Sts., plans 1 story brick, 728 South 28th St. $42,000.

O., Canton—Plant—Daily News Printing Co. plans 3 or 4 story, 67 x 200 ft., brick, concrete and steel, 5th St. and Market Ave. S. J. Cox, Dayton, owner.

O., Cincinnati—Factory—A. Nash Co., 1916 Elm St., plans rein.-con., on lot 177 x 330 ft., McMicken Ave. $1,500,000. Engineer and architect not selected.

O., Cleveland—Factory and Warehouse—Frankelite Co., c/o D. Frankel, vice-pres., 5016 Woodland Ave., having new plans prepared by A. Sogg, 319 Hippodrome Bldg., 3 story and basement, 56 x 130 ft., brick and steel, East 51st St. $75,000.

O., Cleveland—Factory and Warehouse—General Power Constr. Co., 1603 East 27th St., had plans prepared by Hadlow, Hick & Co., Finance Bldg., 1 story and basement, 60 x 87 ft., brick, 1603 East 27th St. $40,000.

Ind., Hammond—Erie R.R., 50 Church St., New York City, plans new terminal freight system, in and around Hammond. Includes new yards and 9 mi. trackage between here and Griffith, and creation of new town site for employees, etc. To exceed $50,000. R. C. Falconer, ch. engr.

Ind., Muncie—Factory—Hinde & Dauch Paper Co. plans to rebuild plant recently destroyed by fire. $40,000.

Wis., Appleton — Garage — Kurz Motor Car Co., 1107 College Ave., having plans prepared by E. A. Wettengel, 578 Pierce Ave., 2 story, 40 x 75 ft. and 40 x 50 ft., brick and concrete, plain foundation. $40,000.

Wis., Milwaukee — Factory — Milwaukee Air Power Pump Co., 8 Keefe Ave., having plans prepared by Erick Schroeder Co., engrs. and archts., 405 Bway., 1 story, 40 x 62 ft. addition, brick and timber, plain foundation. $40,000.

Wis., Milwaukee — Plant — Pittsburgh Plate Glass Co., 205 Lake St., had revised plans prepared and soon takes bids 5 story and basement, 92 x 140 ft., brick and concrete, plain foundation. $300,000. Kirchhoff & Rose, 221 Grand Ave., archts.

Wis., Watertown—Factory—Rock River Paper Co., c/o W. C. Stone, Bank of Watertown Bldg., plans 1 story, 80 x 180 ft., concrete factory, plain foundation. $40,000. Engineer and architect not selected.

Ia., Cedar Rapids—Plant and Office—Gazette Co., c/o V. Marshall, 1st Ave. and 1st St., having plans prepared 3 story and basement, 40 x 140 ft., rein.-con, brick, tile and Bedford stone, 3rd Ave. and 5th St. Est. $90,000. Private plans.

Ont., Morrisburg—See "Unclassified."

Ont., Sarnia — Plant — Dominion Alloy Steel Corp., Royal Bank Bldg., Toronto, plans 1 and 2 story, rein.-con., brick and steel, plain foundation, here. $5,000,000. R. D. Nye, 410 Royal Bank Bldg., Toronto, engr.

Alta., Edmonton—Plant—Canada Creosoting Co., 1005 Canadian Pacific Ry. Bldg., Toronto, preparing plans 60 x 120 ft. concrete and steel plant. $150,000. Private plans.

Wis., Racine—Foundry—Belle City Malleable Iron Co., Kewaunee St., had plans prepared by P. M. Adams, archt., c/o owner, 1 story, 117 x 300 ft., second unit of foundry, brick and steel. Noted Nov. 15.

Minn., Duluth—Plant—Dominion Tar & Chemical Co., 171 St. James St., Montreal, Quebec, plans saturation plant at foot of 59th Ave. W., here. $100,000. J. Buchanan, c/o owner, engr.

Minn., Owatonna — Plant — City having plans prepared by Jacobson & Jacobson, 125 Auditorium Bldg., Minneapolis, power and central heating plants. $350,000. A. L. Mullergren, Gates Bldg., Kansas City, Mo., engrs.

Minn., St. Paul—Garage—Piper & Drake Co., 809 1st Natl. Soo Line Bldg., having plans prepared by A. M. Lindell, 319 Meyers Arcade, Minneapolis, 1 story, brick and concrete, Smith Ave. and Chestnut St. $75,000.

Tex., Dallas—Plant—Guiberson Corp., Pennsylvania St., plans oil well machinery manufacturing plant, on Forest Ave. along tracks Missouri, Kansas & Texas R.R. $50,000. Engineer not announced.

Tex., Dallas—Plant—Leachmans Laundry, South Harwood and Hickory Sts., having plans prepared by C. D. Hill & Co., Sumpter Bldg., 1 story, brick and concrete addition. $45,000 incl. machinery.

Tex., Omaha—Mill—H. M. Farrier plans 10,000 spindle cotton mill. $100,000.

Colo., Denver—Broadcasting Station—General Electric Co., River Rd., Schenectady, N. Y., authorized construction 250 x 300 ft. broadcasting station, equipment to include 2 steel towers 150 ft. high to support aerial, 2 story, 55 x 60 ft. studio building, brick and 1 story, 25 x 70 ft. power plant, brick, here. Bids for erection of towers, and construction 2 buildings incl. steel, will probably be received shortly by H. D. Randall, United States Natl. Bank Bldg., dist. mgr.

Calif., Azusa—Paramount Motors Corp. plans factory, here. To exceed $1,000,000. F. S. Lack, California Bank Bldg., Los Angeles, pres.

Calif., Fresno — Plants — Benham Ice Cream Co., 1420 H St., plans 2 plants in San Joaquin valley. To exceed $40,000.

Calif., Los Angeles—Factory—Los Angeles Soap Co., 633 East 1st St., having plans prepared by Morgan, Walls & Clements, Van Nuys Bldg., 4 story, 130 x 130 ft., rein.-con. factory. $175,000.

Calif., Los Angeles—Factory—Commercial Fixture Co., 914 South Alameda St., plans factory. $50,000.

Calif., Los Angeles—Garage—K. O'Mara, c/o A. C. Martin, archt., Higgins Bldg., having plans prepared 3 story, 60 x 150 ft., rein.-con., Grand Ave.

Calif., Los Angeles—Printing Plant—Evening Herald Publishing Co., 136 South Bway., had plans prepared by Morgan, Walls, Clements, Van Nuys Bldg., 3 story and part basement, 100 x 200 x 282 ft. rein.-con. and brick, Trenton St.

Calif., Marysville — Garage, Warehouse and Shop—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans garages, shops, warehouses, etc., on A St., here. To exceed $40,000. Private plans.

Calif., Oakland—Warehouse—Barrett & Hilp, 918 Harrison St., San Francisco, having plans prepared by Schirmer-Bugbee Co., Thayer Bldg., 4 story and basement, fireproof, downtown section. $65,000.

Calif., Sacramento—Car Barns and Machine Shops—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans car barns and machine shops, 28th and M Sts., here. $100,000. Private plans.

Calif., San Francisco—Garage—Cowell Estate Co., 2 Market St., having plans prepared by H. Meyers, Kohl Bldg., 3 story and basement, rein.-con., Embarcadero. $130,000.

Calif., San Francisco — Laundry — L. R. Lurie, 315 Montgomery St., had plans prepared by O'Brien Bros., Inc., 315 Montgomery St., 2 story brick, 21st St. $50,000.

Calif., San Francisco — Sub-Station — Pacific Gas & Electric Co., 445 Sutter St., plans additions to various sub-stations. $275,000. Private plans.

Calif., Santa Ana—Warehouse—Richards Trucking & Warehouse Co., plans warehouse, fireproof construction. $50,000 or more.

Calif., Santa Paula—Plant—Santa Paula Citrus Assn., had plans prepared by Allison & Allison, archts., Hibernian Bldg., Los Angeles, for 1 story, 150 x 350 ft., rein.-con. $125,000 or more.

Calif. Ventura — Garage — Cerfoglio & Bogetti, c/o A. C. Martin, archt., Higgins Bldg., Los Angeles, having plans prepared 1 story and basement, 100 x 125 ft., brick.

Ont., Ft. William—Pulp Mill—Ft. William Paper Co. plans rein.-con. addition to pulp and paper mill. $3,000,000.

Ont., Hamilton—Plant—Canadian Westinghouse Co., Traders Bank Bldg., Toronto, having plans prepared by B. H. Prack, 50 Bay St., Toronto, 1 and 2 story rein.-con., brick and steel, plain foundation. $1,500,000.

Ont., Niagara Falls—Cannery—Dominion Canners Ltd., plans cannery. $40,000. Private plans.

Ont., Oshawa—Plant—Hambly Bros. plan artificial ice plant. $50,000.

Ont., Port Arthur—Paper Mill—Provincial Paper Mills, Ltd., 56 University Ave., Toronto, plans to enlarge paper mill from 20 to 40 tons per day. $200,000. Private plans.

Ont., Toronto — Garage — City having plans prepared by G. W. F. Price, city archt., City Hall, 2 story, rein.-con., brick and steel garage, plain foundation, River St. $100,000.

BIDS DESIRED

Conn., Oakville — Factory — Fletcher-Thompson, Inc., archts. and engrs., 542 Fairfield Ave., Bridgeport, taking bids 4 story, 60 x 138 ft. addition, rein.-con. and brick, plain fondation, for Autoyre Co., here. $100,000.

N. Y., Ray Brook—Cold Storage Plant—. an. 31, by F. Erdwurn, pres. Bd. Trustees New York State Hospital for Care of Incipient Tuberculosis, Ray Brook, 2 story and basement, 44 x 109 ft., rein.-con. and steel.

Pa., Phila.—Assembly Plant—Jan. 17, by A. Kahn, archt., 1,000 Marquette Bldg., Detroit, Mich., 1 story, 301 x 1,160 ft. brick and steel, plain foundation, 63rd St. and Schuylkill River, for Ford Motor Co., Highland Park (Detroit P. O.). $5,000,000. Noted Oct. 4.

Pa., Phila.—Mill—Jan. 17, by E. A. Stopper, archt., Fuller Bldg., 2 story and basement, 66 x 105 ft., rein.-con. and brick mill, Allegheny and Boudenot Sts., for Concordia Silk Mills, Allegheny and Boudenot Sts. $100,000. Noted Dec. 27.

Pa., Pittsburgh—Plant—Phillips Mine & Mill Supply Co., 2227 Jane St., taking bids remodeling and repairing 2 story, 47 x 121 ft. plant after fire, new brick walls, steel beams and trusses, new floors, etc., South 23rd St. $100,000.

Ky., Louisville—Factory—Highway Iron Products Co., Ligonier, Ind., taking bids and opens same about Feb. 5 (extended date) 1 story, 120 x 200 ft., here. $106,000. Joseph & Joseph, Francis Bldg., archts. Noted Dec. 13.

Ky., Louisville—Plant—Ford Motor Co., Detroit, Mich., receiving bids and opens same about Jan. 12, structural steel for $1,000,000 assembly plant to be built here. To exceed $100,000. A. Kahn, Marquette Bldg., Detroit, Mich., archt.

O., Columbus—Cattle—Jan. 30, by Dept. Agriculture State Authentics, 1 story and basement, 300 x 350 ft., steel, brick and concrete, Fair Grounds. $140,000. R. S. Harsh, Ohio Hartman Bldg., archt.

O., Toledo—Bakery—Holland Bread Co., taking bids 3 story and basement, 133 x 265 ft., rein.-con. and brick, plain foundation, Summit St. $200,000. Mills, Rhine, Bellman & Nordhoff, Ohio Bldg., archts.

Ill., Duquoin—Garage—Sims Motor Car Co., 19 North Division St., receiving bids 1 story, 100 x 175 ft., brick and concrete, $40,000. T. S. Thompson, 1000 South 10th St., Carbondale, archt.

Ark., Hot Springs—Garage—M. J. Henderson, et al. c/o Arkansas Trust Co., taking bids on sub contracts for 3 story, 110 x 159 ft., rein.-con., and brick garage. $50,000. S. M. Frank, 540 Valley St., archt.

New Zealand, Wellington—Powerhouse and Plant—May 21 (extended date) by Secretary Pub. Wks. Bd., Sect. 2 power house and plant of Arapuni Electric Power Scheme; adv. E. N.-R. Jan. 10. Noted Dec. 6.

CONTRACTS AWARDED

Mass., Taunton—Dept. Pub. Wks., one 15 x 18 ft. and one 30 x 50 ft. tower for power plant, to L. M. Witherell & Son, 29 Court St., $50,695. Noted Nov. 29.

R. I., Pawtucket — Factory — Pressed Metal Co., 1 story, 110 x 265 ft., brick and steel, plain foundation, Campbell St., to Rowley Constr. Co., Central Ave. Archts. est. $115,000.

R. I., Pawtucket — Mill — Halliwell Co., Blackstone Ave., 3 story mill addition, and 1 story dyehouse, brick and timber, plain foundation, Blackstone Ave., to Cruise Constr. Co., Pawtucket. Archts. est. $40,000.

Conn., Bristol—Factory—Standard Vulcanizing & Retreading Co., 159 School St., 3 story, 40 x 60 ft. brick and steel, plain foundation, School St., to F. Lagase, 20 Earl St. Archts. est. $45,000.

Industrial Works (Continued)

Conn., Hartford—Storage—Eastern Provision Co., State St., 2 story, brick and steel, plain foundation, State St., to C. P. Waterman, Inc., 43 Farmington Ave. Archts. est. $40,000. Noted Dec. 13.

Conn., Hartford—Storage—Fuller Brush Co., Windsor Ave., 2 story, 50 x 200 ft., brick and steel, plain foundation, to R. G. Bent Co., 183 Ann St. Archts. est. $50,000. Noted Dec. 13.

Conn., New Britain — Factory — Amer. Hardware Corp., Park St., altering building 99, adding one story, etc., Chestnut St., to W. H. Allen Co., Inc., Hungerford St. Archts. est. $60,000.

Conn., New Britain—Factory—Hart & Cooley Co., Corbin Ave., 2 story, 60 x 75 ft., brick and steel, plain foundation, to C. L. D. Co., 87 West Main St. Archts. est. $40,000.

Conn., New Britain—Garage and Salesroom—L. A. Oldershaw, archt., 259 Main St., 1 and 2 story, 70 x 100 ft. rein.-con., brick and steel, plain foundation, Arch St., to Hays Constr. Co., 9 Court St. Archts. est. $40,000. Owners name withheld.

Conn., New Haven—Warehouse—New Haven Dairy Co., 201 Hazel St., 2 story, 70 x 75 ft., brick and timber, plain foundation, to M. J. Gibbud Co., 100 Water St. Archts. est. $40,000.

Conn., Waterbury—Storage—F. Pepe, 42 Canal St., will build storage plant, etc., Bank St., by day labor. Archts. est. $60,000. T. M. Freney, 51 Leavenworth St., archt. Noted Dec. 20.

N. Y., Albany—Foundry—Cox Brass Mfg. Co., Van Woert and North Pearl Sts., will build 1 story, 65 x 84 ft., brick and timber addition, plain foundation, by day labor. $42,000. Private plans.

N. Y., Brooklyn—Garage—D. Schneider, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 1 story, 100 x 200 ft., rein.-con., brick and steel, plain foundation, Henry St., by day labor. $50,000.

N. Y., Buffalo—Warehouse—W. L. Marcy, Erie Co. Bank Bldg., 4 story, 100 x 200 ft., rein.-con. and brick, Swan St., to J. N. Byers & Son, 700 Main St., $150,000.

N. Y., Buffalo—Postal Sub-station and Garage—Postal Terminal Building Co., and Fletcher-Amer. Co., Fletcher Amer. Natl. Bank Bldg., Indianapolis, Ind., 2 story, 115 x 300 ft., rein.-con., brick and stone, Swan St. from Oak to Elm Sts., here, to Everitt Winters Co., 751-754 Book Bldg., Detroit, Mich. $525,000 incl. mechanical trades and equipment.

N. Y., Rome—Factory and Warehouse—Lockwood-Greene & Co., archts. and engrs., 101 Park Ave., New York City, 1 story, rein.-con. and steel factory, and 2 story, brick and steel warehouse, here, for Rome Mfg. Co., to B. S. McCarey & Co., 427 West Embargo St. Archts. est. $210,000. Noted Dec. 6.

Pa., Phila.—Plant, Boiler House, etc.—E. D. Whitaker, Emerald and West Moreland Sts., 3 story, 55 x 239 ft. plant, 1 story, 30 x 38 ft. boiler house and 3 story, 35 x 70 ft. pucker house, Sedgley and N Sts., to W. Steele & Sons, 219 North Broad St.

Pa., Phila.—Warehouse—Brodsky Bros., Richards St., 1 story, 155 x 300 ft., brick and steel, plain foundation, to Sarson & Konsar, c/o I. W. Levine, archt., 1011 Chestnut St.

Pa., Pittsburgh—Garage—Barnes Motor Co., 119 South Hiland Ave., 1 story, 42 x 127 ft. and 69 x 117 ft. garage and auto service shop, Hamilton Ave., to Conley & DeMey, 127 North Hiland Ave. Est. $46,000.

Pa., Pittsburgh—Plant—Presto Lite Co., 30 East 42nd St., New York City, altering plant, Lincoln Ave., here, to Cuthbert Bros., Bessemer Bldg. Est. $40,000.

Md., Baltimore — Substation — United Realty Co., Continental Trust Bldg., 1 story, 27 x 66 ft., concrete and brick, 313-15-17 North Payson St., to A. F. Fedeli Co., State Bank Bldg., $40,000. Noted Dec. 27.

Md., Baltimore — Warehouse — Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, general contract 1 story, 170 x 350 ft., concrete and steel, here, to B. A. Groah Constr. Co., 847 West North St., Pittsburgh. Steel will be furnished by Fort Pitt Bridge Co., Pittsburgh. $400,000. Noted Dec. 13.

W. Va., Fairmont—Sales and Garage—Central Autombile Corp., 3 story, 100 x 120 ft., rein.-con., 4th St., to Concrete Steel Bridge Co., Clarksburg. $75,000.

Ala., Birmingham—Shops—Southern R.R. Co., 105 North 20th St., addition to shops incl. locomotive repair, boilers, mill and car repair shops, power plant and other buildings, general contract to Dwight P. Robinson & Co., Inc., 126 East 46th St., New York City.

Tenn., Chattanooga — Garage — Citizens Automobile Co., 1 story, brick, to M. K. Wilson, James Bldg. Est. cost $40,000.

Ky., Henderson—Warehouse—Belt Line Warehouse Co., 1 story, 110 x 170 ft., to T. H. Overby, Henderson. $50,000.

Ky., Louisville—Factory—Amer. Woolen Co. of Kentucky, 1000 East Oak St., 3 story addition, to Turner Constr. Co., 242 Madison Ave., New York City. Est. cost $150,000.

Ky., Louisville—Transformer Station—Louisville Gas & Electric Co., 311 West Chestnut St., will build 1 story, brick, 13th and Magazine Sts., by day labor. $40,000.

O., Cleveland — Garage — Christian, Schwarzenberg & Gaeda, archts., 1900 Euclid Ave., 2 story and basement, 93 x 180 ft., brick and rein.-con., 1841 Prospect Ave., to G. A. Rutherford Co., 2725 Prospect Ave., for Private Investment Co., c/o S. Miller, 1822 Central Ave. Archts. est. $150,000. Noted Dec. 6.

Ind., Hartford City—Factory—Overhead Door Co., 1 story factory, to J. E. Clark, Hartford City. Archts. est. $40,000. Noted Dec. 27.

Ill., Chicago—Factory—Continental Can Co., 4633 West Grand Ave., 1 and 3 story, 160 x 180 x 200 x 290 ft., fireproof, 4626-54 West North Ave., to S. S. Wilson & Co., 1851 Elston Ave. Archts. est. $650,000. Noted Dec. 13.

Ill., Chicago—Factory—Washington Parlor Furniture Co., 1306 Wicker Park Ave., 2 story, 50 x 107 ft., fireproof, 1308-16 Wicker Ave., to B. Loeff & Co., 105 North Clark St. Archts. est. $75,000.

Ill., Chicago — Laundry — Chicago Wet Wash Laundry Co., 2901 Montrose Ave., 2 story, fireproof addition, to W. E. Solomon, 175 West Jackson St. Archts. est., $75,000.

Ill., Maywood — Machine and Pattern Shop—W. A. Kennedy, c/o Van Gunten & Van Gunten, archts., 26 East Huron St., 2 story, 75 x 175 ft., fireproof, 1st Ave. and 1st St., here, to Buckholz, Huxhold, 533 Elgin Ave., Forest Park. Archts. est. $40,000.

Wis., Kenosha—Factory—P. Pirsch & Co., Fairfield Ave., 1 story, 100 x 202 ft., concrete, plain foundation, to Nielson & Christensen, Racine; structural steel to Kenosha Boiler & Structural Co. Est. $60,000. Noted Dec. 27.

Wis., Milwaukee—Factory—A. Meckelburg Sash & Door Co., 760 31st St., 1 story, 60 x 80 ft., brick and timber addition, plain foundation, to Klug & Smith Co., 609 Wisconsin St. Engrs. est. $40,000.

Wis., Milwaukee—Garage—Byrne Bros. Co., 3112 Burleigh St., will build 1 story, 107 x 120 ft., brick and concrete, plain foundation, North Ave., by day labor. $50,000.

Wis., Milwaukee — Warehouse — School Bd., 10th and Prairie Sts., 2 story, 147 x 170 ft., brick and concrete, plain foundation, let in separate contracts as follows: concrete, to H. Schmitt & Son, 430 Farwell Ave., $114,682; masonry work, to W. Bucholz, 1081 Sherman Blvd., $24,500; structural steel, to C. Hennecke Co., North Pierce St., $11,914.

Wis., Milwaukee — Warehouse — Union Oil & Supply Co., 29th and Forest Home Aves., 1 story, 75 x 119 ft., brick and timber, plain foundation, Leeds Pl., to J. Weisling, 902 Vliet St. $45,000. Noted Dec. 20.

Wis., Port Washington — Warehouse — Gilson Mfg. Co. 1 story, 62 x 300 ft., brick and timber, plain foundation, to E. B. Stone, Port Washington. Archts. est. $70,000.

Ia., Dubuque—Garage—Belsky Motor Co., 6th and Iowa Sts., 3 story, 100 x 103 ft., fireproof, to A. Zwack, 1301 Central Ave. Archts. est. $200,000. Noted Dec. 13.

Minn., St. Paul — Warehouse — Central Supply Co., P. J. Frey, pres., 1514 11th Ave. S., Minneapolis, general contract 3 story and basement, 100 x 100 ft., rein.-con. and brick, University Ave. and Griggs St., here, to C. Skooglun, 502 Ryan Bldg., $80,000. Noted Dec. 27.

Neb., Omaha—Garage—I. Goldstein, 218 South 18th St., 3 story and basement, 80 x 119 ft. rein.-con. and brick, 19th and Capitol Sts., to A. Beck, 410 Keelier Bldg. Engrs. est. $100,000. Noted Nov. 8.

Tex., Athens — Plant — Hugh Drane Ice Co. electrically equipped ice plant, to Hawn Lumber & Constr. Co., Athens, approximately $40,000.

Tex., Sherman—Factory—Hardwick Etter Co., 1 story, brick, to Elliott & Wood, Sherman, $45,000 complete.

Ariz., Phoenix — Warehouse — O'Malley Investment Co., 4 story, 100 x 140 ft., rein.-con., to T. B. Stewart Constr. Co., Central Bldg., cost plus basis.

Calif., Beverly Hills—Bakery—Standard Bakeries, 1802 Hooper St., Los Angeles, 1 and 2 story, brick and hollow tile, here, to A. Johnson & Co., 1007 South Grand Ave., Los Angeles, $132,000.

Calif., Redwood City — Plant — Pacific Portland Cement Co., Pacific Bldg., San Francisco, first unit of cement plant, 4,000 piles, each 85 ft. long, factory unit consisting of two 12 ft. kilns, 240 ft. long, each 1,200 bbl. capacity, here, to Duncanson & Harrelson, Chronicle Bldg., San Francisco. Noted Sept. 20.

Calif., San Francisco—Printing Plant—A. Dulfer Printing Co., 560 Mission St., 2 story and basement, rein.-con., Howard St. near 4th St., to Barrett & Hilp, 918 Harrison St., San Francisco, $54,000.

Ont., Renfrew—Plant—Seaman, Kent Co. Ltd., 268 Wallace St., Toronto, 2 story, rein.-con., brick and steel plant, plain foundation, to Wells & Gray Ltd., Confederation Life Bldg., Toronto. $250,000.

Ont., Timmins — Electric Substation — Hollinger Consolidated Gold Mines Ltd., will build 80 x 100 ft. electric substation, concrete and tile, by day labor. $150,000. Kerry & Chace, 550 Confederation Life Bldg., Toronto, engrs.

Ont., Toronto—Plant—Gelber Bros. Ltd., 217 Richmond St. W., 7 story and basement, 100 x 150 ft. rein.-con., brick and steel, plain foundation, Richmond St., general contract to L. E. Dowling, 167 Yonge St. Archts. est. $160,000.

Buildings

PROPOSED WORK

Mass., Northampton—Hotel—Northampton Hotel Co. had plans prepared by H. L. Stevens, archts. and engrs., 522 5th Ave., New York City, brick, steel and stone, plain foundation, King and Court Sts. $500,000. S. W. Lee, pres.

Conn., Deep River — Church — Baptist Church Society plans church. $150,000. D. S. Tufts, member. Engineer and architect not selected.

Conn., Hartford — Apartment — Bartlett Brainard Co., 252 Asylum St., plans five 3 story 32 x 120 ft., brick, plain foundation, Washington St. $300,000. Private plans.

Conn., Hartford—Apartment—L. Greenshpon, 20 West St., opens bids about Jan. 12, 4 story, 90 x 140 ft., brick, plain foundation, Buckingham St. $150,000. Berenson & Moses, 30 Allyn St., archts. Noted Dec. 20.

Conn., Hartford—Church—Central Baptist Church, 219 Ridgefield St., rejected bids 3 story church, Main and Elm Sts. Archts. est. $500,000. Will readvertise. T. A. Allen, Jr., Inc., 100 Farmington Ave., archt. Noted Oct. 11.

Conn., Hartford — Home — Hebrew Old Ladies Home, 276 Washington St., plans 3 story home, Washington St. $150,000. J. Divinsky, 24 Irving St., chn. building com. Engineer and architect not selected.

Conn., Meriden—Bank—Meriden Savings Bank, East Main St., soon takes bids 1½ story, 60 x 75 ft., brick, steel and stone, plain foundation, Main and Crown Sts. $200,000. Holmes & Winslow, 1346 44th St., New York City, archts. and engrs. Noted July 12.

Conn., New Haven—Library—Yale University having plans prepared by Bertram G. Goodhue, archt., 2 West 47th St., New York City, brick, steel and stone, plain foundation, here, $4,000,000. James Gamble Rogers, 367 Lexington Ave., New York City, consult. archts.

Conn., New Haven — School — Hopkins Grammar School, 1209 Chapel St., having plans prepared by H. K. Murphy, 1 Pershing Sq., New York City, school buildings, fireproof. $400,000.

Conn., Norwich—Hospital—Backus Memorial Hospital having plans prepared by Cudworth & Thompson, Thayer Bldg., hospital. $250,000. Noted July 26.

Conn., Torrington—Business—E. Weitzen, 39 Water St., plans 4 story, Main St. $150,000. Architect and engineer not selected.

Conn., Wallingford — Chapel — Choate School, North Elm St., having plans prepared by R. A. Cram, 33 West 42nd St., New York City, 1 story, brick and stone, on Campus. $150,000.

Conn., Waterbury — Home — Southmayd Home, Inc., having plans prepared by W. A. Arnold, 34½ West Main St., Meriden, 2½ story, brick, plain foundation, Columbia Blvd. $150,000.

Buildings (Continued)

N. Y., Albany—College—Sisters of St. Joseph plan 3 story, 75 x 250 ft., brick and steel, plain foundation, 979 Madison Ave. $175,000. Engineer and architect not selected.

N. Y., Albany—Temple—Masonic Hall Assn. plans demolition present building and construction 5 story, 66 x 330 ft., brick and steel, plain foundation, 111 Washington St. $900,000. Engineer and architect not selected.

N. Y., Amsterdam—Schools—Voted $1,015,000 bonds new junior high school, and additions to Vrooman Ave. and 5th Ward schools. Engineer and architect not selected. Noted Dec. 6.

N. Y., Buffalo—School—Nichols School, Amherst and Colvin Sts., having plans prepared by E. B. Green & Co., 75 Niagara St., 2 story and basement, 150 x 250 ft., rein.-con. and brick, Amherst St. $200,000.

N. Y., New York—Apartment—Park Ave. and 53rd St. Corp., c/o E. D. Litchfield & Rogers, archts. and engrs., 477 5th Ave., having plans prepared 15 story, brick, steel and stone, plain foundation, Park Ave. and 53rd St. $540,000.

N. Y., New York—Institute—Natl. Bible Institute 214 West 35th St., soon takes bids 17 story, 100 x 200 ft., brick, steel and stone, plain foundation, 330 West 55th St. $1,500,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., archts. and engrs.

N. Y., New York—Office—Parlex Building Corp., c/o J. Sloan, archt. and engr., 1 Pershing Sq., having plans prepared 35 story, brick, steel and stone, plain foundation, 4th Ave. and 32nd St. $18,000,000.

N. Y., Ozone Park (Jamaica, P. O.)—Church—St. Marys Gate of Heaven Roman Catholic Church, c/o E. Perrot, archt. and engr., 233 Bway., New York City, soon takes bids brick and stone, plain foundation, 103rd Ave., here. $200,000.

N. Y., Patchogue — Club — Patchogue Lodge B.P.O.E. soon takes bids 3 story, 50 x 100 ft., brick, steel and stone, plain foundation, East Main St. $200,000. L. Jallade, 129 Lexington Ave., New York, archt. and engr.

N. J., Bordentown—Dormitory—State Bd. Educ., Trenton, rejected bids Jan. 3, 3 story, 55 x 175 ft., at Manual Training & Industrial School for Colored Youths, here. To exceed $187,000. Noted Dec. 13.

N. J., Irvington—Vocational School—Essex Co. Court House, Newark, plans school on site 122 x 455 ft., Myrtle Ave. and University Pl., here. Bonds for $250,000 will be issued. Engineer and architect not selected.

N. J., New Brunswick — Library — Trustees Rutgers College plan addition to Ralph Voorhees Library. $150,000. E. L. Tilton, 141 East 45th St., New York City, archt.

N. J., Plainfield — Y.W.C.A., 206 East Front St., having sketches made by J. T. Simpson, archt. and engr., Essex Bldg., Newark, 3 story, brick, steel and stone, plain foundation, Front St. $250,000.

Pa., East Washington—High School—Bd. Educ. having plans prepared by G. H. Schwan, Peoples Bank Bldg., Pittsburgh, 1 story and basement, 83 x 167 ft. $150,000.

Pa., Johnstown—Lodge Home—Knights of Columbus Council 467, 335 Vine St., plans 3 story and basement, 100 x 120 ft. rein.-con., brick and steel, Vine St. $150,000.

Pa., Phila.—Apartment—C. E. Oelshlager, archt., 1615 Walnut St., preparing plans 12 story and basement, 88 x 240 ft., Spruce and Broad Sts. Owner's name withheld. Former bids rejected.

Pa., Pittsburgh—Apartment—A. Rafferty, 1144 Wisconsin Ave., Dormont, having plans prepared 3 story and basement, 36 x 196 ft. brick, 5311 5th Ave. $150,000. Private plans.

Pa., Pittsburgh — Hotel — Pittsburgh Hotels Co., Wm. Penn Hotel, having plans prepared by B. Janssen, Century Bldg., 18 story and basement, 203 x 215 ft. brick, steel and stone, 6th, Grant and Oliver Sts. $6,000,000.

Pa., Windber—School—Bd. Educ. having plans prepared by H. M. Remhold, Jr., 1513 Walnut St., Phila., 2 story and basement, 56 x 162 ft. and 66 x 87 ft., brick, steel and stone, plain foundation. $150,000.

Md., Baltimore—Office and Store—Home Friendly Society Co., 1026 Linden Ave., having revised plans prepared by C. N. and N. Friz, Lexington Bldg., 3 story, brick, plain foundation, Cathedral and Centre Sts. $250,000. H. F. Doelman, 507 North Charles St., engr. Noted Dec. 13.

W. Va., Huntington — Office — Coal Exchange Bldg. Co., Inc., takes bids about Jan. 15, 14 story, 60 x 170 ft., brick, and steel, 11th St. $1,000,000. Meanor & Handloser, Robson-Prichard Bldg., archts. Noted Feb. 15.

W. Va., Parkersburg — Wholesale — Brown-Kendall Co. having plans prepared by T. T. Sansbury, Parkersburg, 6 story, Juliana St. $200,000.

Fla., Bradentown — Hotel — Manovista Hotels, Inc., plans 4 story addition, Main St., $250,000. G. R. Wallace, pres.

Fla., Okeechobee—Hotel—W. G. Conners, West Palm Beach, plans 100 room hotel, here. $200,000.

Ala., Birmingham—Court House—Jefferson Co. having plans prepared by J. B. Wheelock, Birmingham, 4 to 6 story, 6th Ave. N. E. and 20th St. Cost between $1,000,000 and $1,500,000. Address D. C. Ball, Court House.

Tenn., Knoxville—Schools—Plans election to vote on $1,000,000 bond issue for schools. L. H. Spellman, pres. Bd. Educ.

Tenn., Memphis — High Schools — City having plans prepared by Egan & Weller, Bank of Commerce Bldg., 3 story, Mississippi and Georgia Sts., $200,000; by C. O. Pfeil & G. W. Awsumb, U and P Bldg., 3 story high school, North Memphis, $300,000. L. C. Humes, pres. Bd. Educ.

Tenn., Nashville — Apartment — Prichett-Coleman Co., Stahlman Bldg., having plans prepared by Asmus & Clark, Stahlman Bldg., 8 story, Memorial Apartment, 7th Ave. N. $400,000.

Ky., Lexington—Recitation—University of Kentucky plans recitation building. $250,000. A. P. Whipple, supt. of buildings.

Ky., Louisville—High School—Bd. Educ. plans girls high school in West End section. $750,000.

Ky., Louisville—Memorial and Auditorium—Louisville Memorial Comn., City Hall, plans auditorium and war memorial. $1,250,000.

Ky., Louisville—Office—Belknap Hardware & Mfg. Co., 1st and Main Sts., having plans prepared by Joseph & Joseph, Francis Bldg., 17 story, 128 x 200 ft., brick, 4th St. near Bway. $1,500,000. Noted Oct. 11.

Ky., Louisville—Theater, Office and Apartment—Mammoth Realty Co., 608 West Walnut St., having plans prepared by Joseph & Joseph, Francis Bldg., and takes bids about Feb. 11, 6 story, 70 x 150 ft., 6th and Walnut Sts. $250,000.

O., Cincinnati—Hospital—Episcopal Hospital for Children, North Main St., Mt. Auburn, having plans prepared by Elzner & Anderson, Denton Bldg., and S. Mathews, Blymyer Bldg., 5 story, 150 x 350 ft. rein.-con., plain foundation, Burnet Ave. $500,000.

O., Cincinnati—School—Bd. Educ. having plans prepared by Elzner & Anderson, Denton Bldg., 1 story, 250 x 350 ft., rein.-con. and brick, plain foundation, Cedar Ave. $400,000.

O., Cleveland—Medical Library—Allen Memorial Library, c/o Cleveland Medical Library Assn., 2318 Prospect Ave., having preliminary plans prepared by Walker & Weeks, 1900 Euclid Ave., 3 story, concrete, brick and steel, Euclid Ave. and Adelbert Rd. $300,000. C. A. Hamann, pres.

O., Cleveland—Studio—L. Da Vinci Galleries, c/o F. W. Bail, archt., Hanna Bldg., had plans prepared 2 story and basement, 100 x 120 ft., brick, steel and stone. $150,000.

O., Columbus—Hotel—Normandie Realty Co., 259 East Long St., having plans prepared by F and Y Constr. Co., 141 East Broad St., 5 story and basement, 62½ x 100 ft., brick, concrete and terra cotta addition. $300,000.

O., Columbus—Office—Finance Co., 3rd and Rich Sts., having plans prepared 3 story, 100 x 150 ft., concrete and brick addition, 3rd St. $150,000. H. S. Darnell, mgr. Engineer and architect not selected.

O., Dayton—Store—J. G. McCrory Co., 1107 Bway., New York City, plans 4 story and basement, 50 x 198 ft., rein.-con. and stone, plain foundation, Main St., here. $250,000.

O., East Youngstown—High School—Bd. Educ. having plans prepared by Miller & Son, 408 Dollar Bank Bldg., Youngstown, new high school. Noted Sept. 20.

O., Hamilton—Academy—Notre Dame Academy, 2nd St., having plans prepared by Crowe & Schulte, Title Guaranty Bldg., Cincinnati, 4 story and basement, 100 x 119 ft., brick and stone addition, plain foundation, 2nd and Hanover Sts. $200,000.

O., Wooster—Hotel—Lincoln Hotel plans 5 story, Liberty St. $200,000. Ridley & Glazier, Federal Oil & Gas Bldg., Akron, archts.

O., Youngstown — Office — Stanley & Scheible, archts., 1301 Wick Bldg., takes bids about Jan. 15, 12 story and basement, 51 x 72 ft., steel, concrete and terra cotta, East Federal St., for Realty Guarantee & Trust Co. $500,000.

Ind., West Baden—Bath House—West Baden Hotel plans marble bath house. $200,000. F. Uric, mgr.

Mich., Detroit—Apartment—Verner, Wilhelm & Molby, archts., 602 Book Bldg., preparing plans 7 story and basement, 50 x 150 ft. concrete, brick and steel, plain foundation, West Grand Blvd. $175,000. Owners name withheld.

Mich., Detroit — Church — St. Theresa Parish, c/o Van Leyen, Schilling, Keough & Reynolds, archts., 3440 Cass Ave., having plans prepared 2 story, 60 x 170 ft. brick, steel and stone, plain foundation, DeQuincy Ave. $250,000. J. McCabe, pastor.

Mich., Detroit—Rectory—Holy Redeemer Parish, E. K. Cantwell, pastor, 1721 Junction Ave., having plans prepared by Donaldson & Meier, 1314 Penobscot Bldg., 2 story and basement, brick and steel, plain foundation, Junction Ave. $150,000.

Mich., Pontiac—School—Bd. Educ. having plans prepared by Malcomson & Higginbotham 1219 Griswold St., 2 story and basement, rein.-con., brick and steel, plain foundation. $350,000.

Mich., Grand Rapids — Office — Michigan State Telephone Co., having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, 2 story and basement, rein.-con., brick and steel, plain foundation, Division Ave. $150,000.

Mich., Kalamazoo—Church—First Methodist Episcopal Church, Lovell St., plans church on West Lovell St. $225,000 to $250,000. Engineer and architect not selected.

Mich., Kalamazoo—Church—First Presbyterian Church, South St., plans church on West South St. $300,000. Engineer and architect not selected.

Ill., Chicago—Apartment—A. V. Teisen, archt., 4804 North Kedzie Ave., preparing plans 3 story and basement, 102 x 199 ft., fireproof, Jackson St. near St. Louis Ave., $320,000. Owners name withheld.

Ill., Chicago — Commission House — Howard Building Corp., 956 West Randolph St., plans 2 story and basement, 65 x 125 ft., rein.-con., brick and steel, 1000-10 West Randolph St. Archts. est. $200,000.

Ill., Chicago—Store and Office—N. S. Schoenbrod, c/o Rissman & Hirschfield, archts., 64 West Randolph St., plans 2 story, 119 x 124 ft., fireproof, Trumbull and 26th Sts., $200,000.

Ill., Cicero—Hotel—Bartelsen & Gold c/o Dubin & Eisenberg, archts., 14 West Washington St., Chicago, plans 4 story, 91 x 126 ft., fireproof, 52nd Ave. and 54th St., here. $300,000.

Ill., Duquoin—Hotel—W. H. Owens, 12 South Mulberry St., having preliminary plans prepared by R. Z. Gill, 1328 Walnut St., Murphysboro, 6 story and basement, rein.-con., brick, stone and terra cotta. $225,000.

Ill., River Forest—Church and Parish House—Second Presbyterian Church plans 1 story, 125 x 360 ft., fireproof, Quick St. near Jackson St. $250,000. Holmes & Flinn, 8 South Dearborn St., Chicago, archts.

Wis., Marshfield—Church—First Presbyterian Congregation, c/o O. L. Block, pastor, 201 West 24th St., having plans prepared by A. A. Honeywell, 413 Pennwy Bldg., Indianapolis, Ind., brick and concrete, plain foundation. $150,000.

Wis., Milwaukee — High School — Marquette University 1115 Grand Ave., having plans prepared by Herbst & Kuenzli, 114 Grand Ave., 3 story and basement, brick, tile and concrete, plain foundation. $700,000. Noted Dec. 13.

Ia., Cedar Rapids—Store and Office—Killian Co., c/o A. L. Killian, pres., 3rd Ave. and 3rd St., East, having plans prepared by B. Rugh, Klinger Bldg., 12 story and basement, 80 x 120 ft., rein.-con., brick, tile and terra cotta, 3rd Ave. and 2nd St., East. $700,000.

Ia., Des Moines—Office—Southern Surety Co., Register and Tribune Bldg., having plans prepared by Sawyer & Watrous, 401 Hippee Bldg., 13 story and basement, 66 x 132 ft., rein.-con., brick and stone, 6th and Cobb Sts., $600,000.

Ia., Marshallton — High School — Plans election to vote on $500,000 bonds for high school. W. F. Shirley, supt. Bd. Educ.

Minn., Duluth—Hotel—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee,

Buildings (Continued)

Wis., having revised plans prepared by M. Tullgren & Sons, 425 East Water St., Milwaukee, Wis., superstructure of 11 story and basement, 142 x 150 ft., brick and concrete, here. $1,000,000 complete. Noted Nov. 15.

Minn., Duluth—Schools—Bd. Educ. plans to expend $2,500,000 on schools during 1924. Plans incl. West Duluth High School, between 45th and 47th Aves. W., $800,000; junior high school between 23rd and 24th Aves. E., $700,000-$900,000 gymnasium near Central High School; additions to Washington Junior High School and to Stowe School at New Duluth and Lowell School at Duluth Heights. $1,600,000 bond issue will soon be called, and bids on work will be called immediately after authorization of bonds. F. D. Knight, pres.

Kan., Leavenworth — City Hall — City having plans prepared by Feth & Feth, archts., Leavenworth, and takes bids about Jan. 15, 2 story and basement, 90 x 125 ft., brick and rein.-con. $200,000. Noted Nov. 8.

Kan., Wichita — Temple — York Rite Masonic Assn. opens bids about Feb. 25, 7 story, 75 x 132 ft., rein.-con. and stone. $500,000. Eberson & Weaver, 514 Orpheum Bldg., archts. Noted Dec. 20.

Kan., Winfield — College — St. Johns Lutheran College, having preliminary plans prepared by Lorentz Schmidt Co., 121 North Market St., Wichita, 2 story and basement, rein.-con., brick and stone. $185,000.

S. D., Rapid City—School—Bd. Educ. having plans prepared by Perkins & McWayne, Paulton Blk., Sioux Falls, 2 story and basement, rein.-con., brick and tile. $275,000.

Mo., Carruthersville—School—Bd. Educ., takes bids about Feb. 1, 2 story and basement, 75 x 145 ft., rein.-con. and brick. $175,000. H. H. Hohenschild, Odd Fellows Bldg., St. Louis, archt.

Mo., Kansas City—Office—Kansas City Southern Ry. Co., 11th and Wyandotte Sts., having plans prepared by McKechnie & Trask, 719 Gloyd Bldg., 2 story, 96 x 142 ft. addition to present 6 story, rein.-con., brick and terra cotta. $150,000.

Mo., Kansas City—Theatre and Office—Werby Real Estate Co., 419 Bonfils Bldg., having plans prepared by Greenbaum, Hardy & Schromaker, 216 Scarritt Bldg., rein.-con. and brick, 39th and Main Sts. $500,000.

Mo., Roaring River — Hotel—R. E. Bruner, c/o J. O. Hogg, archt., 22nd and Oak Sts., Kansas City, having plans prepared 3 story and basement, 140 x 186 ft., rein.-con. and stone, here. $150,000.

Ark., Texarkana — Office – Texarkana Natl. Bank, 102 West Broad St. soon takes bids 8 story, 25 x 140 ft., rein.-con., brick, steel and stone, West Broad St. $200,000. Private plans.

Tex., Cameron — High School — Voted $150,000 bonds for high school. A. F. Mitchell, city engr.

Tex., Cameron—School—City voted $200,000 bonds for school.

Tex., Dallas—Office—Lang & Witchell, archts. and engrs., Amer. Exch. Natl. Bank Bldg., takes bids in February, 5 story and basement, 56 x 103 ft., brick and concrete, Wood and Browder Sts., for Gunner Estate, c/o architects and engineers. $200,000.

Tex., Luling—High School—Plans election to vote on $150,000 bonds for high school. J. H. Vordenbaum, supt. Pub. Schools.

Tex., San Marcos — Schools — Defeated $200,000 bonds for schools. C. E. Rugel, San Marcos, secy. Bd. Trustees. Noted Jan. 3.

Okla., Blackwell — Memorial — City defeated $175,000 bond issue for 2 story, 125 x 160 ft. brick memorial, Main St. Smith & Senter, Okmulgee, archts. Noted Dec. 13.

Okla., Claremore — Bath House — Claremore Bath & Sanitarium Co. soon takes bids 3 story and basement, 120 x 142 ft., rein.-con. and brick, plain foundation. $200,000. G. D. Davis, Claremore, archt. Noted Oct. 4.

Okla., Muskogee — Temple — Masonic Lodge having plans prepared by Bassham & Howenstein, 702 Commercial Bldg., 2 story and basement, 120 x 132 ft., rein.-con. and Bedford stone. $150,000. Noted Nov. 22.

Okla., Oklahoma City—Store—Kerr Dry Goods Co., 226 West Main St., had preliminary plans prepared by W. T. Schmitt, 1634 West 10th St., 8 story, 80 x 140 ft., rein.-con. and brick, plain foundation, Harvey St. $700,000.

Wash., Tacoma — Schools — School Bd. having plans prepared by Hill, Mock & Griffin, Perkins Bldg., grade school $180,000 and 3 smaller buildings costing $20,000 each.

Calif., Alhambra — Hotel — Community Hotel Corp., had plans prepared by R. B. Stacy-Judd, 6030 Hollywood Blvd., Los Angeles, group of hotel buildings, brick, hollow tile and mill construction. To exceed $150,000. Noted Nov. 8.

Calif., Glendale—Apartment and Store—B. C. Grossman, 246 North Brand Blvd., having plans prepared by A. F. Priest, Fay Bldg., Los Angeles, 3 story and basement, 50 x 130 ft. brick, Brand Blvd.

Calif., Hermosa Beach—Apartment—F. S. Vreeland, c/o M. Hunt, archt., Hibernian Bldg., Los Angeles, having plans prepared 7 story and basement, rein.-con. here. To exceed $150,000.

Calif., Los Angeles — Apartment — B. Hoffman, c/o Norton & Wallis, archts., 716 South Spring St., plans approximately 5 story, rein.-con., St. Paul St. To exceed $150,000.

Calif., Los Angeles—Apartment—S. L. Peiser, et al., 209 Post St., San Francisco, plans 12 story, 135 x 150 ft., fireproof, Wilshire Blvd., here. Engineer and architect not announced.

Calif., Los Angeles—Exchange—Southern California Telephone Co., 740 South Olive St., plans 9 story, 90 x 150 ft., steel frame, fireproof construction, Washington and Grand Aves. Private plans.

Calif., Los Angeles—Hotel and Store—W. E. Wellborne, et al., c/o Ashley & Evers, archts., Mortgage-Guarantee Bldg., having preliminary plans prepared 4 story, and basement, 110 x 120 ft., brick, Western Ave.

Calif., Los Angeles — Office — Citizens Mortgage Co., Loews State Bldg., having plans prepared by Noerenberg & Johnson, Los Angeles Ry. Bldg., 12 story and basement, 73 x 110 ft., rein.-con., 11th St. and Bway. $600,000.

Calif., Los Angeles—Store and Loft—Malman & Silverman having plans prepared by J. M. Cooper, Marsh-Strong Bldg., 6 story, 100 x 140 ft., rein.-con. and brick, South Los Angeles St. $250,000.

Calif., Oakland—Bank and Office—Franklin Bank & Trust Co., Syndicate Bldg., plans 10 or 12 story, fireproof construction, 13th and Franklin Sts. Engineer and architect not selected.

Calif., Redwood City—Preventorium—City and San Francisco Co. plan tuberculosis preventorium on 300 acre site, here. J. Reid, Jr., 1st Natl. Bank Bldg., San Francisco, city archt.

Calif., San Francisco — Apartment — C. Peterson, 390 6th St., plans 6 story and basement, rein.-con., California St. near Jones St. $175,000. Engineer or architect not selected.

Calif., San Francisco — Apartment — H. Shermund, archt., Hearst Bldg., preparing plans 6 story and basement, 67 x 105 ft., rein.-con., Jones St. near Turk St. $175,000. Owner's name withheld.

Calif., Wilmington—Restaurant—A. R. Gearhart, c/o Dearborn Café, Detroit, Mich., representing owners, having plans prepared by Milwaukee Bldg. Co., Wright-Callendar Bldg., Los Angeles, 2 story and basement, fireproof, Fries Ave., here. $150,000.

N. S., Halifax—Home—Halifax Co. plans 3 story, 100 x 300 ft. home, Cole Harbor. $275,000. Architect not announced.

N. B., St. John—High School—St. Johns School Bd., 1 Hazen Ave., had preliminary plans prepared by F. N. Brodie, 42 Princess St., 2 story and basement, 152 x 226 ft. rein.-con., steel and stone, plain foundation. $350,000.

N. B., St. John—School—Roman Catholic Bishop of St. John, Waterloo St., having plans prepared by Frechet & Feeney, 44 Sydney St., 3 story and basement, 93 x 126 ft. steel, brick and stone, plain foundation, Sydney St. corner of Leinster St. $200,000.

Ont., Ft. William—Collegiate—Bd. Educ. plans 3 story and basement, 20 room, rein.-con., brick and steel, plain foundation. $200,000. Engineer and architect not selected.

Ont., Mimico—High School—Bd. Educ. plans 2 story and basement, 10 room, rein.-con., brick and steel, plain foundation. $150,000. Engineer and architect not selected.

Ont., Oshawa — Collegiate — Bd. Educ. plans 3 story and basement, 25 room, rein.-con., brick and steel, plain foundation. $250,000. Engineer and architect not selected.

Ont., Toronto—Bank—Canadian Bank of Commerce, 23 King St. W., plans 3 story and basement, rein.-con., brick and steel, plain foundation, Yonge St. $150,000. Engineer and architect not selected.

Ont., Toronto—Theater—Danforth-Woodbine Theater Ltd., Danforth and Woodbine Aves., having plans prepared by J. H. Stafford, 67 Yonge St. Arcade, 2 story and basement, rein.-con., brick and steel, plain foundation, Danforth Ave. $150,000.

BIDS DESIRED

Conn., Norwalk—Church—Jan. 15, by C. C. Grant, archt. and engrs., 15 West 38th St., New York City, brick, steel and stone, plain foundation, Broad St., for 1st Congregational Church, 69 East Ave. $150,000. E. F. McGregor, pastor.

N. Y., Creedmoor (Jamaica P. O.)—Jan. 22, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 33, 222nd St. through to 224th St. from 91st Rd. to 92nd Ave., here, for Bd. Educ., 500 Park Ave., New York City.

N. Y., Jamaica—School—Jan. 22, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 116, Wren Pl. from Pohlemas Ave. to Rex Rd. and extending to Fern Pl., Jamaica south, for Bd. Educ., 500 Park Ave., New York City. Noted Mar. 29.

N. Y., Roslyn—School—Jan. 21, by Bd. Educ., brick, steel and stone, plain foundation, Walliston St. $250,000. W. B. Tubby, 81 Fulton St., New York City, archt. and engr. Noted Nov. 8.

N. Y., Rome—Employees Home—Feb. 4, by R. C. Briggs, pres. Bd. Mgrs. New York State School, Rome, 2 story and basement, 34 x 157 ft. with 34 x 49 ft. wing, rein.-con., steel and terra cotta, here. $200,000.

N. J., Lambertville—High School—Feb. 1, by School Bd., 2 story, brick and steel. $188,000. W. A. Klemann, 1st Natl. Bank, Trenton, archt. Noted Dec. 20.

N. J., Midland Park—School—Jan. 29, by Bd. Educ., brick, steel and stone, plain foundation. $200,000. F. Y. Parsons, 252 West 46th St., New York City, archt. and engr.

N. J., Millville—High School—Jan. 30, by Bd. Educ., City Hall, high school, Broad and 5th Sts. Guilbert & Bettelle, Chamber of Commerce Bldg., Newark, archts.; adv. E. N.-R. Jan. 10.

N. J., Trenton—School—Feb. 10, by Hamilton Twp. School Bd., 2 story, brick and steel addition to Kuser School. $150,000. W. A. Klemann, 1st Natl. Bank, archt.

Pa., Clairton—High School—Jan. 18, by Bd. Educ., 3 story and basement, 180 x 280 ft. brick and steel. $250,000. C. W. Bates, 77 12th St., Wheeling, W. Va., archt.

Pa., Corry—School—Bd. Educ. taking bids 2 story and basement, 120 x 167 ft. brick, steel and tile, Wright and Congress Sts. $175,000. W. G. Eckles, New Castle, archt.

Pa., Williamsport—Bank—Jan. 25, by P. A. Davis, 3rd, and Dunlop, 1713 Sansom St., Phila., altering old structure and building 5 story and basement, 51 x 109 ft. rein.-con., brick and steel addition, plain foundation, Front, 3rd and Court Sts., for 1st. Natl. Bank. $300,000.

Md., Baltimore—Apartment—Jan. 16, by H. D. Bennett, engr., 2114 Alledale St., 5 story, 90 x 112 ft., brick, plain foundation, Bateman Ave. and Hilton St., for Mont-Alto Apartments Co. $200,000.

Md., Baltimore—Bank—Jan. 15, by J. E. Sperry, archt., Calvert Bldg., altering and building 1 story, 25 x 128 ft. addition, brick, plain foundation, Howard and Saratoga Sts., for Calvert Bank, Howard and Saratoga Sts. $150,000.

O., Shelby—High School—Jan. 14, by Bd. Educ., 2 story and basement, 195 x 250 ft., brick, steel and concrete. $300,000. V. Redding, Bird Bldg., Cleveland, archt.

Ind., Bloomington — Memorial — Jan. 29 (extended date), by J. W. Craven, secy. Indiana University 3 story and basement, 40 x 280 ft., rein.-con. and stone. $330,000. Lowe & Bollenbacher, 108 South LaSalle St., Chicago, archts. Noted Nov. 15.

Ill., Chicago—Apartment—Van Gunten & Van Gunten, archts., 26 East Huron St., receiving bids 6 story, 75 x 125 ft., fireproof, 6232 Bway., for H. Weiss, c/o architects. $425,000.

Ill., Chicago—Hotel—E. M. Levin, 458 North Western Ave., receiving bids 3 story and basement, 50 x 150 ft., fireproof, 5107 Kenmore Ave., $165,000. R. Gregory, 155 North Clark St., archt.

Wis., Mayville—High School, etc.—Jan. 22, by School Bd., O. D. Naber, pres., 2 story and basement, 70 x 157 ft., high school and 1 story 80 x 200 ft., gymnasium.

Buildings (Continued)

brick, tile and concrete, plain foundation. $200,000. Noted Dec. 6.

Ia., Ottumwa — Jan. 18, by Croft & Boerner, archts., 1006 Marquette Bldg., Minneapolis, Minn., 4 story and basement, rein.-con. and brick, for Y. W. C. A. $150,000.

Mo., St. Charles—Dormitory—Jan. 14, by LaBeaume & Kline, archts., Compton Bldg., St. Louis, 3 story, 42 x 150 ft., rein.-con., brick and stone, on campus, here, for Lindenwood College. $175,000.

Tex., San Antonio—Jan. 15, by Adams & Adams, archts., 517 Gibbs Bldg., 5 story, 98 x 184 ft., rein.-con., brick and stone, Martin and Navarro Sts., for Y. M. C. A. W. E. Simpson Co., N. B. C. Bldg., engrs. Noted Dec. 6.

Tex., Vernon—High School—Jan. 30, by Bd. Educ., 3 story and basement, brick and concrete. G. A. Carlander, Amarillo, archt.

Okla., Oklahoma City—Medical, Office and Bank—Feb. 1, by Layton, Smith & Forsyth, 906 Baniff Bldg., 12 story and basement, 75 x 140 ft., rein.-con., brick and stone, for Security Natl. Bank, 109 North Bway. $800,000. Noted Dec. 27.

BIDS RECEIVED

N. Y., St. George—School—Bd. Educ., 500 Park Ave., New York, Jan. 3, P. S. 16, brick, steel and stone, plain foundation. Daniel Low Terrace through to Monroe Ave., here, from Staten Island Constr. Co., Inc., 206 Bay St., Tompkinsville. $275,256. Noted Dec. 20.

Pa., Phila.—Schools—School Bd. (1) 4 story and basement, 111 x 133 ft. 4th, George and Orianna Sts., (2) 4 story and basement, 111 x 133 ft., 6th, Carpenter and Montrose Sts., general contracts from McCloskey & Co., 1620 Thompson St., (1) $427,427, (2) $418,666; heating from W. P. McKenzie & Co., 315 South 15th St., (1) $44,118, (2) $44,116; plumbing from S. Faith & Co., Inc., 2427 Penna. Ave., (1) $27,000, Bulman Bros., 5th and Cumberland Sts., (2) $27,666.

La., New Orleans—Home—J. P. Sullivan, chn. Building Com. Elks Club, reconstructing and altering portion of clubhouse recently destroyed by fire, from R. P. Farnsworth, Canal Commercial Bldg., $172,000. Noted Dec. 6.

Calif., Los Angeles—High School—City, 2 and 3 story, 135 x 247 ft. main building; 2 story, 44 x 144 ft. domestic science and cafeteria building, brick, general contract from J. F. Atkinson, Story Bldg., Los Angeles, $238,700.

CONTRACTS AWARDED

N. H., Lebanon—Town Hall—Town Hall Com., 3 story, 60 x 175 ft., brick, concrete and steel, Main St., to H. P. Cummings Constr. Co., Ware, Mass. Archts. est. $250,000.

Mass., Boston—Apartment—S. Rudnick, 43 Tremont St., will build two 5 story, brick and stone, plain foundation, Fenway Riverway, by day labor. $350,000. G. N. Jacobs, 10 Bosworth St., archt.

Mass., Boston—Apartment—M. Seretto, 3 Tremont Row, will build 7 story, 60 x 100 ft., brick and stone, plain foundation, 90 Commonwealth Ave., by day labor. $175,000. J. T. Ball, 1 Trinity Court, archt.

Mass., Boston—Apartment Hotel—Lincolnshire Realty Co., 15 State St., 8 story, 67 x 120 ft., brick, steel and concrete, plain foundation, Charles St., to Chase & Gilbert, 185 Devonshire St. Archts. est. $270,000.

Mass., Brighton (Boston P. O.)—Apartment—W. London, 24 Milk St., Boston, will build 5 story, 118 x 120 ft., brick and steel, Commonwealth Ave., here, by day labor. $225,000. S. S. Eisenberg, 46 Cornhill, Boston, archt.

Mass., Chelsea (Boston P. O.)—High School—School Com., 3 story and basement, 200 x 230 ft., rein.-con. and brick, wood pile foundation, Crescent St., to Simpson Bros., Corp., 77 Summer St., Boston, $652,000. Noted Oct. 25.

Conn., Bridgeport—Church, etc.—Trinity Episcopal Church, Fairfield Ave. and Broad St., 1 story and basement, 69 x 144 ft., local stone and hollow tile, plain foundation, Washington Ave., to Hewitt Co., 884 Main St. Archts. est. $150,000. Noted Dec. 20.

Conn., Hartford—Office—D. A. Dunham, 199 North Beacon St., 3 story, 48 x 100 ft., also remodeling 2 other buildings, Lewis St., to Industrial Constr. Co., 721 Main St. Archts. est. $200,000. Noted Dec. 20.

Conn., Manchester—Armory—Payne & Keefe, archts., Manwaring Bldg., New London, 2 story, 75 x 150 ft., brick and steel, plain foundation, for Manchester State Guard, to G. Schreiber Sons, Manchester. Archts. est. $175,000. Noted Dec. 13.

ROAD WORK—IDAHO

Following are lowest three bids opened by Dept. Pub. Wks., Bureau of Highways, Boise, Nov. 26, for 10 mi. grading and surfacing North and South Highway, Latah Co., (A) J. A. Terteling, Moscow, (awarded contract); (B) Campbell & Barr, Moscow; (C) Ryberg-McHugh, Boise. The unit bids were as follows:

	A	B	C
13 acres clearing and grubbing	75.00	100.00	75.00
4,428 cu.yd. solid rock excavation	1.25	1.50	1.50
14,671 cu.yd. loose rock excavation	.55	.32	.55
49,314 cu.yd. earth excavation	.26	.32	.25
21,718 cu.yd. earth borrow	.28	.32	.25
5,109 cu.yd. loose rock borrow	.55	.32	.55
82,358 sta.yd. overhaul	.05	.05	.05
21,559 cu.yd. surfacing	2.20	2.10	2.20
380 lin.ft. 12 in. c.i. pipe hauling and placing	.40	.50	.60
1,692 lin.ft. 18-in. c.i. pipe hauling and placing	.50	.60	.70
58 lin.ft. 24-in. c.i. pipe hauling and placing	.70	.70	.80
26 lin.ft. 36-in. c.i. pipe hauling and placing	1.00	.80	.95
92.90 cu.yd. class A concrete	24.00	28.00	28.00
151.72 cu.yd. class B concrete	23.00	27.00	26.00
18,598 lb. reinforcing steel	.08	.10	.08
6,365 lin.ft. guard rail, type A	.50	.75	.90
282 cu.yd. loose rip rap	2.00	4.00	3.00
Pipe furnished by State	3,647.34	3,647.34	3,647.34
Signs furnished and placed by State	315.00	315.00	315.00
10 per cent engineering and contingencies	10,480.61	10,608.18	10,785.58
Extended totals	$115,287	$116,900	$118,641

N. Y., Brooklyn—Apartments—Eastern Parkway Constr. Co., c/o Shampan & Shampan, archts. and engrs., 188 Montague St., will build two 4 story, 80 x 100 ft., brick, steel and stone, plain foundation, Eastern Parkway, by day labor. $200,000 each.

N. Y., Brooklyn—Apartment—A. Kaplan, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build brick, steel and stone, plain foundation, Eastern Parkway, by day labor. $300,000.

N. Y., New York—Apartment—B. W. Axelrod, c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 50 x 100 ft., brick, steel and stone, plain foundation, 314 West 77th St., by day labor. $350,000.

N. Y., New York — Apartment — One Thousand Fifty-Eight 5th Ave., Inc., c/o M. B. Schmidt, archt. and engr., 14 East 46th St., will build brick, steel and stone, plain foundation, 5th Ave. and 97th St., by day labor. $2,000,000.

N. Y., New York — Apartment — F. S. Paterno, 200 West 72nd St., will build 14 story, 100 x 164 ft., brick, steel and stone, plain foundation, Madison Ave. and 89th St., by day labor. $1,500,000. J. Ajello, 200 West 72nd St., archt. and engr.

N. Y., New York—Apartment—M. Silverman, c/o G. F. Pelham archt. and engr., 200 West 72nd St., will build 15 story, brick, steel and stone, plain foundation, West 79th St., by day labor. $2,000,000. Noted Dec. 13.

N. J., Hightstown—Administration—Rich & Mathesius, archts., 800 5th Ave., New York City, 3 story and basement, 60 x 172 ft., rein.-con., brick and steel, plain foundation, here, to F. D. Priory, Amer. Mechanic Bldg., Trenton, for Peddie Institute. $325,000. Noted Dec. 13.

Pa., Cynwyd—Exchange—J. T. Windrim, archt., Commonwealth Bldg., Phila., 2 story and basement, 83 x 84 ft., rein.-con., brick and steel, plain foundation, Levering Mills Rd., to Monoghan & Losse, 3016 Chestnut St., for Bell Telephone Co., 17 and Parkway Sts., Phila.

Pa., Erie — Apartment — Sixth-Chestnut Co., c/o A. F. Ganowitz, archts., 811 Prospect Ave., Cleveland, O., 3 story and basement, 112 x 150 ft. brick, 6th St., to I. and B. Dolinsky Constr. Co., 2214 East 83rd St., Cleveland, O. Archts. est. $300,000. Noted Nov. 8.

Pa., Phila.—Sunday School and Church—H. W. Caster, archt., St. Girard Bldg., constructing Sunday school, and basement of church Oxford Ave. and Dyre St., to F. E. Wallace, Passyunk Ave. and Wharton St. $120,000.

Pa., Pittsburgh—Office—Fidelity Title & Trust Co., 343 4th St., converting old Academy Theatre into office building, Liberty Ave., to Cuthbert Bros., Bessemer Bldg. Archts. est. $150,000.

Md., Baltimore—School of Hygiene—Johns Hopkins Hospital, Wolfe and Monument Sts., 8 story, concrete and brick, plain foundation, Monument and Wolfe Sts., to M. A. Long Co., Guilford Ave. and Fayette St., $1,000,000. Noted Nov. 22.

W. Va., Maggie — Hospital — State Bd. Control, Charleston, general contract 2 story and basement, 45 x 201 ft., to Foreman & Putnam, Marietta, O. Est. cost $150,000.

W. Va., Morgantown—Chemistry—West Virginia University, c/o State Bd. Control, general contract 4 story and basement, 79 x 305 ft., rein.-con., brick and steel, plain foundation, to Foreman & Putnam, Marietta, O., $603,000; plumbing, heating and ventilating to J. McCrea, 529 Mosher St., Baltimore, Md., $31,541. Noted Nov. 15, 1923.

La., Shreveport—Hotel—B. S. Youree, Youree Hotel, 6 story and basement, 100 x 150 ft. concrete and brick addition, Market and Texas Sts., to Henger & Chambers, Slaughter Bldg., Dallas, Tex., $235,000.

Ky., Lexington—Church—Centenary Methodist Episcopal Church, 90 x 120 ft., Bway. and Church St., to A. Howard, Lexington. Est. cost $150,000.

Ky., Louisville—Temple—Union Labor Temple Co. Inc., 133 Main St., will build 5 story, 75 x 200 ft., Main St., by day labor. Structural steel contract to Riverside Bridge Co., Martins Ferry, O. Archts. total est. $350,000. Noted Dec. 27.

O., Barberton—High School—Bd. Educ. 4 story, brick addition, Wunderlich Ave., to M. E. Harpster, 68 Rose Ave., Akron, $240,000.

O., Cleveland—School—St. Catherines Roman Catholic Church, 3443 East 93rd St., 2 story and basement, brick, steel and concrete, East 93rd St. and Catherine Ave., to Schrader Constr. Co., Euclid-46th St. Market Bldg. Archts. est. $150,000. Noted Dec. 13.

O., Dayton—Bank and Office—Third Natl. Bank, 21 East 3rd St., 2 story (ultimately 14 story) rein.-con. and stone, plain foundation, Main St., to Industrial Building Co., 757 Reibold Bldg., $175,000. Noted Nov. 8.

O., Hartford—Grade and High School—Bd. Educ. 2 story and basement, 120 x 128 ft., brick, steel and concrete, to Katzman Constr. Co., Federal Bldg., Youngstown. Archts. est. $150,000.

O., Mansfield—City Hall—City Building Comn., 3 story and basement, 106 x 160 ft., rein.-con., brick and stone, to Boldt Constr. Co., 5902 Euclid Ave., Cleveland. $138,445. Noted Dec. 13.

O., Versailles—High School—Bd. Educ., 2 story and basement, 75 x 187 ft. with 34 x 84 ft. wing, brick and concrete, to Anderson & Hunnicutt, Union City, Ind., about $200,000.

Ind., Newport—Court House—Vermillion Co., new court house, to J. N. Goode & Co., Columbus, $265,000. Noted Nov. 29.

Ill., Chicago—Apartment—G. G. and E. O. Anders, 7401 Paxton Ave., 6 story, 146 x 147 ft., fireproof, 5472-86 Cornell St., to B. W. Constr. Co., 720 Cass St. Archts. est. $750,000.

Ill., Chicago—Apartment—G. L. Arquette, 7244 Paxton Ave., 3 story, 108 x 124 ft., fireproof, 7801-11 Kingston Ave., to Turnquist Bros. Constr. Co., 232 East 69th Pl Archts. est. $150,000.

Ill., Chicago—Apartment—C. E. Wright, c/o E. G. McClellan, archt., 7441 Cottage Grove Ave., 3 story, 124 x 138 ft., fireproof, 7800-10 Kingston Ave., to Turnquist Bros. Constr. Co., 232 East 69th Pl. Archts. est. $150,000.

Ill., Evanston—Apartment—C. F. Stewart, two 3 story, 100 x 150 ft. fireproof, one at Reba Pl. and Sherman St., other at Reba Pl. and Elmwood St., here, to Barrett Constr. Co., 155 North Clark St., Chicago. Archts. est. $200,000 each.

Ill., Oak Park—Apartment—Owner, c/o M. L. Bein, archt., 64 West Randolph St., Chicago, 3 story, 80 x 170 ft., fireproof, Randolph and Maple Sts., here, to Thogerson & Erickson, 4804 North Kedzie Ave., Chicago. Archts. est. $150,000.

Wis., Milwaukee—Temple—Golden Links Realty Co., c/o E. Weinshel, 351 East Water St., 3 story, 50 x 140 ft., brick and concrete, plain foundation, 12th St.,

Buildings (Continued)

to R. Reisinger & Co., 464 Oakland Ave. Archts. est. $150,000.

Wis., Racine—Memorial Auditorium—Memorial Hall Comn., c/o W. Horlick, Jr., pres., superstructure, 1 and 2 story, 180 x 200 ft., brick and concrete, to Bondgard & Christensen, 1135 Mound Ave., $174,500. Noted Dec. 27.

Minn., Minneapolis—Store—L. S. Donaldson Co., 6th St. and Nicollet Ave., general contract for 1st unit of $1,750,000 project, 8 story and basement, 137 x 140 x 143 ft., with 445 ft. tower, steel, hollow tile and marble, 617-29 Nicollet Ave., to Pike & Cook, 416 South 5th St.

Minn., St. Paul—Office—St. Paul Builders Exchange, 609 Ryan Bldg., 13 story, 50 x 100 ft., rein.-con., to Lovering-Longbotham Co., 312 Endicott Bldg., $550,000.

Neb., Falls City—Court House—W. F. Gernandt, archt., 1408 North 34th St., Omaha, 4 story and basement, 66 x 99 ft., rein.-con., brick, steel and terra cotta, general contract to H. Ohleson & Sons Co., David City, $163,691, for Richardson Co. Noted Nov. 22.

Mo., St. Louis—College—Washington University, Skinker Rd. and Lindell Blvd., general contract 3 story and basement, 54 x 188 ft., rein.-con., granite and stone, Campus, to Gamble Constr. Co., 612 Chestnut St. Est. cost $250,000.

Tex., Ft. Worth—Theater—Slay, Simon & Smith, W. T. Waggoner Bldg., 3 story and basement, 95 x 135 ft., brick, concrete and steel, 10th and Commerce Sts., to H. B. Friedman, 1st Natl. Bank Bldg., $150,000.

Okla., Norman — Bank — Security Natl. Bank, 2 story and basement, 50 x 140 ft., brick and steel, plain foundation, Main St., to F. A. Gross Co., 637 West Main St., Oklahoma City, $152,500.

Okla., Oklahoma City — Business — Kerr Dry Goods Co., 226 West Main St., 8 story and basement, 40 x 80 ft., rein.-con., brick and stone, to Campbell & Price, 605½ West Main St. Archts. est. $750,000.

Calif., Long Beach—Apartment—L. V. Mayell, 107 East Ocean Ave., 13 story and basement, rein.-con., Ocean Ave. near Lime St., to A. T. Hesse, Hollingsworth Bldg., Los Angeles, $1,000,00.

Calif., Los Angeles — Church — Fourth Church of Christ Scientist, brick church, Pasadena Ave., to Milwaukee Building Co., Wright-Callendar Bldg., Los Angeles, $155,-000.

Calif., Los Angeles—Hospital—A. Larsen, Consolidated Realty Bldg., 3 story and basement, rein.-con., Lake St., to H. T. Johnson Co., Bradbury Bldg., Los Angeles, $175,000.

Calif., Los Gatos—High School—Los Gatos High School Dist., general contract 2 story and basement, rein.-con., to Herndon & Finnegan, 1814 17th St., Sacramento, $148,670. Total cost $200,000. Noted Jan. 3.

Calif., San Francisco—Apartment—Reilly & Collins, c/o E. E. Young, archt., 2002 California St., 6 story and basement, rein.-con., Eddy St. near Hyde St., to M. A. Little, 535 Geary St., San Francisco, $155,000.

Ont., Gananoque—Hotel—Royal St. Lawrence Hotel, 3 story and basement, 200 room, rein.-con., brick and steel, plain foundation, general contract to Mitchell & Wilson, Gananoque. Archts. est. $200,000.

Ont., London—School—School Bd. general contract Empress Ave. School, to J. Putherbough, 396 Talbot St., $180,000. Noted Jan. 3.

Ont., Oshawa—High School—Bd. Educ., 2 story and basement, 20 room, rein.-con., brick and steel addition, plain foundation, to Gay Bros., Oshawa, $194,450.

Ont., Toronto — Clubhouse — Parkdale Canoe Club, 7 Lakurnam Ave., 2 story and basement, 80 x 100 ft. with two wings, 60 x 100 ft. wood and stucco, plain foundation, Sunnyside Ave., to G. L. Robinson, 107 Armstrong Ave. Archts. est. $200,000.

Federal Government Work

PROPOSED WORK

W. Va., Huntington—Maneuver Boat, etc. —U. S. Engineer, rejected bids steel hull maneuver boat, etc., for Dam 32, Ohio River. Noted Nov. 15.

Ala., Florence — Turbines — U. S. Engineer, Florence, takes bids about Feb. 1, four 35,000 hp. turbines for Wilson Dam.

Ky., Addison—Cement—U. S. Engineer, P. O. Box 72, Louisville, plans purchasing 15,000 bbl. portland cement for Dam 45, Ohio River, here.

Ky., Green River — Gates — U. S. Engineer, P. O. Box 72, Louisville, plans replacing upper and lower wooden gates at Lock 5, here, with steel gates.

Ky., Pilcher—Lumber—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase approximately 55,000 ft. select white oak f.o.b. here, for Dam 44, Ohio River, here.

Ind., Jeffersonville—Reservoir—Quartermaster Intermediate Depot plans $350,000 gal. concrete reservoir, 80 x 80 ft.

BIDS DESIRED

Mass., Haverhill—Extension—Jan. 31, by Treas. Dept., Wash., D. C., constructing incl. mechanical equipment, 1 story and basement, 25 x 45 ft. concrete and brick extension, to U. S. Post Office, here. J. A. Wetmore, acting superv. archt.

N. Y., New York—Dredging—Jan. 14, at office U. S. Engineer, Army Bldg., Whitehall St., dredging about 76,000 cu.yd. material in Flushing Creek, 1st Dist.

Del., Wilmington—Dike—Jan. 14, at office U. S. Engineer, Wilmington, 5,200 lin.ft. earth dike, 1 mi. below Delaware City.

Del., Wilmington—Steel House—Feb. 1, at office U. S. Engineer, War Dept., steel house on quarterboat.

Ga., Augusta—Hospital—Spec. 4922—Feb. 4, by U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., following work at U. S. Veterans Hospital, here, (1) new buildings (2) plumbing incl. fixtures, outside sewerage, drainage and water supply systems (3) complete heating and steam distributions (4) lighting systems incl. outside electric distributing and street lighting systems (5) remodeling building incl. plumbing, lighting and heating. F. T. Hines, dir. Noted Oct. 18; adv. E. N.-R. Jan. 10.

Tenn., Memphis—Sub-Post Office—Feb. 11, by Treas. Dept., Wash., D. C., constructing Sub-Post Office, here. J. A. Wetmore, acting superv. archt.; adv. E. N.-R. Jan. 10. Noted Sept. 20.

Ky., Camp Knox—Paving—Constructing Quartermaster, Camp Knox, receiving bids and opens same about Jan. 15 resurfacing with concrete section Dixie Highway passing through camp.

Ky., Louisville—Steel Piling—Feb. 5 at office U. S. Engineer, P. O. Box 72, 350 tons steel sheet piling f.o.b. Addison, and 1,200 tons f.o.b. Owensboro.

Ky., Owensboro—Forgings, Castings, etc. —U. S. Engineer, P. O. Box 72, Louisville, receiving bids and opens same about Feb. 11, 10 tons rolled steel forgings, 1,700 lb. phosphor bronze and 28 tons reinforcing bars, for Dam 46, Ohio River, here. Noted Dec. 10.

Ky., Owensboro—Steel and Bolts—Feb. 8 at office U. S. Engineer, P. O. Box 72, Louisville, 123 tons structural steel and bolts, etc., for lock valves at Dam 46, Ohio River, here Noted Dec. 13.

Ind., Leavenworth—Lumber—Jan. 14 at office U. S. Engineer, P. O. Box 72, Louisville, Ky., furnishing 53,000 ft. white oak for bear trap at Dam 44, Ohio River.

Ore., Portland—Barges—Jan. 24, at office U. S. Engineer, War Dept., constructing four 8 x 34 x 100 ft. wooden stone barges.

Alaska, Ketchikan—Gasoline Hoist, etc.—Feb. 12 by Superintendent Lighthouses, one 30 hp. gasoline hoist, 2 drum, with derrick swinging gear, and 1 stiff leg derrick for light station.

Porto Rico, San Juan—Quarters—Spec. 4909—Jan. 16, by Bureau Yards & Docks, Navy Dept., Wash., D. C., constructing double quarters and auxiliary buildings, at Naval Radio Station, here. Noted Dec. 20.

BIDS RECEIVED

Vt., St. Johnsbury—Post Office—Treas. Dept., Wash., D. C., 1 story, 61 x 69 ft., brick and tile, here, from J. Mills & Son Co., Worcester, Mass., $71,387. Noted Dec. 6.

N. Y., Poughkeepsie—Extension—Treas. Dept., Wash., D. C., construction, incl. mechanical equipment, extension to U. S. Post Office, here, from G. A. Burley Co., Flint Mich., $59,380, alternate $2,400. Noted Dec. 6.

N. J., Lakehurst—Material, Piping, etc.—Interior Dept., Wash., D. C., furnishing labor, material, piping, concrete and electrical work for installation in and around generator building, U. S. Naval Air Station, here, from L. S. Sauers, Lakehurst, $8,465 (35 days). Noted Dec. 20.

Tenn., Memphis—Towboat—U. S. Engineer, 1st and 2nd Mississippi River Dists., 1006 McCall Bldg., stern-wheel steel towboat, from Howard Shipyards & Dock Co., Jeffersonville, Ind., $119,445. (181 days). Noted Nov. 22.

Ky., Addison—Lock Gates—U. S. Engineer, P. O. Box 72, Louisville, furnishing and erecting 2 mitering lock gates for Dam 45, Ohio River, here, from Penn Bridge Co., Beaver Falls, Pa., $62,468. Noted Dec. 6.

Ky., Louisville—Metal Work—U. S. Engineer, P. O. Box 72, metal work for Dams 44 and 45, Ohio River, from Amer. Car and Fdry. Co., Jeffersonville, Ind., $76,300. Noted Dec. 6.

Mo., Liberty—Post Office—Treas. Dept., Wash., D. C., construction complete incl. mechanical equipment, U. S. Post Office, here, from W. McDonald Constr. Co., Odd Fellows Bldg., St. Louis, $43,765. Noted Dec. 6.

Tex., Paris—Post Office, etc.—Treas. Dept., Wash., D. C., 1 story and basement, 88 x 109 ft., brick and stone Post Office and Court House, here, from C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $143,-990. Noted Dec. 6.

Wash., Keyport—Extension—Spec. 4926—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to operating building, here, from J. G. Wethers, 720 33rd Ave., Seattle, $5,379. Noted Dec. 20.

CONTRACTS AWARDED

Md., Annapolis—Shore Protection—Spec. 4917—Bureau Yards & Docks, Navy Dept., Wash., D. C., shore protection for high power radio station at Naval Academy, here, to A. Pope, 4722 15th St., N. W., Wash., D. C., $5,300 (120 days). Noted Nov. 22.

D. C., Wash.—Recreation Building, etc.—U. S. Veterans Bureau, Arlington Bldg., recreation building, alteration and addition, to garage for attendants quarters at U. S. Veterans Hospital 32, Mt. Alto, here, to Skinker & Garrett, 1416 F St., N. W., $51,-000. Noted Oct. 11.

Ga., Savannah—Dredge Pump—U. S. Engineer, one 20 in. dredging pump for dredge, to Ellicott Machine Corp., Bush and Severn Sts., Baltimore, Md., $6,190.

Ky., Louisville—Operating Machinery—U. S. Engineer, P. O. Box 72, operating machinery for Dams 44 and 45, Ohio River, to H. P. Gazzam Machine Co., 3200 Penn Ave., Pittsburgh, Pa., Lot A, $29,950; to J. and J. B. Milholland Co., 714 5th Ave., Pittsburgh, Pa., Lot B, $13,045. Noted Jan. 3.

Calif., Livermore—Hospital— U. S. Veterans Bureau Arlington Bldg., Wash., D. C., construction complete of infirmary, administration, mess and kitchen building, recreation building, nurses quarters, attendants quarters, garage storehouse, etc., mechanical equipment and outside service lines except grading and walks, at U. S. Veterans Hospital, here, to H. S. Williams, 180 Jessie St., San Francisco, $757,740 (440 days). Noted Dec. 13.

Unclassified

PROPOSED WORK

Transmission Line—New York—Fulton Co. Gas & Electric Co., Cobleskill, plans 20 mi. distribution lines from Cobleskill to Esperance and Schoharie.

Generating Unit — Cohoes, N. Y.—S. "Industrial Works."

Yard, etc.—Horseheads, N. Y.—Consolidated Brick Co., Westlake St., plans reconstructing brick yard, machine shop and driers. $200,000. Address G. Prindible, Patton, Pa.

Pavilions—New York, N. Y.—Bellevue & Allied Hospital, 415 East 26th St., rejected bids Dec. 20, pavilions F and G incl. heating and ventilating apparatus, of new Bellevue Hospital. Will readvertise soon. Noted Dec. 27.

Elimination of Grade Crossing—Rochester, N. Y.—City, State, and New York Central R.R. Co., Grand Central Terminal, New York City, plan elimination of Winton Rd. crossing of main line and Auburn branch tracks by elevating tracks 2 ft. and depressing Winton Rd. under railroad about 66 ft., etc. $460,000. Railroad will pay ½ cost, city and state ¼. G. W. Kittredge, ch. engr. railroad. Noted July 26.

Stadium—Ashland, Ky.—Ashland High School plans concrete stadium, 6,000 seating capacity. $40,000.

Golf Course—Henderson, Ky.—Henderson Country Club plans 18 hole golf course on 47 acre tract. $25,000.

Grain Elevator, etc.—Greenville, O.—Soyco Milling Co. plans elevator and dryer to replace one recently destroyed by fire. $150,000. Will mature in spring.

Stadium—Wooster, O.—Wooster College plans stadium and athletic field, 5,000 seating capacity. $50,000.

Loading Dock—Pontiac, Mich.—Oakland Motor Car Co., plans rein.-con. and steel loading dock, 18 x 468 ft., at Howard St. $30,000. Private plans.

Recreation Field—Evansville, Ind.—City plans development of West Side Recreation field, incl. shelter houses, golf course, swimming pool, also rest stations in various parts of city. W. Elmendorf, mayor.

River and Rail Terminal—Evansville, Ind.—City plans river and rail terminal along Ohio River. W. Elmendorf, mayor.

Electric Distributing Lines, etc.—Leon, Kan. — Voted $32,000 bonds for electric distributing lines, street lights, etc., incl. line from here to Augusta. Private plans.

Lighting System — St. Louis, Mo. — Bd. Pub. Utilities plans street lighting system. $8,000,000 bonds voted. W. W. Horner, city engr.

Unclassified (Continued)

Pipe Line—Texas—Brownwood Gas Co., Brownwood, making plans 15 mi. of 12 in. gas pipe line from Brownwood to Bangs. $50,000.

Electric Traffic System—Dallas, Tex.—City making plans electric traffic system for residence streets. $25,000. E. A. Kingsley, city engr.

Street Lights—Ft. Worth Tex.—Having plans prepared street lights in Rosen Heights $30,000, in Arlington Heights $30,000, miscellaneous street lights $25,000. D. L. Lewis, city engr.

Electric Control Traffic System—Houston, Tex.—Plans extending system to three new streets. $25,000. J. C. McVea, city engr.

Gas Mains—San Antonio, Tex.—San Antonio Pub. Serv. Co., 201 North St. Marys St., making plans replacing present small mains with larger mains will also extend same to suburban districts. $104,000. W. B. Tuttle, vice-pres.

Gas Distribution System—Stephensville, Tex.—Southwestern Gas & Electric Co. had plans prepared for natural gas distribution system. $50,000.

Stadium — Waco, Tex. — Voted $60,000 bonds for athletic stadium. V. G. Koch, city engr. Noted Nov. 8.

Gas and Electric System—San Diego, Calif.—San Diego Consolidated Gas & Electric Co., Electric Bldg., plans to expend $2,500,000 for extensions, repairs, alterations and improvements to system.

Lighting System—San Diego, Calif.—Had plans prepared ornamental lighting system, marblelyte standards, 120 standards for all night lighting, 48 standards for midnight, underground conduits. $42,000. F. A. Rhodes, City Hall, engr.

Asphalt Plant — Montreal, Que. — City plans asphalt plant. $80,000. H. A. Teatreault, dir. pub. wks.

Harbor Improvements—Chantry Harbor, Ont.—Dept. Pub. Wks., Parliament Bldg., Ottawa, having plans prepared improving harbor, largely dredge work, with repairs to piers. $50,000. K. M. Cameron, ch. engr.

Subways—Kitchener, Ont.—City Council plans 5 subways next year at King, Lancaster, Park, Ahrens and Edward Sts., concrete abutments, steel girders, etc. $475,000. S. Shupe, city engr.

Harbor Improvements—Meaford, Ont.—Dept. Pub. Wks., Parliament Bldg., Ottawa, plans improving Meaford Harbor, dredging, repairing wharf, etc. $50,000. K. M. Cameron, ch. engr.

Electric Light System—Mildmay, Ont.—Mildmay Electric Co. plans to improve electric lighting system. $25,000. Prices wanted on transformers.

Power Development— Morrisburg, Ont.—Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, plans to develop 15,000 hp. here on St. Lawrence River, incl. concrete dam, canal through rock, power house, etc. $2,000,000. F. A. Gaby, ch. engr.

Dock and Wharf—Oshawa, Ont.—Dept. Pub. Wks., Parliament Bldg., Ottawa, having surveys made dock and wharf, concrete on wood piles, in harbor, here. $150,000. K. M. Cameron, ch. engr.

Harbor Improvements—Saugeen, Ont.—Dept. Pub. Wks., Parliament Bldgs., Ottawa, having plans prepared improving harbor, dredging, deepening, extending and repairing wharves and piers in Saugeen Harbor. $120,000. K. M. Cameron, ch. engr.

Hydro-Electric System—Toronto, Ont.—Toronto Electric Comrs., 225 Yonge St., plan to expend $1,940,000 for extensions and improvements in 1924.

Subways—Toronto, Ont.—Plans 10 or 12 concrete and steel subways in west end of city, under Canadian Natl. Ry. and Canadian Pacific Ry. $700,000. Cost to be divided between City and Railroads.

Grain Elevator—Edmonton, Alta.—Dept. Trade & Commerce, Parliament Bldgs., Ottawa, Ont., plans rein.-con. grain elevator on pile foundation. $500,000. C. D. Howe & Co., Whalen Bldg., Port Arthur, Ont., engrs.

BIDS DESIRED

Conduit—New York—Jan. 22, by Bd. Water Supply, Municipal Bldg., New York City, Clove conduit a portion of city conduits of Catskill aqueduct extending from Bay St. and Vanderbilt Ave., Clifton, S. I., to Silver Lake reservoir, Richmond Boro. Contr. 199. G. J. Gillespie, pres.; adv. E. N.-R. Jan. 10.

Roadway Columns—New York, N. Y.—Jan. 18, by Transit Comn., 49 Lafayette St., removing roadway columns and reconstructing structure of Manhattan-Bronx Rapid Transit R.R. at East 177th St. (Tremont Ave.) and Boston Rd., Bronx Boro, Agreement "CV." G. McAneny, chn.

Levee—Clarksdale, Miss.—Jan. 15, by Bd. Levee Comrs. for Yazoo-Mississippi Delta, 5 mi. enlargement work on Old Ward Lake Levee, containing approximately 85,000 cu. yd. Noted Nov. 8.

Structural Steel—Louisville, Ky.—See "Buildings."

Subway — Tulsa, Okla. — Feb. 15, by County clerk, subway 40 f.t wide, two 20 ft. driveways separated by pillars, 6,000 cu.yd. excav., 450 cu.yd. concrete, 15th St. and Broken Arrow Rd., for city, Tulsa Co. and Missouri, Kansas & Texas R.R. Co. $81,000. Railroad company will appropriate $47,000, also furnish steel girders, city and county will appropriate balance.

BIDS RECEIVED

Lighting System—Los Angeles, Calif.—City, ornamental lighting system, from C. W. Sparks, 457 South Lake St., $41,632.

Pier Shed Extensions—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., pier shed extensions, Islais Creek Terminal, from Grant & Hart, 571 42nd Ave., San Francisco, $45,623.

CONTRACTS AWARDED

Heating and Ventilating Apparatus — Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 142, Rapelyea St., here, to D. J. Rice, 405 Lexington Ave., New York, $46,970; P. S. 99, East 9th St., here, to Gillis & Geohegan, 537 West Bway., New York, $54,229; in P. S. 205, 20th Ave. and 67th St., here, to E. Rutzler & Co., 404 East 49th St., New York, $111,288. Noted Dec. 27 and Jan. 3.

Heating and Ventilating Apparatus — New York, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in P. S. 60, 12th St. and Ave. A, to Raisler Heating Co., 129 Amsterdam Ave., $98,765. Noted Dec. 27.

Structural Steel—Louisville, Ky.—See "Buildings."

Steel Rolling Doors—New Orleans, La.—Bd. Port Comrs., 200 New Court Bldg., furnishing and erecting steel rolling doors for new warehouse, to Kinnear Mfg. Co., Hibernia Bank Bldg., $47,500; 2 hoisting engines for coal tipple, to Mead-Morrison Mfg. Co., $10,500. Noted Jan. 3.

Steel Superstructure—New Orleans, La.—Bd. Port Comrs., 200 New Court Bldg., steel superstructure for Claiborne St. shed, to Lukens Steel Co., 626 South Peters St., $150,000.

Heating and Ventilating Apparatus, etc. —Cincinnati, O.—Bd. Educ., 511 West Court St., heating, ventilating and air washers in 25th Dist. School, Tremont St., to Peck, Hannaford & Peck Co., Court and Sycamore Sts., $23,297. Engrs. est. $25,000. Noted Nov. 29.

Foundations—Rapid City, S. D.—State Cement Comn., concrete foundation for 50 x 72 ft. coal mill building, and 30 x 72 ft. crusher building, also structural steel for conveyor gallery 350 ft. long, to Carlson & Snitkey, Dakota Ave., Sioux Falls. Noted Dec. 6.

Transmission Line Towers—Ontario—Hollinger Consolidated Gold Mines, Ltd., Timmins supply and fabrication of transmission line towers for 80 mi. 110,000 volt line from here to Island Portage, 600-800 tons steel, to Canadian Bridge Co., Walkerville.

Breakwater — Thessalon, Ont. — Dept. Pub. Wks., Parliament Bldgs., Ottawa, wood breakwater extension, to V. T. Bartram, Bank of Toronto Bldg., Toronto, $38,321.

Materials and Equipment

PROPOSED WORK

Road Machinery—Wisconsin—Following are county appropriations for road machinery during 1924. Vilas Co. $12,000, W. F. Hunter, Eagle River, comr.; Oneida Co. $2,000, incl. patrol graders, B. L. Horr, Rhinelander, comr.; La Crosse Co. $20,000, J. Hintgen, La Crosse, comr.; Forest Co. $3,000, B. McGinley, Grandon, comr.

Street Sweeper—Kansas City, Kan.—City plans to purchase motor pick up street sweeper. G. T. Darby, purch. agt.

Street Sweeper—Fullerton, Calif.—City plans to purchase street sweeper, power driven. F. C. Hezmelhatch, clk.

BIDS DESIRED

Tractor—Kinderhook, N. Y.—Town Bd. in market for one 10 ton caterpillar type tractor and 1 scraper suitable for snow removal.

Broken Stone, etc.—Long Island City, N. Y.—Jan. 14, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 21,000 cu.yd. broken stone and screenings, 5,000 cu.yd. sand grit, 11,000 cu.yd. sand, 14,000 tons steam boiler ashes, 75,000 asphalt paving blocks, 50,000 wood paving blocks, 25,000 vitr. paving blocks, and 864 ft. iron pipe.

Road Surfacing Material, etc.—New York, N. Y.—Jan. 14, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., 75,000 cu.yd. bituminous road surfacing material, 600,000 gal. asphalt road oil, 50 tons pitch joint filler, 3,000 cu.yd. clean boiler ashes, 500 cu.yd. sand, 5,000 cu.yd. 1½ in. broken stone, 2,000 bags Portland cement, 500 cu. yd. paving gravel, 1,200 tons asphalt cement, 300,000 gal. tar road oil, 7,500 cu. yd. asphalt wearing surfacing sand, 7,500 cu.yd. sand grit, 500 tons limestone dust, 10,000 cu.yd. asphalt wearing surface sand, spruce lumber, cypress, whitwood, white pine, plain sawn, white oak, chestnut posts, etc., long leaf yellow pine lumber, two 15 ton macadam steam rollers, two 5 ton gasoline motor driven trucks.

Bituminous Patching Material—Trenton, N. J.—Jan. 22, by Bd. Freeholders Mercer Co., tar cold patch known as Grade "K-O" or "U-C," also asphalt cold patch, Grade "H-K." H. F. Harris, Court House, engr.; adv. E. N.-R. Jan. 10.

Roller, etc. — Waukesha, Wis. — A. P. Kuranz, city engr. taking bids 10 ton roller with scarifier, also garbage trucks or wagons.

Crusher, Elevator, etc.—Oglesby, Ga.—Feb. 1, by State Hy. Dept., 2 crushers, 1 elevator, etc., to be used at state quarry, here. W. R. Neel, state highway engr.; adv. E. N.-R. Jan. 10.

Blade Grader—Galesburg, Ill.—Knox Co. receiving bids 10 or 12 ft. blade grader with scarifier, backsloper and engine hitch. $2,000.

Portland Cement—Springfield, Ill.—Jan. 14 by Dept. Pub. Wks. and Buildings, Div. Highways, 4,000,000 bbl. cement. C. Older, ch. highway engr. Noted Dec. 13.

Mining Equipment—Duluth, Minn.—Jan. 25, by R. E. Mace, purch. agt. Oliver Iron Mining Co., Wolvin Bldg., for one 50-ton revolving steam shovel for cleanup work for Virginia Dist., one for Eveleth and 2 for Hibbing Dists.; one 30-40 ton locomotive crane for Hibbing and one for Virginia Dists.; 4 caterpillar mountings for steam shovels for Virginia, 10 for Hibbing, 4 for Chisholm, 6 for Canisteo and 3 for Eveleth Dists.; 1 spreader plow for Virginia Dist.; 3 churn drills electrically operated; fifteen 30-yard steel stripping cars for Hibbing Dist. and 10 for Canisteo Dist.; 3 tie tampers for Hibbing Dist.; 2 steel flat cars of 100,000 ton capacity for Virginia, 4 for Hibbing and 1 for Chisholm Dists. $770,000.

Steam Shovel — Ft. Scott, Kan. — G. Julian, 6th and Heylman Sts., in market for 1½ or 2½ steam shovel for coal stripping.

Steam Roller—Kansas City, Mo.—Jan. 15, by city, 3 ton steam roller for Street Dept. G. T. Darby, purch. agt.

Breakers, Rolls, etc.—Nevada, Mo.—Natl. Asphalt Co., in market for breakers, rolls, hammer machines, crushers, etc. $75,000. P. C. Hansen, mgr. T. Douglas, 212 Bartlett Bldg., Joplin, engr.

Castings, etc.—St. Louis, Mo.—Jan. 17, by G. E. Scott, purch. agt. Missouri-Kansas-Texas R.R. Co., 1520 Ry. Exch. Bldg., 150 tons miscellaneous cast-steel castings for locomotives and cars excluding couplers, bolsters and side frames; 87 tons locomotive and car bolsters and side frames, furnished as required during 1st quarter of 1924.

Steam Shovel—Little Rock, Ark.—Ball-Benton Gravel Co., 821 Southern Trust Bldg., taking bids style B Erie steam shovel, long boom with ¾ yd. dipper, must be ready for use.

Trucks, etc.—Houston, Tex.—Jan. 14, by Harris Co., 2 light trucks, one grader, and 1 road maintainer. Howe & Wise, co. engrs.

BIDS RECEIVED

Cement—Wisconsin—State Hy. Comn., Madison, cement for 1924, Federal Aid also State Aid and bond issue construction, from Universal Portland Cement Co., 210 South La Salle St., Chicago, prices range from $2.49 to $2.76 according to destination.

Granite Curbstone—Montreal, Que.—Furnishing 75,000 ft. straight curbstone and 1,000 ft. circular curbstone, from Brodies Ltd., 128 Bleury St., $0.80 and $1 per ft. respectively.

CONTRACTS AWARDED

Stone, etc. — Hartford, Conn. — Street Dept., Municipal Bldg., 30,000 tons crushed stone and 10,000 tons dust, to E. Balf & Co., 14 Haynes St., 80,360. Noted Jan. 3.

Cement—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 3,000 bbl. Portland cement, to E. E. Buhler, 103 Park Ave., New York, $7,470. Noted Dec. 20.

Snow Loader — Trenton, N. J. — City Comn., snow loader to Barber-Greene Co., West Park Ave., Aurora, Ill., $5,550. Noted Jan. 8.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Jan. 17.

Excavation and Rock Protection

STATE OF NEW YORK
DEPARTMENT OF PUBLIC WORKS
BUREAU OF CANALS

Albany, N. Y.,
December 13, 1923.

Sealed proposals will be received by the undersigned at his office in Albany, N. Y., until twelve o'clock noon of Thursday, January 17th, 1924, at which place and hour they will be publicly opened and read, for improving the New York State canals pursuant to the provisions of Chapter 147 of the Laws of 1903, and of the acts amendatory thereof and supplementary thereto, and Chapter 570 of the Laws of 1915, as follows:

CONTRACT NO. 214.

Erie Canal—Section 9.

For completing the excavation of the canal channel in the Genesee river at Rochester and placing rock spoil protection along the river banks.

Sheets 1 to 3, inclusive.

Plans may be seen, and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Bureau of Canals, Albany, N. Y.; at the office of the Division Engineer, Department of Public Works, at Utica, Syracuse, Rochester and Buffalo; and at the Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accomplished by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank, in good credit within the State and payable at sight to the Commissioner of Canals and Waterways for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Commissioner of Canals and Waterways.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Commissioner of Canals and Waterways, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work, according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Bureau of Canals, State Department of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Commissioner of Canals and Waterways of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject all proposals and readvertise and award the contract in the regular manner if, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

ROYAL K. FULLER.
Commissioner of Canals
and Waterways.

Bids: Jan. 16.

(READVERTISEMENT)

Delaware River Bridge

CONTRACTS NOS. 9A, 9B, 9D, 10A & 10B
DEMOLITION

Philadelphia, Pa.

Sealed proposals for the demolition and removal of the buildings on the site of the Philadelphia approach between Front Street and Third Street, and between Fourth Street and Sixth Street, and the buildings on the site of the Camden Approach between Delaware Avenue and Fourth Street, will be received by the Delaware River Bridge Joint Commission at Room 806, Widener Building, Philadelphia, Pa., until 2:30 o'clock p.m., January 16, 1924, when they will be publicly opened and read. The contracts will be awarded, or all bids rejected, within fourteen days after bids are opened. The right is reserved to reject any or all bids.

Separate bids are asked for each of three sections of the Philadelphia Approach, and each of two sections of the Camden Approach. The work includes the demolition and removal of structures and certain other work incidental thereto. The work under Contracts 9A, 9B, 10A and 10B, is to be completed in three months, and that under 9D in six months.

Bids must be made upon the blank proposal forms, which together with specifications, bond and contract form, and contract drawings, may be obtained at the office of the Joint Commission, upon deposit of $10.00, which deposit will be refunded upon receipt of bid or upon the return in good condition of the copies so taken.

Each proposal must be accompanied by a certified check for Three Thousand Dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and surety's consent must be shown. The bidder or bidders to whom the contract for each section is awarded will be required to give bond in the sum of fifty per cent of the amount of such contract, but not less than $25,000.

Delaware River Bridge Joint Commission.
GIFFORD PINCHOT,
Chairman.
JOSEPH K. COSTELLO,
Secretary.

Bids: Jan. 22.

Conduit

CONTRACT 199

Staten Island, N. Y.

SEALED BIDS will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers Streets, New York City, until 11 a.m., Eastern Standard time, on Tuesday, January 22, 1924, for Contract 199, for the construction of the Clove conduit, a portion of the City conduits of the Catskill aqueduct, extending from Bay Street and Vanderbilt Avenue, Clifton, Staten Island, along Vanderbilt Avenue, Targee Street, Clove Avenue, Clove Road and land of the City of New York to the Silver Lake reservoir, in the Borough of Richmond, New York City.

The conduit will consist of about 16,600 linear feet of 66-inch steel pipe, about 90 tons of cast-iron pipe and special castings of various sizes, and other appurtenances, all of which will have to be maintained for one year.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President,
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

Bids: Jan. 30.

42 in.—48 in. and 60 in. Intercepting Sewers, Sewage Pumps, and Sewage Disposal Plant Improvements

Fostoria, Ohio.
December 24th, 1923.

Sealed proposals for the construction of 42" 48" and 60" Intercepting Sewers and Pumping Machinery, Superstructures, Grit Chamber, Sludge Beds, and other improvements to the Sewage Disposal Plant, will be received by the City of Fostoria, Ohio, until 2 o'clock p.m., Eastern Standard Time, on the 30th day of January, 1924, and will then be publicly opened and read.

Official Proposal Blanks, Instructions to Bidders, Specifications, Form of Contract and Bond may be seen at the office of the Director of Public Service, Fostoria, Ohio, or one (1) copy of plans and specifications may be obtained by bona fide bidders upon application to The J. N. Chester Engineers, Union Bank Building, Pittsburgh, Pa., or to the City of Fostoria, Ohio, and deposit of Twenty-five Dollars ($25.00), which amount will be refunded to bidders on receipt of a bona fide bid, or upon the return within thirty (30) days after receipt of bids, of both plans and specifications, in good order.

The right is reserved to reject any or all bids.

JAMES MANECKS,
Director of Public Service.
THE J. N. CHESTER ENGINEERS,
Union Bank Building,
Pittsburgh, Pa.

CONSTRUCTION NEWS

Engineering News-Record, January 17, 1924

The Construction Barometer

Year 1923 Established New Construction Record—Increasing Number of Jobs Out for Bids

THE year 1923 established several new records in American industry. Production of pig iron and cement exceeded all previous records. Car loadings also reached peak levels and retail stores report unprecedented receipts. The total money value of construction was the highest of any single year in the history of the industry. Contracts for excavating work gained 160 per cent over 1922; water-works increased 75 per cent; bridges, 56 per cent; sewers, 52 per cent; industrial building, 42 per cent; Federal Government work, 9 per cent; streets and roads, 8 per cent and large commercial buildings 8 per cent. New England and the Middle Atlantic states both dropped below the 1922 totals. The Middle West, while it gained during 1923, closed the year at least ten million dollars under December, 1922. Production in basic industries, such as steel and cement, is now experiencing a seasonal slow-down. The lumber output, however, started to increase during the first week in January. With the present gain in building permits and "bids wanted," a repetition of the 1923 volume seems probable.

Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

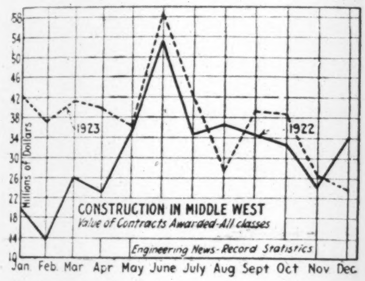
Week Ended	Public Work	Private Work	Total Contracts
Dec. 27	$12,657,000	$11,740,000	$24,397,000
Jan. 3	10,163,000	15,275,000	25,438,000
Jan. 10	13,625,000	23,761,000	37,386,000
3 weeks	$36,445,000	$50,776,000	$87,221,000

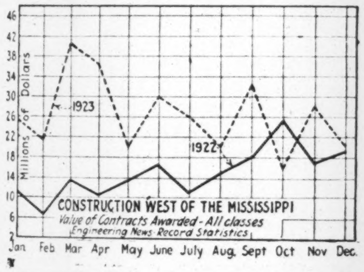
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

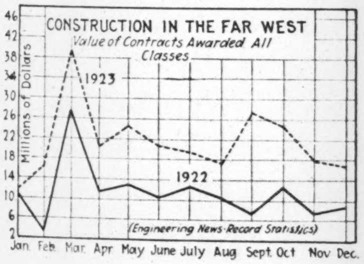
Week Ended	No.	Public Work	No.	Private Work
Dec. 27	8	$3,859,000	16	$ 7,240,000
Jan. 3	10	3,148,000	30	11,480,000
Jan. 10	12	3,219,000	42	18,138,000
3 weeks..	30	$10,226,000	88	$36,858,000

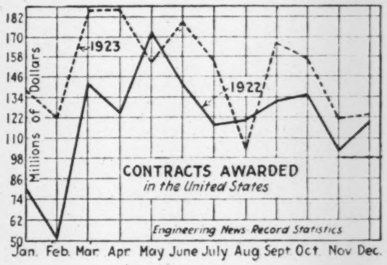
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

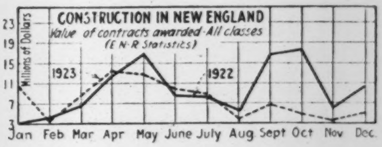
Week Ended	Private	Public			
		All	Streets and Roads	Water-works and Sewers	All Buildings
Dec. 27	29	114	27	17	36
Jan. 3	25	117	31	20	30
Jan. 10	28	149	33	32	30

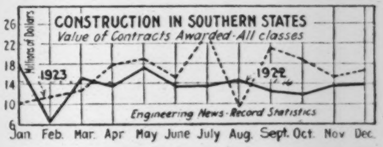


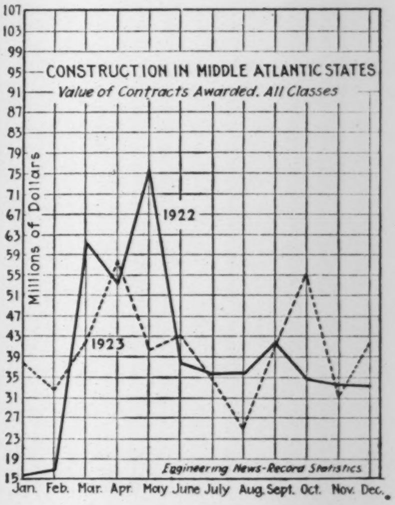












PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Jan. 18	Boston, Mass.	Jan. 17
Jan. 21	Minneapolis, Minn.	Jan. 17
Jan. 24	Milwaukee, Wis.	Jan. 17
Jan. 24	Louisburg, N. C.	Jan. 10
Jan. 25	Wash., D. C.	Jan. 10
Jan. 25	Two Rivers, Wis.	Jan. 17
Jan. 25	Stillwater, Okla.	Jan. 17
Jan. 26	Fairmont, W. Va.	Jan. 10
Jan. 29	Bloomington, Ind.	Jan. 3
Jan. 30	Greenville, S. C. Adv. Jan. 10 and 17.	Jan. 10
Jan. 31	Massachusetts	Jan. 10
Feb. 1	Phillips, Wis.	Jan. 10
Feb. 4	Denver, Colo. Adv. Jan. 17.	Jan. 17
Feb. 11	Fairmont, Okla. Adv. Jan. 10 and 17.	Jan. 17
Feb. 11	McKeesport, Pa. Adv. Jan. 17.	Jan. 17

SEWERS

Bids Close		See Eng. News-Record
Jan. 22	Minneapolis, Minn.	Jan. 17
Jan. 22	Ferndale, Pa.	Jan. 17
Jan. 24	Ft. Smith, Ark.	Jan. 10
Jan. 24	Baton Rouge, La.	Jan. 3
Jan. 25	Wash., D. C.	Jan. 3
Jan. 25	Mt. Morris, Ill.	Jan. 17
Jan. 25	Wash., D. C.	Jan. 17
Jan. 30	Fostoria, O.	Jan. 3
Feb. 5	Baton Rouge, La.	Jan. 3
Feb. 5	Gallitin, Tenn.	Jan. 17
Feb. 6	Oelwein, Ia. Adv. Jan. 17.	Jan. 17
Feb. 5	St. Louis, Mo.	Jan. 10
Feb. 11	Pleasantville, N. Y. Adv. Jan. 10 and 17.	Jan. 17
Feb. 12	Elizabethtown, Ky.	Jan. 17

BRIDGES

Bids Close		See Eng. News-Record
Jan. 22	St. Louis, Mo.	Dec. 27
Jan. 22	Lakefield, Ont.	Jan. 3
Jan. 22	Louisiana	Jan. 17
Jan. 28	New Jersey Adv. Jan. 10 and 17.	Jan. 10
Feb. 1	Cambridge, O.	Jan. 17
Feb. 4	California	Jan. 17
Feb. 5	Yankton, S. D.	Jan. 17
Feb. 13	Phila., Pa. Adv. Jan. 17.	Jan. 1
Feb. 20	New York Adv. Jan. 17.	Jan. 17
May 1	Tientsen, North China	Oct. 11

DAMS

Bids Close		See Eng. News-Record
Feb. 7	Kingston, N. C.	Dec. 27

Bids Close		See Eng. News-Record

RAILWAYS

Mar. 18	New Zealand	Sept. 20

EXCAVATION, DRAINAGE IRRIGATION

Jan. 28	Oroville, Calif.	Jan. 17
Jan. 29	St. Louis, Mo. Adv. Jan. 3 to 17.	Jan. 3
Jan. 31	St. Catherines, Ont.	Jan. 17
Feb. 4	Minneapolis, Minn.	Jan. 10

STREETS AND ROADS

Jan. 22	New Hampton, Ia.	Jan. 10
Jan. 22	Washington	Jan. 10
Jan. 22	Louisiana	Jan. 3
Jan. 22	St. Louis, Mo.	Dec. 27
Jan. 22	Alexandria, La.	Jan. 10
Jan. 22	Louisiana	Jan. 17
Jan. 23	Mississippi	Jan. 10
Jan. 23	Winona, Miss.	Jan. 3
Jan. 25	Waterloo, N. Y. Adv. Jan. 10 and 17.	Jan. 10
Jan. 25	San Antonio, Tex.	Jan. 17
Jan. 28	Michigan	Jan. 17
Jan. 28	New Jersey Adv. Jan. 10 and 17.	Jan. 10
Jan. 28	Akron, O.	Jan. 17
Jan. 29	Hibbing, Minn.	Jan. 17
Jan. 29	Uvalde, Tex.	Jan. 10
Jan. 29	Baton Rouge, La. Adv. Dec. 27, Jan. 10 and 17.	Jan. 3
Jan. 29	Virginia	Jan. 10
Jan. 29	Auburn, Neb.	Jan. 17
Jan. 29	Palo Pinto, Tex.	Jan. 17
Jan. 30	Michigan	Jan. 17
Jan. 30	Nevada	Jan. 17
Jan. 31	Laredo, Tex.	Jan. 17
Jan. 31	North Carolina Adv. Jan. 17.	Jan. 17
Jan. 31	Michigan	Jan. 17
Feb. 1	Winchester, Ind.	Jan. 17
Feb. 1	Charleston, W. Va. Adv. Jan. 10 and 17.	Jan. 10
Feb. 4	New Mexico	Jan. 17
Feb. 4	Newport, Ind.	Jan. 17
Feb. 4	Shoals, Ind.	Jan. 17
Feb. 5	Leland, Miss.	Jan. 17
Feb. 5	New York Adv. Jan. 17.	Jan. 17
Feb. 5	Kosciusko, Ind.	Jan. 17
Feb. 8	Nashville, Tenn.	Jan. 17
Feb. 11	Scottsburg, Ind.	Jan. 17
Feb. 14	Jasper, Ind.	Jan. 17
Feb. 28	Kenosha, Wis.	Jan. 17
Mar. 11	Washington	Jan. 10

INDUSTRIAL WORK

Jan. 15	Milwaukee, Wis.	Jan. 17
Jan. 19	Phila., Pa.	Jan. 17
Jan. 21	Phila., Pa.	Jan. 17
Jan. 21	Toledo, O.	Jan. 17
Jan. 24	Cortland, N. Y.	Jan. 17
Jan. 28	Princeton, Ind.	Jan. 17
Jan. 30	Columbus, O.	Jan. 10
Jan. 31	Ray Brook, N. Y. Adv. Jan. 17.	Jan. 10
Feb. 1	Peoria, Ill.	Dec. 27
May 21	Wellington, New Zealand Adv. Jan. 10.	Jan. 10

BUILDINGS

Jan. 18	Phila., Pa.	Jan. 17
Jan. 19	Indianapolis, Ind.	Jan. 17
Jan. 19	Troy, N. Y.	Jan. 17
Jan. 20	Lincoln, Neb.	Jan. 17
Jan. 21	Roslyn, N. Y.	Jan. 10
Jan. 21	Clayton, Mo.	Jan. 17
Jan. 21	Phila., Pa.	Jan. 17
Jan. 22	Columbus, O.	Jan. 17
Jan. 22	St. Paul, Minn.	Jan. 17
Jan. 22	Ft. Collins, Colo.	Jan. 17
Jan. 22	Brooklyn, N. Y.	Jan. 17
Jan. 22	Jamaica, N. Y.	Jan. 10
Jan. 22	Creedmoor (Jamaica P. O.), N. Y.	Jan. 10
Jan. 22	Jeannette, La.	Jan. 17
Jan. 25	Indiana, Pa.	Jan. 17
Jan. 25	Williamsport, Pa.	Jan. 10
Jan. 26	Wallingford, Conn.	Jan. 17
Jan. 28	Algonac, Mich.	Jan. 17
Jan. 29	Midland Park, N. J.	Jan. 10
Jan. 29	Bloomington, Ind.	Jan. 10
Jan. 29	Lancaster, Wis.	Jan. 17
Jan. 30	Vernon, Tex.	Jan. 10
Jan. 30	Millville, N. J.	Jan. 10
Jan. 30	Baltimore, Md.	Jan. 17
Jan. 30	Columbus, O.	Jan. 17
Jan. 30	Prairie du Sac, Wis.	Jan. 17
Jan. 31	Mayville, Wis.	Jan. 17
Feb. 1	Oklahoma City, Okla.	Jan. 10
Feb. 1	Lambertville, N. J.	Jan. 10
Feb. 1	Dorchester, Mass.	Nov. 29
Feb. 1	Joliet, Ill.	Jan. 17
Feb. 1	Webster Groves, Mo.	Jan. 17
Feb. 1	Waterbury, Conn.	Jan. 17
Feb. 2	Northfield, Minn.	Jan. 17
Feb. 4	Rome, N. Y.	Jan. 10
Feb. 4	Urbana, Ill.	Dec. 13
Feb. 4	Columbus, O.	Dec. 27
Feb. 4	Wash., D. C.	Jan. 17
Feb. 6	Huntington, W. Va. Adv. Jan. 10 and 17.	Jan. 17
Feb. 8	Phila., Pa.	Jan. 17

Bids Close		See Eng. News-Record
Feb. 10	Trenton, N. J.	Jan. 10
Feb. 13	Industry, N. Y. Adv. Jan. 17.	Jan. 17

FEDERAL GOVERNMENT WORK

Jan. 19	Gates—Cincinnati, O.	Dec. 27
Jan. 21	Post Office—State College, Pa.	Dec. 27
Jan. 21	Steel—Louisville, Ky.	Jan. 17
Jan. 24	Barges—Portland, Ore.	Jan. 10
Jan. 26	Finding Tower—New York, N. Y.	Jan. 17
Jan. 28	Snagboat—Wilmington, N. C.	Jan. 3
Jan. 29	Extension—Kansas City, Mo. Adv. Jan. 10 and 17.	Jan. 3
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15
Jan. 31	Extension — Haverhill, Mass. Adv. Jan. 10 and 17.	Jan. 10
Feb. 1	Steel House—Wilmington, Del.	Jan. 10
Feb. 4	Hospital—Augusta, Ga. Adv. Jan. 3 to Jan. 17.	Jan. 10
Feb. 5	Steel Piling — Louisville, Ky.	Jan. 10
Feb. 6	Storehouse—Pearl Harbor, H. T.	Dec. 20
Feb. 7	Steel Roof Trusses—Florence, Ala. Adv. Jan. 17.	Jan. 17
Feb. 8	Steel and Bolts—Owensboro, Ky.	Jan. 10
Feb. 11	Sub-Post Office—Memphis, Tenn. Adv. Jan. 10 and 17.	Jan. 10
Feb. 11	Laundry — Northampton, Mass. Adv. Jan. 17.	Jan. 17
Feb. 11	Steel Castings, etc.—Louisville, Ky. Adv. Jan. 17.	Jan. 17
Feb. 12	Gasoline Hoist, etc.—Ketchikan, Alaska	Jan. 10
Feb. 14	Stone—Portland, Ore. Adv. Jan. 17.	Jan. 17
Feb. 15	Kitchen and Mess Hall — Prescott, Ariz. Adv. Jan. 17.	Jan. 17
Feb. 15	Steel Forging, etc.—Owensboro, Ky.	Jan. 17
Mar. 1	Turbines—Florence, Ala. Adv. Jan. 17.	Jan. 17

UNCLASSIFIED

Jan. 21	Jetty—New Westminster, B. C.	Jan. 3
Jan. 22	Conduit—New York Adv. Jan. 3 to Jan. 17.	Jan. 10
Jan. 22	Pier—Baltimore, Md.	Jan. 17
Jan. 24	Distribution Lines—Modesto, Calif.	Jan. 17
Jan. 24	Wharf—Houston, Tex.	Jan. 17
Jan. 25	Heating and Ventilating Apparatus—New York, N. Y.	Jan. 17
Jan. 28	Bulkhead—Bayonne, N. J. Adv. Jan. 10 and 17.	Jan. 17
Feb. 11	Transformers and Spares—Melbourne, Australia Adv. Jan. 3 to Jan. 17.	Jan. 3
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIALS AND EQUIPMENT

Jan. 22	Bituminous Patching Material —Trenton, N. J.	Jan. 10
Jan. 22	Norway Pine—Minneapolis, Minn.	Jan. 17
Jan. 25	Mining Equipment—Duluth, Minn.	Jan. 10
Jan. 29	Cable Guard Rail, etc. — Trenton, N. J. .6	Jan. 17
Feb. 1	Crusher, Elevator, etc. — Oglesby, Ga.	Jan. 10
Feb. 4	Cletracs—Gilroy, Calif.	Jan. 17

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., New York—State Hospital Comn., Albany, soon takes bids high pressure fire line, 2 mi. 6- to 18-in. c.i. pipe, 20 hydrants, 4 electric pumps and pump house, at Manhattan Hospital, Wards Island, here. $90,000.

N. C., Rutherfordton—Plans extension of waterworks to increase supply by 1,000,000 gal. $30,000. Mees & Mees, Kinney Bldg., Charlotte, engrs.

Fla., Fort Meyers—City voted $80,000 bonds for mains. F. E. Smith, clk. Noted Dec. 20.

Fla., Orlando—Voted $100,000 bonds for improvements to water and light plants. G. B. Ranney, Orlando, engr.

Tenn., Jackson—City plans improvements and additions to waterworks system. $100,000. S. Lancaster, Jackson, engr. Noted Oct. 6.

Tenn., Lewisburg—Voted $150,000 bonds for waterworks system. Engineer not selected.

O., Painesville—Plans extending mains, improving waterworks, incl. new pumps. $100,000.

O., Sidney—Baltimore & Ohio R.R., Central Union Depot, Cincinnati, plans water treating plant, here. $30,000. J. E. Nelson Co., 3240 South Michigan Ave., Chicago, Ill., engrs.

O., Perrysburg—Plans new water supply from Toledo. To exceed $15,000. Engineer not announced.

Ill., Jonesboro—Having preliminary plans prepared waterworks, tower, tank, 4- and 6-in. distribution mains and fire hydrants, etc. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Wis., Eau Claire—Plans 3 m.g. rein.-con. reservoir. J. T. Hurd, City Hall, engr.

Minn., Willmar — Making plans waterworks, power and light systems. $150,000. H. Gunderson, clk. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs.

Mo., Thayer — Voted $75,000 bonds for waterworks, distribution system and ice plant. Alexander Eng. Co., Springfield, engrs. Noted Dec. 27.

Tex., Brenham—Jan. 25 to vote on $25,000 bonds filtration plant. A. M. Krug, city secy.

Okla., Jefferson — Making preliminary plans extension to pumping equipment and distribution system, well, triplex pump and motor, 7,000 ft. 4 in.- to 6 in.- c.i. $28,000. Engineer not selected.

Wash., Kalama—Plans municipal water supply, using water of Woolford nad Italian Creeks. Plans include dam 50 ft. long, 20 ft. high, in each stream, to furnish 700,000 gal. water. $70,000.

Calif., Madera—See "Excavation, Drainage, Irrigation."

Ont., Beamsville—Plans pumping plant at lake or storage reservoir. $40,000. C. W. Tufford, chn. Water Bd.

Ont., Brantford — Voted $90,000 bonds for extensions and improvements. F. P. Adams, city engr.

Calif., Oakland—City abandons proposed contract with East Bay Water Co. to install water mains, $160,000, city to pay for same in yearly installments. New plans will be made. $610,000. W. W. Harmon, city engr. Noted Dec. 20.

BIDS DESIRED

Mass., Boston—Jan. 18, by F. P. Rock, supt. Supply Dept., City Hall Annex, six thousand five hundred pieces ⅝-in., two hundred ¾-in., one hundred and fifty 1-in., one hundred 1½-in., seventy-five 2-in. and fifty 3-in. water meters.

N. Y., Saranac Lake—Water Dept. taking bids 2 new centrifugal (preferred) motor driven water pumps. $16,000. Horizontal steam pumps will be considered. Noted Mar. 15.

Pa., McKeesport — Feb. 14, by City Council, at office City Clerk, addition to filtration plant, new pump plant, stand pipe, pipe lines, etc. Hudson & Myron, 808 Wabash Bldg., Pittsburgh, engrs; adv. E. N.-R. Jan. 17.

W. Va., Fairmont — Feb. 11 (extended date), at office of Director of Waterworks, filtration plant. Fuller & McClintock, 170 Bway., New York City, and 600 Walnut St., Kansas City, Mo., engrs. Noted Jan. 10; adv. E. N.-R. Jan. 17.

Ky., Elizabethtown—Feb. 5, by Mayor and City Council, waterworks improvements. To exceed $25,000. Former bids rejected. This corrects report in Jan. 3 issue.

Colo., Denver — Feb. 4, by Bd. Water Comrs., 1509 Cleveland Pl., 36 in. Class B c.i. main from West 2nd Ave. and Federal Blvd. to Ashland Ave. Reservoir, etc. B. Lowther, ch. engr.; adv. E. N.-R. Jan. 17.

Tenn., Gallatin—Feb. 7, by Mayor and Bd. Aldermen, improvements to waterworks incl. gravity type filtration plant of 1,250,000 gal. capacity, work to be awarded in 4 contracts, as follows, (a) 4 centrifugal pumps and motors, (b) installing filter equipment, (c) constructing rein.-con. filtration plant, etc., (d) furnishing laboratory equipment. B. H. Klyce, 4th and First Natl. Bank Bldg., Nashville, engr. Noted Oct. 6.

O., Cincinnati—Jan. 16, at office of C. F. Hornberger, dir. Pub. Serv., furnishing c.i. pipe, special and miscellaneous castings

Waterworks (Continued)

during 1924; also furnishing and laying c.i. mains, special castings, fire hydrants, fire valves and miscellaneous work in Colerain Pike, Palos and Carothers Sts., Highland, McKeone, Hart and Hedge Aves. E. P. Durr, secy.

Wis., Milwaukee—Jan. 24, by Central Bd. Purchases 2,500 tons 6- to 16-in Class C c.i. water pipe, 150 tons special castings for Class C pipe, stop cocks, boxes, etc.

Wis., Two Rivers—Jan. 25, by J. Doleysh, city clk., 124.03 tons 4- to 6-in. Class C c.i. water pipe, 3 tons Class D special casings, seven 6 in. Eddy fire hydrants, twenty 6 in. and two 4 in. valves.

Ia., What Cheer — See "Material and Equipment."

Minn., Minneapolis — Jan. 21, by F. S. Gram, city purch. agt., furnishing Water Dept., with five thousand ⅝-in. corporation cocks, four thousand ¾-in. and two hundred 1-in. curb cocks; also three hundred ¾-in. and one hundred 1-in. curb cocks of different type. N. W. Elsberg, city engr.

Okla., Stillwater—Jan. 25, by city, waterworks pumping equipment, reservoir, distribution mains, etc. $150,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 20.

BIDS RECEIVED

Minn., St. Paul — H. W. Austin, city purch. agt., Jan. 2, 35,579 lb. structural steel and 4,023 lb. miscellaneous steel and iron castings, from St. Paul Fdry. Co., Como Ave. and Mackubin St., $2,287; hub-end, nut operated L. B. gate valves, (a) twenty 4-in. (b) two hundred and six 6-in. (c) thirty 8-in. (d) forty 12-in. (e) thirty 16-in. (f) five 20-in. and (g) four 24-in. spur geared with by-pass, from South Park Fdry. & Machine Co., 23 East 6th St. (a) $12 each (b) $19.50 (c) $31.50 (d) $65; Michigan Valve & Fdry. Co, Amer. Trust Bldg., Detroit, Mich., (a) $14 (b) $24 (c) $39 (d) $75.90 (e) $140.80 (f) $242.10 (g) $440.40.

Wash., Kelso — City Council, Jan. 5, pumping and purification plant, 1 m.g.p.d. capacity, from Hedges & Hels, Kelso, $21,511. Engrs. est. $25,000. Noted Jan. 3.

CONTRACTS AWARDED

Md., Baltimore—Mayor and City Council, furnishing and delivering c.i. pipe and fittings for Water Dept., to R. D. Wood & Co., 400 Chestnut St., Phila., Pa., $234,389. Noted Jan. 10.

N. C., Conover — Water and sewerage systems, to Tucker & Laxton, Inc., Realty Bldg., Charlotte, $30,250 exclusive of cost of waterworks materials which will be furnished by town. Noted Jan. 3.

Wis., Milwaukee—Oil removal plant, to Permutit Co., 440 4th Ave., New York, $6,150; 500 lb. electric freight elevator, to Rosenberg Elevator Co., 1647 Richards St., $3,178

Tex., Dallas—Beverly Hills Fresh Water Dist., c/o C. H. Leinbach, Deere Bldg., main extensions, incl. 102,500 ft. 2- to 8-in. pipe, to J. C. Winslett, 1001½ Main St., $35,000.

Ont., Ford—R. S. Braid, secy. Essex Border Utilities Comn., Heintzman Bldg., Windsor, mechanical filtration plant, general contract to Strain & Emery Ltd., Dowler Bldg., Windsor, $350,582; 42 in. steel piping to Toronto Iron Wks., Cherry St., Toronto $7,680; c.i. pipe and specials, to F. Hankin & Co., Ltd., 386 King St. W., Toronto, $26,783; controls and operating equipment, to Canadian International Filters, Confederation Life Bldg., Toronto, $12,325. Noted Dec. 13.

Sewers

PROPOSED WORK

Conn., Bridgeport—Plans storm sewers in North Main St. and Bethany Chapel System, $30,000; sanitary and storm water sewer in Beachwood Park Sect., $75,000; storm sewer in Capitol Ave. from North Main to Lindley Sts., $25,000; sanitary trunk system in Mountain Grove St., $50,000; miscellaneous storm and sanitary sewers in smaller streets throughout city, $100,000. J. A. McElroy, City Hall, engr.

N. Y., Hamburg—Making preliminary plans sewers and disposal plant. $350,000. G. C. Diehl, 575 Ellicott Sq. Bldg., Buffalo, engr.

Fla., Fort Meyers — City voted $75,000 bonds for sanitary sewers, also $70,000 for storm sewers. F. E. Smith, clk. Noted Dec. 20.

O., Youngstown — Plans approximately 45,000 ft. sewers in Calvary Run and Cochran Park. $145,000. I. Turner, city engr.

Ill., Jonesboro—Having preliminary plans prepared 8 in. sanitary sewers and disposal plant. W. A. Fueller Co., 1917 Railway Ex., St. Louis, Mo., engrs.

Mo., St. Louis—Bd. Pub. Serv. making plans North Baden Dist. Sewer, 3,000 ft. of 14 ft. brick horseshoe, $220,000; Ohio-Montrose relief sewer, 21,310 ft. 8- to 36-in. vitr. clay and 2,695 ft. 42- to 66-in. segmental block pipe, 50,008 cu.yd. excav., etc., $500,000; Elliot and Warne relief sewers $800,000; and 2nd section of River Des Peres sewer from Southwest to Knox Aves., $500,000. W. W. Horner, city engr.

Ark., McGehee — Plans sewer improvements. Probably $50,000. Private plans.

Tex., Alvarado—Jan. 29, to vote on $50,000 bonds for sewerage system. Address Mayor.

Tex., Dallas—See "Streets and Roads."

Okla., Lawton—City having plans prepared by W. V. Montin, Lawton, sewage disposal plant, Imhoff tank and filters. $40,000. Noted Oct. 18.

Utah, Salt Lake City—Plans 3½ mi. 18- to 80-in. storm sewers from eastern portion of city to Jordan River, 4th South Storm Sewer. $250,000.

Ont., Galt—Plans storm sewer outlets in Waterloo and Forbes Aves. $37,000. Bids will be called about end of March. 'J. McCartney,' city engr.

Ont., Niagara Falls—Having plans prepared sewerage system in lower Niagara Falls, Stamford Twp. $425,000. T. R. Stokes, Portage Rd., engr.

BIDS DESIRED

N. Y., Pleasantville — Feb. 11, by Bd. Sewer Comrs., Village Hall, disposal works Contr. 1, sewage collecting system, Contr. 2. J. O. Derby, engr.; adv. E. N.-R. Jan. 17.

Pa., Ferndale—Jan. 22, by Boro Council, 1,000 ft. 8 in. sanitary sewers in Glenwood Ave., West St. and Hickory Alley. L. R. Owen, Otto Bldg., Johnstown, engr.

D. C., Wash.—Jan. 25, constructing 2,700 ft. trunk, service and sanitary sewers in Connecticut and Illinois Aves., Holbrook and Jenifer Sts., terra cotta and concrete pipe.

Ill., Mt. Morris—Jan. 25, by Bd. Local Impvts., 10,000 ft. sanitary sewers and 2 treatment plants. $80,000. J. H. Ritson, pres. Private plans.

Ia., Oelwein—Feb. 6, by City Council, extensions to sewage disposal plant. E. B. Tourtellot, Oelwein, engr.; adv. E. N.-R. Jan. 17.

Minn., Minneapolis—Jan. 22, by F. S. Gram, city purch. agt., furnishing 400 tons special sewer castings, 190,000 vitr. paving brick for sewer construction, sewer pipe and segment blocks, for 1924 season. N. W. Elsberg, city engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Jan. 9 sewers in (1) Narrows Ave. engrs. est. $800 (2) Forbell Ave. $700 (3) 24th Ave. $37,586 (4) East 36th St. $2,245 (5) Miller Ave. $400 (6) 70th St. $400 (7) East 31st St. $400, from C. F. Vacharas, 645 40th St. (1) 108% engineers estimate; Fenlon Contg. Co., (2) 99%; B. Peconi & Sons (3) 73% (4) 90%; R. Iobino (5) 91% (6) 88% (7) 92%. Noted Jan. 3.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Jan. 14, sewers across Queens Blvd., intersecting various streets, from F. L. Paino, 572 1st St., Brooklyn, (a) $226,159 (b) $224,543; in Patterson Ave., from Necaro Co., Inc., 97 Court St., Brooklyn, $800,614; Astoria Ave., from J. Gallo, 203 Division St., Brooklyn, $19,800; Harman St., from Peace Bros., Inc., 57 North Laurence St., Flushing, $11,091; Varian Pl., from J. F. Clancy, Inc., 460 Lockwood St., Astoria, $5,219. Noted Jan. 10.

Minn., St. Paul—H. W. Austin, city purch. agt., Jan. 2, Portland Ave. Outfall sewer from Mississippi River to point 990 ft. east, and West 7th St. from Parmer St. to Albion Ave., from De Graff Wolff, 985 Scheffer St., $25,780 and $26,100 respectively; Davern-West 7th St. Sewer System No. 1, from Thornton Bros. Co., 318 Endicott Bldg., $206,587.

Calif. Newport Beach — City Council, Balboa Island sewerage system, from Gibbons & Reed, 905 South Olive St., Los Angeles, $133,654. Noted Dec. 20.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in 159th and 90th Sts., to J. F. Clancy, Inc., 460 Lockwood St., Astoria, $2,649 and $13,425 respectively; Suwanee Ave., to E. J. Kelly, Jr., $31,309. Noted Jan. 10.

Md., Baltimore—Bd. Awards, 4,200 ft. 8- to 27-in. sanitary sewers, Dist. 24-B Trunk Sewer, Sanitary Contr. 208, to Aiello Constr. Co., 4th and Gough Sts., $131,000. Noted Jan. 3.

N. C., Conover—See "Waterworks."

N. C., Laurinburg—Sanitary sewer extensions, to T. D. Noan, 22 Highland Ave., Detroit, Mich., $38,837. Noted Nov. 29.

Mich., Detroit—Pumps, motors, air compressors, etc., in sewage pumping station, to Miller-York Inc., 1523 East Congress St., $74,900. Noted Jan. 10.

Ill., Lewiston—For 13,000 ft. 8-in. vitr. clay sewer, disposal plant, etc., to Anno & Nohl, Havana, $19,922. Noted Jan. 3.

Okla., Oklahoma City—New storm sewer, 7,669 ft., 15 in. to 60 in. concrete pipe, in Bway., Pottawatomie, Robinson and Harvey Sts., to Municipal Excavator Co., 200 East Main St., $57,949.

Utah, Salt Lake City—Forest Dale Sewer Extension, 40,000 ft. 8- to 21-in. pipe, 32,000 yd. excav., to J. O'Conner, Utah Savings Bldg., $105,000; sewer extension 419, 3rd St. S. to 9th St. S., and 7th St. W. to Goshen St., 10,000 ft. 8- to 12-in. pipe, to J. L. Griffith Co., Salt Lake City, $28,000.

Calif., Morgan Hill — Sewerage system and disposal plant, to Heafey-Moore-McNair, 2030 High St., Oakland, $51,296. Noted Dec. 27.

Waste Disposal

PROPOSED WORK

N. Y., Albany—Making plans incinerator and garbage reduction plant. $400,000. J. G. Brennan, city engr.

Calif., Beverly Hills—Having plans prepared sewage treatment plant. To exceed $25,000. Salisbury, Bradshaw & Taylor, Mortgage Guarantee Bldg., Los Angeles, consult. engrs. Noted July 26.

Bridges

PROPOSED WORK

Conn., New Haven—Bureau Eng. making preliminary plans steel and concrete arch., 38 ft. span, on Willow St. $150,000. E. S. Nettleton, city engr.

N. Y., Buffalo—Comr. Pub. Wks., Municipal Bldg., rejected bids Dec. 26, reconstructing, renewal and protection of viaduct over tracks of Lake Shore & Michigan Southern R.R., Fulton St., new truss span for Elk-Abbott viaduct over tracks of Erie R.R., etc., replacing 3 old truss spans with 3 new ones on Elk St. viaduct, etc., replacing 1 old truss with one 113 ft. 6 in. new truss span on Elk-Abbott viaduct, etc., and old truss span with one 105 ft. new truss span on Van Rensselaer St. viaduct, etc. Will readvertise. Noted Jan. 10.

N. Y., Schenectady—State Hy. Dept., Albany had plans prepared removing defective beams and replacing same with new ones, new flooring, repairing foundations, grading approaches, etc., on Schenectady-Scotia Bridge. $30,000.

Fla., Sarasota—See "Streets and Roads."

Fla., Sarasota—Sarasota Co. election Jan. 29, to vote on $45,000 bonds for bridge and fill, Blackburn Point; $45,000 bridge and fill, Stickney Point Rd. O. E. Loesch, clk.

Kentucky—Norfolk & Western R.R. Co., Norfolk, plans steel girder bridge over Tug Folk of Big Sandy River, Pike Co. $25,000. W. P. Wiltsee, ch. engr.

Kentucky—Norfolk & Western R.R. Co., Norfolk, plans steel girder bridge over Tug Fork of Big Sandy River Pike Co. $25,000. W. P. Wiltsee, ch. engr.

Ky., Whitesburg—See "Streets and Roads."

Ill, Aurora—City plans steel truss highway bridge over Fox River. To exceed $125,000.

South Dakota—State Hy. Comn., Pierre, plans 3,000 ft. bridge over Missouri River. $350,000. F. D. Hudgins, state engr.

Tex., Sulphur Springs—See "Streets and Roads."

Okla., Chickasha — Grady Co. election Mar 4, to vote on $100,000 bond issue for 2 concrete bridges over Washita River. P. A. Little, Chickasha, engr.

Colorado — State Hy. Dept., Denver, adopted budget for 1924. Governor approved same. Work includes bridge over railroad tracks north of Colorado Springs, Dist. 5, Federal Aid Project 276, $35,000; bridge south of Craig, Dist. 6, Federal Aid Project 282, $40,000.

Bridges (Continued)

Calif., Santa Ana — Orange Co. having plans prepared bridge over Newport Bay between Newport Blvd. and Palisades. $75,000. J. L. McBride, co. rd. comr.

Calif., Weitchpec—Humboldt Co. (Eureka) had plans prepared reconstructing cable suspension bridge over Klamath River, here, consists of steel truss span, 385 ft. long, steel towers. $25,000. A. J. Logan, co. surv.

BIDS DESIRED

New York—Feb. 20, at office of J. D. Bradburn, clk. town of Aurora, East Aurora, Bridges 3, 16, 18, 20, 21, 22 and 25, Erie Co. G. C. Diehl, 577 Ellicott Sq., Buffalo, engr.; adv. E. N.-R. Jan. 17.

Pa., Phila.—Feb. 13, by Delaware River Bridge Joint Comn., Room 806 Widener Bldg., constructing Phila. and Camden approach piers of bridge over Delaware River between here and Camden, N. J., Contrs. 11 and 12; adv. E. N.-R. Jan. 17.

North Carolina — See "Streets and Roads."

Louisiana—Jan. 22, by State Hy. Dept., Reymond Bldg., Baton Rouge, constructing Bayou Vidal Bridge on Federal Aid Project 134, Madison and Tensas Parishes; Bayou Macon Bridge on Federal Aid Project 135 B, Madison and Richland Parishes; Bayou Vermillion Bridge on Federal Aid Project 136 B, Lafayette Parish. J. M. Fourmy, ch. engr.

O., Cambridge—Feb. 1, by Dept. Highways and Pub. Wks., Columbus, improving section of viaduct over tracks of Baltimore & Ohio R.R. and Pennsylvania R.R., Wills Creek, Dewey Ave., here, rein.-con. $192,780. A. V. Donaheys, dir. highways.

S. D., Yankton — Feb. 5, by Meridian Highway Bridge Co., approach and concrete slab on truss spans, 2,230 cu.yd. concrete, 282,000 lb. reinforcing and 80,000 lb. structural steel, 4,580 sq.yd. asphalt paving, 1,050 sq.yd. brick paving, 1 frame office building and lights for entire bridge. Harrington, Howard & Ash, 1012 Baltimore St., Kansas City, Mo., engrs.

California—Feb. 4, by State Hy. Comn., Sacramento, bridge over Cedar Creek, 18 mi. east of Gilroy, Santa Clara Co., three 42 ft. 4 in. rein.-con. girder spans with concrete piers, abutments and wing walls, also across North Fork Pacheco Creek about 21 mi. east of Gilroy, three 50 ft. and two 34 ft. rein.-con. girder spans on concrete bents. R. M. Morton, state highway engr.

BIDS RECEIVED

Kentucky—State Hy. Dept., Frankfort, 540 ft. steel bridge over Cumberland River, Harlan Co., one 240 ft. and two 150 ft. spans, from F. K. Ketler Co., 7344 Yates Ave., Chicago, $44,377; 4 rein.-con. abutments and 1 concrete pier, from Blanchard Crocker Co., Lexington, $24,359.

Wash., Seattle—Bd. Pub. Wks., Jan. 11, West Spokane St. Bridge, from H. Pederson, Alaska Bldg., $154,536. Noted Dec. 20.

CONTRACTS AWARDED

Pa., Northumberland—Pennsylvania R.R. superstructure for 157 ft. two track through truss span bridge across Susquehanna River from here to Sunbury, to Bethlehem Steel Co., Bethlehem.

Miss., Jackson — For 382 ft. rein.-con. bridge, 50 ft. wide, 20 ft. high, over Cut Off Canal, between Capitol and Pearl Sts., to Hayes & Lewis, Jackson, $58,300.

O., East Sparta—Stark Co., Court House, Canton, concrete bridge, here, to Roberts Supply Co., 419-21 Opera Blk., Lima, $58,808. Engrs. est. $65,000.

O., Navarre—Stark Co., Court House, Canton, concrete bridge, here, to Roberts Supply Co., 419-21 Opera Blk., Lima, $43,533. Engrs. est. $50,000.

Ind., Indianapolis—Marion Co., 3 span rein.-con. bridge over Fall Creek on Delaware St., to M. E. White, 130 North Wells St., Chicago, $172,336. Noted Nov. 29.

Ia., Sioux City—Bd. Supervs. Woodbury Co., 370 ft. bridge over Little Sioux River, three 90 ft. and two 50 ft. steel truss spans, to Des Moines Steel Co., 415 S. W. 5th St., Des Moines, $40,000.

Dams

PROPOSED WORK

Wis., Wausau—See "Industrial Works."

Missouri — Central Missouri Power & Water Co., c/o C. E. Jacoby, engr. Shuckert Bldg., Kansas City, having preliminary plans prepared power dam, 40,000 kw. capacity, on Gasconade River near mouth of Piney River, 90 mi. from St. Louis.

Calif., Madera—See "Excavation, Drainage, Irrigation."

Que., Bryson—Ottawa River Power Co., Ltd., Montreal, plans dam and power house, on Calumet Island, here. L. A. Hendt, Montreal, engr. Generators to be supplied by Canadian Westinghouse Co. Ltd., Montreal, $250,000.

Railways

PROPOSED WORK

Tennessee—Southern R.R. Co., 13th St. and Pennsylvania Ave., plans 17 mi. railroad cutoff between Bulls Gap and Leadville. J. B. Akers, ch. engr.

Indiana — See "Unclassified" under Ft. Wayne.

Indiana—Cleveland, Cincinnati, Chicago & St. Louis R.R., Cleveland, plans enlarging trackage in yards at Petersburg, Ind. $25,000-$50,000. C. A. Paquette, Cincinnati, ch. engr.

Indiana—Wabash R.R., Division Headquarters, Peru, plans to expend $1,000,000 for improvements in and around Peru, incl. new yards east of city, new car and locomotive repair shops. R. H. Howard, St. Louis, Mo., ch. engr.

Texas—Ft. Worth Belt Line & Terminal Warehouse Co., Ft. Worth, having surveys made belt line railroad around city. $1,000,000. K. Roby, Court House, engr.

Calif., Dos Rios—See "Unclassified."

CONTRACTS AWARDED

Oregon—See "Unclassified."

Excavation, Drainage, Irrigation

PROPOSED WORK

Ark., Brookland—Thompson Creek D. D. having preliminary plans prepared 10 mi. ditches, 500,000 cu.yd. excav., from floating dredge. Cobb & Lee, Amer. Trust Bldg., Jonesboro, engrs.

Ark. Jonesboro—Cane Island D. D. 26, takes bids about Feb. 15, remaining dredge and drainage work. $90,000. Cobb & Lee, Amer. Trust Bldg., engrs.

Ark., Jonesboro — See "Unclassified" under levee.

Ark., Lake City — See "Unclassified" under levee.

Calif., Madera—San Joaquin Water Storage Dist. had surveys made for large storage dam on San Joaquin River, pumping plants and other irrigation works, about 550,000 acres in district. $33,000,000. H. Barnes, Madera, consult. engr. Chief engineer not selected.

Calif., Ukiah—C. Kasch, I.O.O.F. Bldg., representing interests, plans irrigation works for district in Potter Valley. To exceed $25,000. Engineer not selected.

Calif., Williams—William Irrigation Dist. had surveys made 13 mi. canal connecting Glenn-Colusa and Williams Irrigation Dists., incl. 175,000 cu.yd. earthwork. F. H. Tibbetts, Alaska Commercial Bldg., San Francisco, consult. engr.

BIDS DESIRED

Ore., Danner—Feb. 4, by Bd. Directors Jordan Valley Irrigation Dist., at office C. E. Lanning, secy. widening present lower feeder of Jordan Valley project, raising Antelope dam, constructing outlet from dam, main canals and laterals, etc.

Ont., St. Catharines—Jan. 31, (extended date), by J. W. Pugsley, secy. Dept. Rys. & Canals, Parliament Bldg., Ottawa, Sect. 8, Welland Ship Canal, $5,000,000 to $8,000,000. W. A. Bowden, ch. engr. Noted Jan. 3.

BIDS RECEIVED

New York—J. A. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York City, Jan. 14, dredging channel, constructing dikes, etc., Queens Boro, Contr. 1818, from Arundel Corp., foot of Fulton St., Brooklyn, (b) $504,814 (c) $811,817. Noted Jan. 10.

CONTRACTS AWARDED

Miss., Charleston—Panola Quitman D. D., draining 90 acres, 6,500,000 cu.ft. earth excav., to N. C. McGinnis & Co., Exch. Bldg., Memphis, Tenn. Engrs. est. $1,500,000.

Ind., Crown Point—Lake Co., constructing Beaver Dam Ditch No. 3, main ditch and 16 laterals, 407,646 cu.yd. open work, 57,008 ft. 8- to 36-in. tile, to Walb Contg. Co., La Grange, $126,000.

Calif., Blythe—Palo Verde D.D. rescinded call for bids for west side drain. Work may be done by day labor. Noted Dec. 20.

Streets and Roads

PROPOSED WORK

Conn., Windham (Willimantic, P. O.)—Plans paving North Windham Rd., concrete. $25,000. F. P. Fenton, town clk.

N. Y., Albany—Plans 54 ft. carriageway with grass plot 18 ft. wide in center, 6 ft. sidewalks, and asphalt concrete paving Manning Blvd. S. $25,000. J. G. Brennan, city engr.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, rejected bids Dec. 27, grading Flatbush Ave. Will readvertise. Noted Dec. 20.

New Jersey—State Hy. Dept., Trenton, plans improving 3.5 mi. Route 9, Dunellen-Middlesex Rd., Middlesex Co. W. G. Sloan, state highway engr.

N. J., New Brunswick—Plans paving several streets. $194,000. A. Atkinson, New Brunswick, engr.

N. J, Trenton—Plans paving and repaving several streets. $500,000. J. E. English, City Hall, engr.

W. Va., Huntington—See "Unclassified."

Fla., Sarasota—Sarasota Co., election Jan. 29 to vote on $75,000 bonds, grading and 9 ft macadam paving 15 mi. Fruitville-Miakka Rd., $54,000, 9 mi. Verna-Miakka Rd., $60,000, 10 mi. Lockwood Ridge Rd.; $78,000 widening, grading and 9 ft. macadam paving 14 mi. Madison Grove Rd.; $128,000 grading, 9 ft. macadam paving and concrete bridge over Miakka River, 16 mi. Bee Ridge-Miakka River Rd.; $65,000 resurfacing with 9 ft. macadam, Venice Englewood Rd.; $40,000 grading and 9 ft. shell paving, 10 mi. Little Sarasota Key Rd. O. E. Roesch, clk.

Ala., Albany—Soon takes bids bitulithic paving 9 blocks 6th and 7th Aves. W., 8th Ave. and Jackson St. $50,000. W. S. Bingham, city engr.

Miss., Columbus — Having preliminary plans prepared grading and paving with brick, asphaltic concrete or concrete 60,000 ft. various streets. $500,000. R. L. Totten, Brown-Mark Bldg., Birmingham, Ala., engr.

Miss., Meridian — Had plans prepared paving, curbing and guttering 159 blocks. W. H. White, city clk.

La., New Iberia—See "Industrial Works."

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, plans to construct during 1924 152.5 mi. highway, 9 to 18 ft. wide, in Blount, Coffee, Cumberland, De Kalb, Grundy, Jefferson, Loudon, Marion, Monroe, Montgomery, Pickett, Putnam, Roane and Sullivan Counties; grade 25 mi., 16 ft., in Chester, Hardin and McNairy Counties; with bituminous macadam 5.5 mi., 14 ft., Trousdale Co.; 8 mi., 16 ft., probably bituminous macadam, Davidson Co.; grade and gravel surface 13 mi., 16 ft., in Giles and Hardin Counties; grade and probably gravel surface 11.4 mi., 16 ft., Perry Co.; surface (oil treatment) 47.3 mi., 16 ft., in Dickson, Lawrence, Lewis, Marshall and Maury Counties. Following are Federal Aid Projects for 1924, construct 184 mi., 16 to 18 ft., Anderson, Cocke, Crockett, Dyer, Fayette, Gibson, Greene, Hamblen, Hardeman, Henderson, Madison, Roane and Tipton Counties; grade and gravel surface 12.6 mi., 16 ft., Obion Co.; grade and surface 18.7 mi., 16 to 18 ft., Lincoln and Maury Counties; surface 11 mi., 16 ft., Smith Co.; construct, probably gravel or chert 34.8 mi., 16 ft., Hardin and Wayne Counties; construct 55.2 mi., 16 to 18 ft., Bedford, Campbell, Cannon, Gibson, Hamilton, Lincoln and Marion Counties; surveys being made 88 mi., 18 ft., Bradley, Campbell, Carroll, Lauderdale, Louden and Madison Counties; concrete bridge over Little River, near Marysville. J. G. Creveling, highway comr. Noted Dec. 27.

Tenn., Bolivar—Hardeman Co. plans to sell $55,000 bonds for highway from Bolivar to Fayette Co. line.

Tenn., Nashville—Plans constructing and paving 10 streets, probably rock or sheet asphalt. W. W. Southgate, City Hall, engr.

Tenn., Rockwood—Plans to improve 1.5 mi. Chamberlain Ave. and Front St., probably asphalt.

Ky., Whitesburg — Letcher Co. election Mar. 15, to vote on $250,000 bonds for roads and bridges. Address Clerk.

O., Cleveland — Takes bids in spring grading, curbing and paving Lakeshore Blvd., Fairmount and Henninger Rds., Forest, Gordon and Hope Courts, Camden, Cedar, Carlton, Diana, Durkee, Dundee, Denison, Ella, Euclid, Folk, Fidelity, Ferris, Forest, Frankfort, Gifford, Hough, Heath, Headley, Hamilton and Iroquois Aves., Harvard Ave. from East 123rd to East 131st Sts., Harvard Ave. from East 110th to East 116th Sts., Lorain Ave. from West 25th to West 55th Sts., Lorain Ave. to old city limits. $1,000,000. R. Hoffman, City Hall, engr.

O., Cleveland — Takes bids in spring grading, curbing and paving West 69th Pl., Moore and Woodward Courts, Milverton, Nathaniel, Wheelock and Wentworth Rds., Mapleside, Market, Natchez, Payne, Proctor, Pershing, Revere, Raymond, Sandusky, Treadway and Wagner Aves., East

Streets and Roads **(Continued)**

37th, 33rd, 30th, 60th, 84th, 85th, 97th, 100th, 103rd, 106th, 113th, 114th, 118th, 119th, 120th, 105th, 106th, 110th, 139th, 130th, 123rd, 128th, 135th, 143rd, 140th, 147th, 126th, 153rd, 127th, 167th, and 176th Sts., West 4th, 20th, 52nd, 42nd, 44th, 59th, 68th, 86th, 105th, 114th, 117th and 103rd Sts., St. Clair Ave. from East Blvd. to Penobscot Ave., St. Clair Ave. from Woodworth Rd. to East 140th St., St. Clair Ave. from East 140th to East 152nd Sts., St. Clair Ave. from London to Nottingham Rds., St. Clair Ave. from East 152nd St. to London Rd., Saranec Rd. from Aspinwall Ave. to East 142nd St., East 55th St. from Woodland to Grand Aves., East 55th St. from Scovill to Carnegie Aves., East 55th St. from Scovill to Woodland Aves., East 112th St. and Clarebird Ave. from Union Ave. to East 116th St., East 112th St. and Charlotte Rd. from Miles Ave. to East 111th St., East 137th St. from Kinsman Rd. to Abell Ave., 139th St. from Union to Melzer Aves., East 137th St. from Caine to Beachwood Aves., East 139th St. from Kinsman to Abell Aves. $2,500,000. R. Hoffman, city engr.

O., Lisbon—Columbiana Co. plans constructing 2 mi. or more Fairfield-Elkron-Middleton Twp. Rd., 20 ft. $150,000. Cost to be borne by above townships. Will mature in spring. L. C. Kirk, Lisbon, engr.

Indiana—State Hy. Dept., Indianapolis, plans cement paving highways connecting Anderson with Indianapolis, Muncie and Alexandria. Work includes 4 mi. Alexandria Pike, 12 mi. road from Chesterfield to point east of Yorktown, 6.03 mi. from McCordsville to Fortville, 5.95 mi. from Fortville to point south of Pendleton and 8.29 mi. to Anderson. Total $1,000,000. Above work will be let in February. J. D. Williams, dir.

Indiana—State Hy. Dept., Indianapolis, rejected bids concrete paving 7.736 mi. Federal Aid Rd. 74, Sect. A, Boone Co. and 6.032 mi. Federal Aid Rd. 21, Sect. B, Clark Co. Noted Jan. 10.

Ind., Ft. Wayne—Allen Co. plans resurfacing and widening from 12 and 16 ft. to 18 ft., 5.5 mi. Bass Rd., various materials will be considered. $50,000. W. G. Tonkel, co. supt. roads.

Ind., Richmond—Wayne Co. plans paving 1½ mi. Abington Pike, 18 ft., cement concrete. $30,000. H. Thornburg, aud.

Mich., Plainwell — Plans to pave West Bridge and Allegan Sts. $25,000.

Wis., Janesville—Making plans paving 8 mi. various streets, one course rein.-con. $300,000-$350,000. C. V. Kerch, City Hall, engr.

Kan., Topeka—Preparing plans paving 30 blocks, (3 mi.), 2 in. asphaltic concrete on 7 in. concrete; 15 blocks, brick or sheet asphalt on 7 in. concrete; 30 blocks 6 in. concrete alleys, 15 ft wide, all to have concrete curbs and gutters. $242,000. W. E. Baldrey, City Hall, engr.

South Dakota—State Hy. Comn., Pierre, plans to grade 600 mi. road (Federal Aid) $1,850,000, (State Aid) $240,000; gravel surfacing 450 mi. road, (Federal Aid) $855,000. F. D. Hudgins, state engr.

S. D., Canton—Making plans paving 20 blocks 5th and Main Sts. $75,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Missouri — State Hy. Dept., Jefferson City, plans concrete paving 47,759 sq.yd. Federal and State Aid Project 236C, Route 2, Warren Co., and 1.5 mi. State Project Route 35, Sect. 5, 18 ft., Cass Co.; gravel surfacing 46,132 sq.yd. State Project Route 15, Sect. 80A, Dallas Co., 1.132 mi. State Project Route 12, Sect. 25, 16 ft., Moniteau Co., and 21,848 sq.yd. State Project Route 12, Sect. 29A, Moniteau Co.; grading, etc. 4.35 mi. State Project Route 5, Sect. 72, 26 ft., Laclede Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Plans granite curbing where necessary and resurfacing 15 blocks Lindell Blvd., 80 ft., refined asphalt on concrete. $144,000. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Making plans creating North and South Highway, from 50 to 80 ft., $500,000 exclusive of paving; widening Grand Blvd. from Choteau to Magnolia Aves., from 60 to 100 ft. $200,000, Grand Blvd. from Natural Bridge Rd. to Florissant Ave., $45,000; Olive-Theresa and Pine-Lawton-West Pine cut-offs, $266,000. W. W. Horner, city engr.

Tex., Amarillo—Having plans prepared paving 28 residence streets, bituminous types and brick. $80,000. H. B. Jones, city engr.

Tex., Anderson—Iola Dist., Grimes Co., voted $200,000 bonds road construction. R. M. West, co. judge. Noted Jan. 10.

Tex., Anderson—Grimes Co. voted $80,000 bonds improving roads in Singleton Dist. R. M. West, co. judge.

Tex., Crockett — Houston Co. defeated $250,000 bonds for highway improvements and road construction in Grapeland Dist. C. H. Milburn, co. engr. Noted Jan. 10.

Tex., Dallas — Plans gravel surfacing side streets, permanent paving traffic streets, and storm sewers in Oak Cliff, incl. Oak Cliff Blvd., West 12th and Jefferson Sts. $150,000. E. A. Kingsley, city engr.

Tex., Dallas—Had plans prepared widening and paving Live Oak St. from 50- to 70-ft., $471,710; Harwood St., 45- to 60-ft. $432,000; Lamar St., $175,000; Cockrell St., $160,000. E. A. Woods, city plan engr.

Tex., Dallas—Plans gravel or macadam surfacing, curbing and guttering Broadmoor, Britton, Saner and miscellaneous streets. $25,000. E. A. Kingsley, city engr.

Tex., Dallas—Soon takes bids paving 15 streets, bituminous, concrete or brick. $400,000. E. A. Kingsley, city engr.

Tex., Eagle Pass — Maverick Co. voted $150,000 bonds hard surfacing Eagle Pass Dilley Rd., to connect with Meridian Highway. $100,000 Federal Aid, total $250,000. W. A. Bonnet, co. judge. Noted Nov. 15.

Tex., Eagle Pass — Maverick Co. voted $150,000 bonds grading and bituminous macadam surfacing 25 mi. Eagle Pass-Carrizo Springs Rd. Total cost $425,000. Bonds voted to be supplemented by State and Federal aid.

Tex., El Paso—El Paso Co. having plans prepared grading and surfacing with bituminous or concrete 8 mi. State Highway 1, 18 ft. $368,000. L. A. White, co. engr.

Tex., Hereford—Jan. 26, to vote on $50,000 bonds permanent paving.

Tex., Highland Park (Dallas P. O.)—Had plans prepared and soon takes bids paving Cowper St., bituminous or concrete. $25,000. G. D. Fairtrace, city engr.

Tex., Leakey—Real Co. had plans prepared and opens bids about Feb. 15, crushed rock surfacing 18 mi. highway, 16 ft. $200,000. W. E. Simpson Co., N. B. C. Bldg., San Antonio, engrs.

Tex., Rosebud—Voted bonds paving Ave. C and miscellaneous streets, brick or bituminous concrete. City to pay ⅓ ($18,000), property owners ⅔. Address Mayor or R. A. Sapp, Rosebud. Noted Dec. 13.

Tex., Sulphur Springs—Hopkins Co. having plans prepared grading and gravel surfacing 8 mi. Sulphur Springs-Commerce Rd., 18 ft., also bridge across Trinity River, etc. $86,000. J. B. Rieman, co. engr.

Tex., Vernon — Wilbarger Co. election Feb. 2, to vote on $150,000 bonds highway construction in Precinct 4, (Harrold Precinct). J. B. Nabors, co. engr.

Okla., Blackwell — Plans grading and paving 29 blocks College, Pason, Bridge and McKinley Sts., 26,000 sq.yd. concrete, 11,800 lin.ft. curbing, 8,600 cu.yd. earth and 100 cu.yd. rock excav. $105,000. W. Ritzhaupt, Jr., Blackwell, engr.

Okla., Chickasha — Grady Co. election Mar. 4, to vote on $900,000 bonds for grading and paving 70 mi. highways, 250,000 sq. yd. concrete, 500,000 sq.yd. gravel, 500,000 cu.yd. excav. P. A. Little, Chickasha, engr.

Okla., Comanche—Making surveys grading and paving 7 blocks Main St., 30-60 ft. $60,000. V. V. Long & Co., 1300 Colcord St., Oklahoma City, engrs.

Okla., Kingfisher—Kingfisher Co. having surveys made grading and paving 38 mi. Meridian Highway, 400,000 sq.yd. concrete, 275,000 cu.yd. excav. $500,000. C. R. Steele, co. engr.

Okla., Pauls Valley—Garvin Co. election Feb. 15 (extended date) to vote on $700,000 bond issue for grading and paving 70 mi. county highways. P. A. Little, Chickasha, engr. Noted Jan. 3.

Okla., Sapulpa—Creek Co. voted $700,000 bonds and takes bids about July grading and concrete paving 63 mi. highway. C. K. Howard, Sapulpa, engr. Noted Dec. 13.

Okla., Tulsa — Preparing plans grading, paving, curbing and guttering 19,000 ft. 12th Pl., Lewis, Boston, 8th, Wheeler, 20th, Zunis and St. Louis Sts., brick, concrete, asphaltic concrete, etc. $180,000. C. Schultz, city engr.

Colorado — State Hy. Dept., Denver, adopted budget for 1924, Governor approved same. Estimates of cost are based on average of $36,000 per mile for paving and $13,000 per mile for gravel surfacing. Work as follows: Dist. 2, grading and surfacing $60,000, gravel surfacing $345,416; Dist. 3, asphalt paving $140,000, gravel surfacing $310,314; Dist. 4, paving $30,000, gravel surfacing and paving $219,700, gravel surfacing $105,966; Dist. 5, gravel surfacing $25,000, paving $600,140; Dist. 6, grading $100,000, gravel surfacing $75,000, paving $380,000; Dist. 7, gravel surfacing $123,464, paving $340,000. All foregoing Federal Aid Projects. Above does not include state projects ranging from $1,000 up to $24,000, nor maintenance.

California—State Hy. Dept., Secramento, had plans prepared grading and graveling 6 to 8 mi. 30 to 32 ft. wide, incl. 30,000 cu.yd. excavation to mile, San Mateo Co.; 4½ mi. of 20 ft. concrete paving from Huntington Beach to Newport, Orange Co. R. M. Morton, state highway engr.

Calif., Bakersfield—Kern Co. had plans prepared resurfacing with 3 to 5 in. asphaltic concrete 38 mi. various highways, also 3 mi. new construction, 6 in. asphaltic concrete in 2 courses. To exceed $900,000. W. Farley, Monadnock Bldg., San Francisco, consult. engr. Noted Aug. 23.

Calif., Burlingame—Had plans prepared improving Bway. between El Camino Real and San Mateo Dr., incl. 25,000 sq.ft. grading, 985 tons asphaltic concrete base and 60,000 sq.ft. asphaltic concrete surface, etc. C. A. Torello, city engr.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving portion 1st St., etc., 8,855 sq.ft. concrete walks, 6,095 sq.ft. concrete gutter, 6,402 sq.yd. concrete pavement, etc.

Calif., Porterville — Having plans prepared paving 30 blocks. To exceed $50,000. F. Pease, city engr. Noted July 12.

Calif., San Diego—Plans improving Columbia, Laurel and Maple Sts., 31,719 sq.ft. 4 in. concrete, 72,027 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous base, 199,607 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous base, 12,703 sq.ft. cement concrete sidewalk, etc.; Woolman Ave. and N St., 206,196 sq.ft. 1½ in. Warrenite bitulithic wearing surface on 3 in. bituminous, 7,816 sq.ft. cement concrete sidewalk; A, Ash, Dale, 30th, Fern, B, Granada, 29th and Grape Sts., 144,384 sq.ft. 1½ in. sheet asphalt on 4 in. concrete base, 496,587 sq. ft. 1½ in. sheet asphalt on 2½ in. bituminous base, 21,600 sq.ft. cement concrete sidewalk, 4,564 lin.ft. cement concrete curb, etc. F. A. Rhodes, city engr.

Calif., Oakland—Had plans prepared improving 12th St. incl. 92,176 sq.ft. grading, 4,362 lin.ft. concrete curb without guard, 5,321 sq.ft. concrete gutter, 96,855 sq.ft. 6 in. concrete base with 2 in. warrenite surface pavement, etc. W. W. Harmon, city engr.

Ont., Stratford—Plans 25,000 sq.yd. asphalt, concrete and macadam pavements, 17,000 lin.ft. concrete curbing and guttering, $100,000. A. B. Manson, city engr.

BIDS DESIRED

New York — Feb. 5, by L. Grossman, comr. State Hy. Dept., Albany, constructing and reconstructing highways in Allegany, Dutchess, Madison, Ontario, Orange, Orleans, Oswego and Wyoming Counties; adv. E. N.-R. Jan. 17.

North Carolina—Jan. 31, by State Hy. Comn., Raleigh, hard surfacing, concrete or asphaltic paving, grading, etc. Projects, 106-B, 111, 222, 352, 381, 536, 720, 732-B and 836-B in Bertie, Camden, Duplin, New Hanover, Pender, Guilford, Caldwell, Davie and Henderson Counties respectively; topsoiling, sand clay or gravel surfacing, etc. Projects 472-B, 714, 449, 662, 912-A and 912-B, in Vance Ashe, Lee, Richmond and Cherokee Counties respectively; bridges Projects 404-B and 610, Chatham, Anson and Richmond Counties; adv. E. N.-R. Jan. 17.

Miss., Leland—Feb. 5, by J. T. Mathis, mayor, and Bd. Alderman, 72,000 sq.yd. pavement, etc. M. L. Culley, consult. engr. A. A. McCarn, resident engr.

Louisiana—Jan. 22 (extended date), by State Hy. Dept., Reymond Bldg., Baton Rouge, 5.42 mi. State Project 386 A, St. Landry Parish, Opelousas-Ville Platte Highway. J. M. Fourmy, ch. engr. Noted Dec. 27.

O., Akron—Jan. 28, by W. F. Peters, dir. Pub. Serv., paving 1 mi. or more West Market St., 80 ft., brick, $150,000; ½ mi. Aqueduct St., 50 ft., brick, $50,000; ¾ mi. Collinwood Ave., 60 ft., asphalt, $75,000-$80,000. E. A. Kemmler, Delaware Bldg., engr. Noted Nov. 22.

Ind., Jasper — Feb. 14, by Dubois Co., paving County Unit Rd. 1, 24,726 sq.yd. concrete. $63,038. H. J. Lemme, Jasper, engr.

Ind., Kosciusko—Feb. 5, by Kosciusko Co., gravel surfacing 2 mi. Curtis Cripe Rd., $29,237; concrete paving 3 mi. Columbus Disher Highway, $72,609, 3 mi. Union Chapel Highway, 86,901, all foregoing 16 ft. wide. Co. Eng. Bureau, engrs.

Ind., Newport—Feb. 4, by Vermillion Co., paving R. F Staats Rd., 13,950 sq.yd. concrete. $32,944. J. C. Ingram, Newport, engr.

Ind., Scottsburg—Feb. 11, by Scott Co., grading and gravel surfacing 12,410 ft. Frank Gardner Rd., 18 ft. $29,653. E. Kieth, Scottsburg, engr.

Streets and Roads (Continued)

Ind., Shoals—Feb. 4, by Martin Co., macadam paving 26,560 ft. Peter Fuhrman Rd., 18 ft.; 21,625 ft. Fred Hoffman Rd., 18 ft. J. L. Arvin, Shoals, engr.

Ind., Winchester—Feb. 1, by Comrs. Randolph Co., paving H. G. Kemp Rd., 31,140 sq.yd. concrete, $80,640; D. W. Bailey Rd., 22,858 sq.yd. concrete, $78,238. A. B. Purdy, Winchester, engr.

Michigan—Jan. 28, by State Hy. Dept., Lansing, grading and surfacing 4.206 mi. Federal Aid Project 63, Sect. B, Bay Co., 44,603 sq.yd. concrete. G. C. Dillman, ch. engr.

Michigan—Jan. 30, by State Hy. Dept., Lansing, grading and surfacing 2.628 mi. Federal Aid Project 101, Sect. C, Van Buren Co., 31,411 sq.yd. concrete. G. C. Dillman, ch. engr.

Michigan—Jan. 31, by State Hy. Dept., Lansing, grading and surfacing 3.041 mi. State Trunk Line Rd. 13-44, St. Joseph Co., 32,070 sq.yd. concrete. G. C. Dillman, ch. engr.

Wis., Kenosha—Feb. 28, by Bd. Pub. Wks., curbing, guttering and paving 100,000 sq.yd., bids on sheet asphalt, asphaltic concrete, rein.-con. and vitr. brick. R. M. Smith, City Hall, engr.

Minn., Hibbing—Jan. 29, by city, grading and paving with rein.-con. or bitulithic 33 blocks. $175,000. E. Hawley, city engr.

Neb., Auburn—Jan. 29, by City Council, grading and paving with brick on concrete 2,500 ft. in Dist. 8. $25,000. T. C. Daugherty, City Hall, engr.

Tex., Laredo—Jan. 31, by A. N. Winslow, judge Webb Co., widening from 15- to 18-ft. and asphalt macadam surfacing Federal Aid Project 165, State Highway 2, 6.5 mi. Sect. A, $50,195; 8.14 mi. Sect. B, $62,962; 8.75 mi. Sect. C, $73,250; 9.88 mi. Sect. D, $83,118. T. E. Huffman, co. engr. Noted Jan. 10.

Tex., Palo Pinto—Jan. 29, by E. L. Pitts, judge Palo Pinto Co., grading and surfacing with crushed stone base 4.97 mi. State Highway 28, Federal Aid Project 414, 18 ft. $100,250. G. W. Courter, co. engr. Noted Jan. 10.

New Mexico—Feb. 4, by State Hy. Comn., Santa Fe, improving road west of Silver City, Federal Aid Project 85, Grant Co., 4,106 cu.yd. one course crushed stone surfacing; 14.964 mi. Clovis-Texico Rd., Federal Aid Project 25, Curry Co., 25,398 cu.yd. 2 course 6 in. each, loose, caliche surfacing; 2.79 mi. east of Picacho, Federal Aid Project 20-A, Lincoln Co., 5,301 cu.yd. one course gravel surfacing; 4.923 mi. Pajarito-Isleta Rd., Federal Aid Project 102, Bernalillo Co., 2,849 cu.yd. Class 1 excav., 10,929 cu.yd. Class 1 borrow, 242,563 sq.ft. metal reinforcement, 9,147 cu.yd. concrete paving, etc.; 15,171 mi. between Silver City and Cliff, Federal Aid Project 47, Grant Co., 10,084 cu.yd. Class 1 excav., 2,597 cu.yd. Class 1 borrow, 2,533 cu.yd. one course gravel surfacing, etc.; 20.717 mi. Tucumcari-Logan Rd., Federal Aid Project 98, Quay Co., 42,350 cu.yd. Class 1 excav., 25,535 cu.yd. one course gravel surfacing, etc.; 4.545 mi. Cubero-McCarty Rd., Federal Aid Project 115, Valencia Co., 13,180 cu.yd. Class 1 excav., 7,031 cu.yd. 2 course crushed stone surfacing, 116.1 cu.yd. concrete pavement, etc.; 11.581 mi. Valmont-Escondido Rd., Federal Aid Project 49, Otero Co., 16,641 cu.yd. one course gravel or crushed rock surfacing, etc.; 21,082 mi. between Cliff and south line Gila National Forest, Federal Aid Project 84, Grant Co., 10,349 cu.yd. Class 1 and 2 excav. 20,041 cu.yd. one course gravel surfacing, 105,063 ft. wooden superstructure for bridge, etc. J. A. French, state highway engr.

Nevada—Jan. 30, by State Hy. Comn., Carson City, improving road from 5 mi. south of Fallon to Grimes, Churchill Co., 25,800 cu.yd. excav., unclassified, etc. G. W. Borden, state highway engr.

BIDS RECEIVED

N. Y., Brooklyn—F. D. Gallatin, pres. Park Comrs., Municipal Bldg., New York. Jan. 10, grading and paving, etc. Eastern Parkway, sheet asphalt on concrete, from M. J. O'Hara, 1228 Park Ave., New York, $140,415. Noted Jan. 3.

N. Y., Buffalo—Dept. Pub. Wks. Municipal Bldg., Jan. 3, paving with **(a)** asphalt **(b)** brick **(1)** Copeswood Ave. **(2)** Freeman St. **(3)** Highgate Ave., repaving **(4)** Ashland Ave. **(5)** Rhode Island St., from Rock Asphalt & Constr. Co., Inc., Morgan Bldg., **(a1)** $13,865 **(a2)** $16,698 **(a3)** $36,179 **(a5)** $13,699; Erie Contg. Co., Morgan Bldg., **(b1)** $14,990 **(b2)** $16,889 **(b3)** $39,000; H. P. Burgard Co., Fillmore Ave., **(a4)** $74,856. Noted Dec. 27.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Jan. 14, curbing and laying sidewalks, etc., in Chauncey St. from Welsh Bros. Contg. Co., 32 Queens St., Astoria, $11,315; paving Chauncey St., from Sicilian Asphalt Paving Co., 41 Park Row, New York, $12,968; grading, curbing, laying sidewalks, etc., on 77th St., from Kennedy & Smith, Inc., 93 Amity St., Flushing, $8,707; sheet asphalt paving 77th St., and grading, curbing, laying sidewalks and sheet asphalt paving 90th Ave., from Cranford Co., 52 9th St., Brooklyn, $24,123 and $11,988 respectively. Noted Jan. 10.

Florida—State Hy. Dept., Tallahassee, 30 ft. grading and 20 ft. sand clay surfacing, 9.45 mi. between Aucilla Rd. and Monticello, Jefferson Co., from W. J. Bryson, Jacksonville, $84,699.

Kentucky—State Hy. Dept., Frankfort, paving with waterbound macadam 5.809 mi. Williamsburg-Jellico Rd., 16 ft., State Project 35, Sect. C, Whitley Co., from E. A. Chilton, London, $157,545, 7.623 mi. Owingsville-Carlisle Rd., 14 ft., State Project 61, Sect. A, Bath Co., from Moynahan & Turner, Lexington, $103,595; surface treating above roads, from Southern Oil and Tar Co., Clay and Fulton Sts., Louisville, $8,251 and $9,502 respectively; paving with waterbound macadam 15.133 mi. Owenton-Georgetown Rd., 14 to 32 ft., State Project 49, Sect. A, Scott Co., from Georgetown Constr. Co., Georgetown, $293,205, surface treating from Atlantic Asphalt Refining Co., Atlanta, Ga., $18,044; with rein.-con. 3.747 mi. Louisville-Bardstown Rd., 20 ft., State Project 3, Sect. B, Jefferson Co., from Louis Des Cognets & Co., 413 East Main St., Lexington, $191,209; grading 3.167 mi. Harlan-Pineville Rd., 24 and 28 ft., State Project 6, Sect. C, Harlan Co., from J. S. Lusk & Co., Barboursville, $33,603. Noted Dec. 13.

Tex., Dallas—Paving Young St. from Akard to Houston Sts. and from Harwood to Akard Sts., Jefferson St. from Polk to McDonough Sts., from Smith Bros., Sumpter Bldg., rock asphalt $1.15 per sq. yd.; Fuller Constr. Co., Slaughter Bldg., willite $1.34; Central Bitulithic Co., Praetorian Bldg., bitulithic $2. Engrs. est. $45,000.

Tex., Decatur—Wise Co., hauling and placing 33,125 cu.yd. gravel surfacing on State Highway 2, Federal Aid Project 14-B, from Alexander & Speer, Alvord, $21,607. Gravel to be furnished by county, $26,500. Noted Dec. 13. Engrs. est. $50,000.

Tex., Sierra Blanca—Hudspeth Co. grading and gravel surfacing 9.03 mi. State Highway 1, Federal Aid Project 399, 258 cu.yd. concrete, 23,091 cu.yd. roadway, 16,118 cu.yd. borrow excav., 21,040 lb. reinforcing steel, 2,954 cu.yd. gravel, from Valient & Toomey, F & M Bank Bldg., Ft. Worth, $30,532. Engrs. est. $35,000.

Wash., Seattle—Bd. Pub Wks., Jan. 4, grading and concrete walks on 26th Ave. N. E., et al., from Paduano & Chrisman, 1546 12th St. S., 6,700 lin.ft. concrete sidewalk $1.35, 18,500 cu.yd earth excav. $0.42, total $30,598.

Wash., Seattle—Bd. Pub. Wks., Jan. 11, paving, curbing, etc. Jackson St. et al., from F. McClellan, Lyon Bldg., $504,457 for brick and $457,038 for concrete. Noted Dec. 27.

California—State Highway Comn., Sacramento, improving 11.5 mi. Beltane-Schellville Rd., Federal Aid Project 123, Sonoma Co., from Galbraith & Janes, San Mateo, 45,000 cu.yd. roading embankment $1.08, 76,800 sta. yd. overhaul $0.02, 22,524 lin.ft. subgrade, preparing and shaping $0.24, 8,975 cu.yd. Class A Portland cement concrete pavement $13.35, 1,425 cu.yd. Class A Portland cement concrete culverts and monuments $24.50, 13,120 cu.yd. crushed gravel or broken stone $3.48, etc. Total $274,761. Noted Dec. 20.

California—State Hy. Comn., Sacramento, improving 13.1 mi. Thoute Ave. to west city limits of Los Angeles, Los Angeles Co., 52,000 cu.yd. unclassified excav., 21,080 cu. yd. Class A concrete pavement, 385 cu.yd. Class A concrete in structures, 37,970 sq.yd. reinforcing steel in pavement, etc., from G. H. Oswald, 366 East 58th St., Los Angeles, $388,785. Noted Dec. 27.

California—State Hy. Comn., Sacramento, 1.9 mi. concrete paving in vicinity of Galt, from Kaiser Paving Co., Bank of Savings Bldg., Oakland, $53,354.

Calif., Auburn—Improving Sacramento, High and Nevada Sts., etc., incl. 276,000 sq. ft. grading and 276,000 sq.ft. Willite paving from J. A. Costello, Jr., 1083 Shotwell St., San Francisco $0.05 sq.ft. and $0.214 sq. ft. respectively. Noted Jan. 3.

Calif., Fresno—Improving Moroa and Vassar Aves., 122,123 sq.ft. grading, 88,582 sq.ft. paving, 2,722 lin.ft. concrete curb, 7,985 sq.ft. concrete gutter, 12,070 sq.ft. walks, culverts, twenty manholes, etc., from California Road and Street Improvement Co., Bank of Italy Bldg., Fresno, $37,129.

Calif., Los Angeles—Los Angeles Co. improving Western Ave. between Clarke and Rosecrans Sts., incl. (1) 660 cu.yd. excavation (2) 3,270 ton asphalt concrete surface (3) 26,632 sq.ft. concrete shoulders (4) 26,632 ft. of 3 in. concrete sand cushion, from G. H. Oswald, 366 East 58th St. (1) $0.80 (2) $6.20 (3) $0.36 (4) $0.03; Griffith Co., Railway Bldg. (1) $2 (2) $6.50 (3) $0.32 (4) $0.02; G. R. Curtis, 2440 East 26th St (1) $2 (2) $6.50 (3) $0.35 (4) $0.02. Noted Dec. 20.

Calif., Los Angeles—Los Angeles Co. improving Western Ave., between Clarke and Rosencrans Sts., incl. (1) 660 cu.yd. excavation, (2) 3,270 ton asphalt concrete surface, (3) 26,632 sq.ft. concrete shoulders, (4) 26,632 ft. of 3 in. concrete sand cushion, from G. H. Oswald, 366 East 58th St., (1) $0.80, (2) $6.20, (3) $0.36, (4) $0.03. Noted Dec. 20.

Calif., Oakland—Improving portions Lynde and Bartlett Sts.; incl. (1) 58,500 ft. grading **(2)** 1,958 ft. concrete curb (3) 3,895 ft. concrete gutter (4) 29,325 ft. oil macadam pavement (5) 11,130 ft. cement walks, from Hutchinson Co., Hutchinson Bldg. (1) $0.03 (2) $0.70 (3) $0.26 (4) $0.11 (5) $0.16; Bates & Borland, Bank of Savings Bldg., (1) $0.035 (2) $0.70 (3) $0.25 (4) $0.095 (5) $0.16; Heafy-Moore-McNair, 2030 High St. (1) $0.038 (2) $0.70 (3) $0.24 (4) $0.11 (5) $0.17. Noted Jan. 3.

Calif., Oakland—Alameda Co., concrete paving in towns of Pleasanton and Livermore, from Heafey, Moore-McNair, 2030 High St., Oakland, $32,541.

Calif., San Diego—Common Council, improving Dickinson and Front Sts., incl. (1) 113,075 sq.ft. paving with 2½ in. bituminous base and 1½ in. asphalt concrete top (2) 2,249 sq.ft. cement concrete sidewalk (3) 2,952 lin.ft. cement concrete curb, from G. R. Daly, 4430 Boundary St. (1) $0.177 (2) $0.23 (3) $0.67; California Constr. Co., Union Bldg., (1) $0.183 (2) $0.25 (3) $0.72. Noted Nov. 15.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, Boro pres., Boro Hall, paving Carroll St., permanent asphalt on 6 in. concrete, to Borough Asphalt Paving Co., 1301 Metropolitan Ave., $12,453; curbing where necessary and paving Ave. D, 7 in. preliminary concrete, to E. F. Monahan, 1921 Morris Ave., New York, $64,124; grading, curbing, flagging where necessary and paving Ocean View Ave., second-hand granite on sand, to F. Mandatto, 120 32nd St., $26,227. Noted Dec. 20.

Fla., Miami—F. W. Wharton, city mgr., 11,598 sq.yd. concrete sidewalks, Contr. 25, to C. H. Cook & Son, Miami, $1.60 sq.yd. Noted Jan. 10.

Alabama—State Hy. Dept., Montgomery, grading and cherting 3.82 mi. Birmingham-Decatur Rd., 20 ft., Jefferson and Blount Counties, to J. Gwin, Hamilton Station, Birmingham, $110,477. Noted Dec. 13.

Alabama—State Hy. Dept., Montgomery, grading and graveling 16 mi. Dixie Overland Highway, Dallas and Perry Counties, to W. C. McCoy, LaFayette, $110,781.

Miss., Collins—Covington Co. improving 2.708 mi. Federal Aid Project 165, to M. Williams, Magee, 26,633 cu.yd. common excav. $0.28, 4,643 cu.yd. borrow $0.26, 83.47 cu.yd. concrete $34, 6,356 cu.yd. gravel 1 mi. haul $0.75, 23,024 unit gravel ½ mi. overhaul $0.15, bridge included 234 cu.yd. concrete $34, etc. Engrs. est. $33,290. Noted Nov. 29.

Miss., Jackson—Paving with vitrolithic 3 suburban roads, to Owens & Gaddis, $110,916.

Louisiana—State Hy. Comn., Baton Rouge, grading and hard surfacing 12.62 mi. Delhi-Winnsboro Highway, to L. M. Wimberly, Arcadia, $48,553.

Indiana—State Hy. Comn., Indianapolis, paving Federal Aid Rd. 67, Sect. A, Lagrange Co., 81,017 sq.yd. concrete, to R. Daoust, Defiance, O., $181,281; widening and grading 8.176 mi. Federal Aid Rd. 68, Sect. G, Parke Co., 149,267 cu.yd. excav., to Ellis & Scamahorn, Rockport, $93,178; concrete paving 5.743 mi. Federal Aid Rd. 74, Sect. B, Boone Co., 76,755 sq.yd. concrete, and 8.639 mi. Sect C, Clinton and Tippecanoe Counties, 83,039 sq.yd. concrete to J. M. Snyder, Frankfort. $112,955 and $158,333 respectively. Noted Jan. 10.

Ind., Monticello—White Co., improving 2 mi. Augustus U. Lex Rd., Princeton Twp., to S. Spencer, Wolcott, $37,490. Engrs. est. $40,000. Noted Dec. 20.

Ia., Laporte City—Paving, curbing and guttering 23 blocks, 19,716 sq.yd. 8 in. rein.-con., 14,568 lin.ft. curbing and guttering, to P. P. Smith, 1600 Washington St., Cedar Rapids, $61,379.

Streets and Roads (Continued)

Ia., Waterloo—Black Hawk Co., grading and gravel surfacing 11.14 mi. Primary Rd. 359, grading to T. Ryan & Sons, Missouri Valley, 72,557 cu.yd. template excav. $0.25 per yd., 1,815 cu.yd. farm entrance excav. $0.35; gravel surfacing to L. Moe, Belmond, 17,392 yd. gravel $0.39; drain to J. Christensen, Hudson, 71,643 ft. tile drain, and 5 type A and 3 type B intakes, $8,245. Noted Dec. 20.

Minn., Duluth—St. Louis Co., grading 4 mi. Trinity Ave. from 24th Ave. W., to Miller Trunk Highway, to D. H. Clough Co., 405 Palladio Bldg., Duluth, $57,870.

Tex., Corpus Christi — Nueces Co., improving 10.1 mi. State Highway 12, 16 ft., to Smith Bros., Inc., Sumpter Bldg., Dallas, $288,062. Noted Dec. 13.

Tex., Halletsville—Lavaca Co. grading, etc. 14.23 mi. State Highway 3-B, Federal Aid Project 373, 93,154 cu.yd. roadway and 40,362 cu.yd. borrow excav., to Pague Bros., Waelder, $30,467. Engrs. est. $33,514 incl. 10% for engineering and contingences. Noted Dec. 6.

Tex., Hemphill — Sabine Co., grading, gravel surfacing and bridging 14.69 mi. State Highway 8, Federal Aid Project 327-B, 381 cu.yd. concrete, 91,321 cu.yd. roadway and 50,576 cu.yd. borrow excav., etc., to Geroge & Kerr, Lufkin, $80,825; 23,005 cu.yd. gravel to be furnished by county. Engrs. est. $94,793. Noted Jan. 10.

Okla., Oklahoma City—Grading and paving 7 blocks West 3rd St., 6,600 sq.yd. asphalt, 3,800 lin.ft. curbing, 2,650 cu.yd. excav., to Western Paving Co., Tradesmens Bldg., $29,058. Noted Dec. 6.

Utah, Salt Lake City — Salt Lake Co., paving 4 mi. Bingham Highway-Atwells Crossing, 18 ft., 6-in. concrete, to P. J. Moran, Inc., 850 South 2nd St., W., $105,000.

Ariz., Tucson—Improving Speedway and Campbell Ave., 87,150 sq.yd. subgrading, 55,920 sq.yd. paving, etc., to Borderland Constr. Co., Tucson, $158,750. Noted Dec. 27.

Wash., Seattle — King Co., grading and graveling 1.2 mi. 10th Ave. N. E. extension, 35,000 cu.yd. gravel, to Dump Trucking Corp., 1115 Valley St., $25,648. Noted Dec. 6.

Calif., Glendale—City, improving Sycamore Canyon Rd., incl. 758,000 sq.ft. grade, 16,750 sq.ft. B curb, 32,480 sq.ft. concrete gutter, 476,000 sq.ft. asphalt concrete base with 1½ in. National surface, etc., to Thompson & Heuser, Loew State Bldg., Los Angeles, $194,125. Noted Jan. 10.

Calif., Los Angeles—Improving Alvarado St., 28,574 sq.ft. asphalt concrete pavement, 447,856 sq.ft. of 7 in. and 18,559 ft. of 6 in. concrete pavement, curbs, gutters, etc., to W. Liddington, 420 East 60th St., $154,783; Vine St. between Melrose and Yucca Sts., incl. grading, 1,800 sq.ft. asphalt pavement, 306,133 sq.ft. concrete pavement, 12,086 sq.ft. bituminous base pavement, 10,431 ft. curb, 54,242 sq. ft. walks, storm drain complete, iron pipe lighting conduit, to W. F. Peck, Hollywood Security Bldg., $316,940. Noted Jan. 10 and 17, respectively.

Calif., San Diego—Common Council, improving Fort Stockton Dr., Falcon and Lewis Sts., 113,394 sq.ft. paving with 1½ in. asphaltic concrete on 2½ in. bituminous base and 3,308 sq.ft. cement concrete sidewalk; also improving Sutter St., 87,777 sq.ft. paving with 1½ in. asphaltic concrete on 2½ in. bituminous base and 106 sq.ft. cement concrete sidewalk, to G. R. Daley, 4430 Boundary St., $22,453 and $15,677 respectively. Noted Jan. 17.

Industrial Works

PROPOSED WORK

Mass., Boston—Warehouse—C. E. Osgood Co., Washington and Harvard Sts., plans 7 story and basement, brick and concrete, Harvard St. $175,000. Engineer and architect not announced.

Conn., Hartford—Repair Shop and Warehouse—Water Dept., 1026 Main St., plans 3 story, 150 x 200 ft., brick and steel, plain foundation, Homestead Ave. $150,000. Engineer and architect not selected.

Conn., New London — Distributing Station—Dixie Oil Co., 154 Pearl St., Hartford, plans distributing station, probably 2 buildings and several tanks, here. $50,000. Architect not selected.

Conn., Winsted — Factory — Strand & Sweet Mfg. Co., Meadow St., plans 2 story addition, brick and steel, plain foundation, Meadow St. $100,000. Private plans.

N. J., Bridgeton—Plant—Illinois Glass Co., Alton, Ill., plans rebuilding 2 story plant, here, recently destroyed by fire. $150,000.

N. J., Camden—Factor and Warehouse—J. Campbell Co., 32 North Front St., plans factory and warehouse, company authorized by City Comn., to bulkhead along Delaware River from Cooper to Linden Sts. To exceed $1,000,000.

Pa., Grove City — Factory — Patterson Gear Shift Co., Monaca, plans factory. $65,000. Architect not selected.

Pa., Shadeland—Plant—J. A. Bradley Co., engrs., Jones Law Bldg., Pittsburgh, preparing plans steel plant, here. $4,000,000. Owner's name withheld.

Md., Baltimore—Consolidated Gas Electric Light & Power Co., Lexington Bldg., plans to expend $10,000,000 during 1924. Work includes steam generating station at Gould St., 60,000 hp.; substation on Walbrook Ave.; addition to Monument St. station; creosoting plant and central pole lot; boiler house, service station, offices, etc.; 16 additional transmission cables, 800 mi. wire and 675 distribution transformers with total capacity of 11,000 kw.; 36.5 mi. gas mains, 5.5 mi. of which will be 20-in. pipe; relief holder at Spring Gardens plant also 2 m.g. steel oil tank; coal handling equipment will be extended from pier head line to new generator house. H. A. Wagner, pres.

W. Va., Martinsburg—Factory—Eastern Sewer Pipe & Brick Co., Dean Bldg., plans factory. $150,000.

Va., Marion—Plant—W. H. Allen, Elizabethtown, plans new brick plant, here. $50,000.

S. C., Charlotte—Supply House—Charlotte Supply Co., 20-22 East 4th St., having plans prepared by Lockwood & Greene, Piedmont Bldg., 4 story and basement, brick and steel, 1st and Mint Sts. $150,000.

N. C., Greensboro—Plant—Southern Milk Products Co. plans 2 story, 65 x 120 ft. plant. $150,000. E. S. Davies and associates, interested.

Fla., Fort Meyers—Gas Plant, etc.—City voted $130,000 bonds for gas plant and mains. Noted Dec. 20.

Fla., Orlando—Plant—See "Waterworks."

Fla., Sanford — Factory — Florida McCracken Concrete Pipe Co. plans factory, here. $70,000. K. B. McCracken, local mgr. R. A. McConville, Sanford, engr.

La., New Orleans — Factory — Great Southern Lumber Co., Bogalusa, plans factory, 75 tons chipboard daily, here. $1,000,000. W. H. Sullivan, pres. J. L. Carey, 208 North Laramis St., Chicago, Ill., archt.

La., New Iberia—Voted $250,000 bonds for electric plant and road work.

Tenn., Chattanooga—Factory—Turnbull Cone Mchy. Co., Fort and 14th St., plans 4 story, 50 x 120 ft., brick, 14th St. $40,000.

Ky., Covington—Warehouse—Dohermann & Co., 3rd and Main Sts., plans 1 story brick warehouse, to replace one destroyed by fire. $40,000.

Ky., Henderson—Ice Plant—Home Ice Co. plans to rebuild ice plant recently destroyed by fire. $40,000.

O., Cleveland—Garage—M. Glauber of Glauber Brass Co., 7706 Platt Ave., plans altering 2 story, brick, steel and concrete, Ontario St. $75,000. Engineer and architect not selected.

O., Lakewood (Cleveland P. O.)—Garage, etc.—Marked Motor Corp., 13316 Madison Ave., plans 2 story, garage, service station and sales-room, brick, concrete and steel, Madison Ave. $45,000. Engineer and architect not announced.

O., Toledo — Industrial — Libbey-Owens Sheet Glass Co., Nicholas Bldg., having revised plans prepared by Devore Co., archts. and engrs., Nicholas Bldg., 1 story, 187 x 1002 ft. polishing and grinding plant, railroad siding and drainage work, East Bway. $1,000,000. Former bids rejected. Noted Dec. 20.

Ind., Bloomfield—Factory—Faucett-Vanmeter Chair Co. plans to rebuild factory, brick, recently destroyed by fire. $60,000. Engineer and architect not selected.

Ind., Indianapolis—Warehouse—C. P. Lesh Paper Co., Kentucky Ave., plans 6 story and basement, brick and steel, North Senate Ave. $200,000. Engineer and architect not selected.

Ind., New Paris—Factory—H. Roeber, archt., South Bend, preparing plans factory, here. $50,000. Owners name withheld.

Ind., Peru—Repair Shops—See "Railways" under Indiana.

Mich., Detroit — Factory — H. Flint Ink Co., 1430 Sherman St., having plans prepared by Weston & Ellington, 1507 Stroh Bldg., 2 story and basement, 100 x 250 ft. rein.-con. and brick, plain foundation, Scotten Ave. $100,000.

Mich., Monroe—Factory—Monroe Steel Castings Co. plans to rebuild portion of factory recently destroyed by fire. $50,000.

Wis., Crandon—Northern Woodenware Co., c/o J. H. Fiebing, pres., plans to rebuild 2 story, brick and timber factory, plain foundation. $40,000. Engineer and architect not selected.

Wis., Fond du Lac—Garage—Anderson Motor Co., 36 West 2nd St., plans 2 story, 45 x 120 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $40,000. Engineer and architect not selected.

Wis., Madison—Garage—J. Peterson, 102 South Orchard St., plans 2 story, 60 x 200 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation, Fairchild St. $70,000. Engineer and architect not selected

Wis., Menomonie—Garage—E. V. Johnson soon takes bids 1 story, 60 x 176 ft., brick and concrete garage, plain foundation, Main St. $50,000. Private plans.

Wis., Milwaukee — Repair Plant — City voted $250,000 bonds for central repair plant. C. E. Malig, city engr.

Wis., Milwaukee — Service — Bartles-Maguire Oil Co., 539 Bway., having preliminary plans prepared by Buemming & Guth, 521 Jackson St., 1 story and basement, 75 x 102 ft., brick and concrete service station, plain foundation, Sycamore St. $100,000.

Wis., Polar—Factory—E. Kramer plans to rebuild 1 story, 40 x 60 ft., brick or concrete factory, plain foundation, recently destroyed by fire. $40,000. Engineer and architect not selected.

Wis., Wausau—Electric Power Plants—Wisconsin Valley Electric Co., 206 3rd St., plans 3 hydro electric power plants along Wisconsin River, near here, at Lower Grand Father Falls, Trappe Rapids and Bill Cross Rapids, brick and concrete, plain foundations, also rein.-con. dams. Engineer and architect not selected.

Ia., Ft. Dodge—Factory—Johnson Clayworks, Inc., plans 2 story, 50 x 150 ft., brick and stucco. $48,000. D. G. Johnson, pres. Architect not announced.

Ia., Grimes—Factory—Grimes Canning Co. plans 2 story and basement, 64 x 100 ft., brick. $100,000. W. J. Stewart, pres. Architect not announced.

Minn, Willmar—See "Waterworks."

Mo., Kansas City—Factory—Iten Biscuit Co., 1202 Capitol Ave., Omaha, Neb., having plans prepared 2 story and basement, 131 x 175 ft., 25th and Madison Sts., here. $125,000. Private plans.

Mo., Thayer—Ice Plant—See "Waterworks."

Tex., Alice—Cotton Compress—J. I. Cain, Corpus Christi, plans concrete, cotton compress, here. $50,000.

Tex., Colorado—Cotton Compress—Continental Cotton Oil Co. of Colorado, c/o J. Guitar, Abilene, plans additions to cotton compress, here. $50,000.

Washington—Power Plant—Puget Sound Power & Light Co., Stuart Bldg., Seattle, plans to expend $5,000,000 in West Washington during 1924. Work includes addition to White River Power Plant, to produce 23,000 hp., $1,000,000; new transmission and distribution lines and substation improvements, $2,500,000; permanent miscellaneous improvements, $1,000,000. Will also start preliminary work on Baker River Project which will ultimately cost several million dollars.

Ore., Portland—Mill—R. H. Mills, pres. Portland Pulp & Paper Co., 815 Bway. Bldg., takes bids in March, 10 story, rein.-con. and steel, along Willamette River. $1,200,000. R. R. Clark, Ry. Exch. Bldg., archt. and engr. Noted Dec. 6.

Calif., Fullerton—Factory—Balboa Motor Corp. having plans prepared by Hamm & Grant, Ferguson Bldg., Los Angeles, 80 x 100 ft. office building, 168 x 280 ft. main factory, 84 x 150 ft. paint shop and 48 x 156 ft. repair shop.

Calif., Los Angeles—Factory—Wood Mfg. Co., 1617 McGarry St., having plans prepared by W. C. Pennell, Merritt Bldg., 1 story, 100 x 225 ft., wood and corrugated iron.

Calif., Oakland—Factory—Pacific Furniture Co., foot of Madison St., having plans prepared by E. W. Cannon, Central Bank Bldg., 2 story, rein.-con. and frame, 3rd and Oak Sts. $40,000.

Industrial Works (Continued)

Calif., Oakland — Planing Mill — E. K. Wood Lumber Co., 1 Drumm St., San Francisco plans planing mill Rose St., here. Will employ about 250 men.

Calif., Pomona—Laundries—Consolidated Laundries, Inc., 600 Merritt Bldg., Los Angeles, plans laundry, here and at Azusa. $70,000.

Que., Bryson — Power House — See "Dams."

Que., Montreal—Plant—Algonquin Power Co., Montreal, plans hydro-electric plant and water power development on River du Loup, $2,500,000. J. M. Robertson Ltd., St. Nicholas St., engrs.

Ont., Hamilton — Plant — Mercury Mills plans addition to plant. $50,000.

BIDS DESIRED

N. Y., Cortland—Power House—Jan. 24, by L. T. Klauder, engr., 1574 Pennsylvania Bldg., Phila., 54 x 62 ft. addition, here, for Cortland Co. Traction Co., 127 Main St. $50,000.

Pa., Phila.—Abbatoir—Jan. 19, by F. A. Stoutenburgh, archt., 452 North American Bldg., 2 story, 63 x 80 ft. and 1 story, 33 x 119 ft. brick and steel, plain foundation, Front and Venango Sts., for Duffy Bros. Inc., 3255 North Front St. $75,000.

Pa., Phila.—Factory—Jan. 14 (extended date) by P. S. Tyre, archt., 15th and Arch Sts., 2 story and basement, 30 x 60 ft. and 1 story and basement, 60 x 90 ft. rein.-con., brick and steel, plain foundation, 5th and Hamilton Sts., for Crescent Ink & Color Co., 408 Vine St., $45,000. Noted Dec. 13.

Pa., Phila.—Factory—Jan. 21, by Corrugated Container Co., Trenton and Venango Sts., 2 story and basement, 80 x 93 ft., brick and steel, plain foundation, Venango and Sepviva Sts. Private plans.

Tenn., Memphis — Assembly Plant — A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., taking bids and opens same about Jan. 22, 1 and 2 story, 301 x 800 ft., rein.-con., brick and steel, Riverside Blvd. and Parkway West, here, for Ford Motor Co., Highland Park, Mich. Noted Jan. 17.

Ky., Louisville — Assembly Plant — A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., taking bids 1 story, 301 x 1,000 ft., brick and steel, Western Parkway, here, for Ford Motor Co., Highland Park, Detroit, Mich. Noted Jan. 10.

O., Toledo—Bakery—Jan. 21, by Mills, Rhines, Bellman & Nordhoff, archts., Ohio Bldg., 3 story and basement, 133 x 265 ft., rein.-con. and brick, plain foundation, Summit St., for Holland Bred Co. $200,000. Noted Jan. 10.

Ind., Ft. Wayne—Garage—Becker Motor Co. taking bids 2 story and basement, 108 x 109 ft., rein.-con. and brick, West Jefferson St. $90,000. Pohlmeyer & Pohlmeyer, Central Bldg., archts.

Ind., Princeton — Plant — Jan. 28, by Southern Ry., Cincinnati, O., 1 story, 80 x 200 ft., brick and steel, here. $125,000. A. Tyrell, c/o Owner, 7th and Sycamore Sts., St. Louis, Mo., div. engr.

Wis., Madison—Warehouse—E. Tough, archt., Washington Bldg., taking bids 2 story, 64 x 120 ft., storage warehouse, brick, rein.-con. and steel, plain foundation, for Heilpun & Co., c/o J. Heilpun, pres., West Mifflin St. $75,000.

Calif., Los Angeles—Warehouse—Western Wholesale Drug Co., 200 South Los Angeles St., receiving bids 6 story and basement, rein.-con. $135,000.

Calif., San Francisco — Warehouse and Loft—Baumann & Jose, archts., 251 Kearny St., receiving bids 3 story and basement, rein.-con., Mission St. near 8th St., for F. J. Klenck, c/o architects. $60,000.

BIDS RECEIVED

Ga., Atlanta — Warehouse, etc. — J. A. Roeblings Sons Co., 65½ Walton St., 1 story, 120 x 200 ft., brick and steel warehouse and office, plain foundation, Avon Ave., from C. F. Nonnemaker, 307-8 Bona Allen Bldg. Est. cost $55,000.

Calif., Emeryville — Factory — Westinghouse Electric Co., 62nd and Powell Sts., 3 story, rein.-con., from Dinwiddie Constr. Co., Crocker Bldg., San Francisco. To exceed $150,000. Noted Jan. 3.

CONTRACTS AWARDED

Conn., Bridgeport—Service Station—A. L. Clark Co., 1710 Main St. 1 and 2 story 100 x 298 ft. brick concrete and stone, Fairfield Ave., to Hewlett Co., 884 Main St. Archts. est. $150,000.

Conn., Torrington—Factory—Progressive Mfg. Co., 52 Norwood St., 2 story, 165 x 180 ft., brick and steel, plain foundation, to Torrington Building Co., 182 Church St. Archts. est. $40,000.

N. Y., New York—Garage—A. B. Fleck, c/o Connova & Viviani, archts. and engrs., 145 West 41st St., 2 story, 100 x 300 ft., rein -con., brick and steel, plain foundation, 91st St. and 1st Ave., to J. Viviani & Son, 145 West 41st St. Archts. est. $500,000.

N. Y., New York — Garage — Keystone Properties Corp., 27 Cedar St., will build 5 story, 100 x 100 ft., rein.-con., brick and steel, plain foundation, 107-115 West 89th St., by day labor. $200,000. B. S. King, 18 East 41st St., archt. and engr.

Pa., Phila.—Boiler, Power and Engine House—L. Burk, 3rd and Thompson Sts., 3 story, 49 x 138 ft., rein.-con. and steel, plain foundation, to J. N. Gill Constr. Co., City Centre Bldg.

Pa., Phila.—Printing Plant, etc.—Public Ledger Co., 6th and Chestnut Sts., printing plant and offices, Chestnut, 6th and Sansom Sts., to Doyle & Co., 1519 Sansom St., $2,500,000. Noted Jan. 3.

Pa., Pittsburgh—Factory—Phillips Mine & Mill Supply Co., Mary St., plans to alter and build 1 story, 47 x 122 ft. addition to factory, Mary St., to Bollinger Andrews Eng. Co., Empire Bldg. Archts. est. $40,000.

Md., Baltimore — Warehouse — Emerson Drug Co., c/o W. H. Parker and P. Heuisler, Emerson Hotel, 9 story, 28 x 103 ft. addition, concrete and brick, plain foundation, 9 South Eutaw St., to Consolidated Eng. Co., Calvert Bldg., $200,000.

N. C., Charlotte—Plant—Ford Motor Co., Highland Park, Detroit, Mich., plant, here, to McDevitt-Fleming Co., 1st Natl. Bank Bldg., Chattanooga, Tenn., $1,000,000.

Ala., Birmingham — Warehouse — Standard Sanitary & Mfg. Co., Troy, N. Y., 4 story, 60 x 170 ft., concrete and steel, 22nd St. and Ave. E, to Southern Ferro-Concrete Constr. Co., American Trust Bldg., $150,000.

O., Bridgeport—Machine Shop—Dillon Bros. Machine Co., 1 story, 80 x 120 ft., brick, to Austin Co., 16112 Euclid Ave. Archts. est. $50,000. Noted Mar. 8.

O., Cleveland—Factory—General Power Constr. Co., 1603 East 27th St., 1 story, 60 x 87 ft., brick, 1603 East 27th St., to W. F. Hyde Co., 1008 Scovill Ave. Archts. est. $40,000. Noted Jan. 10.

O., Cleveland—Plant—Dercum & Beer, archts., 4500 Euclid Ave., 3 story and basement, 90 x 116 ft., brick and rein.-con., East 12th St., to Craig-Curtis Co., 4614 Prospect Ave., for German Consolidated Newspaper Co., 1570 West 3rd St. Archts. est. $150,000. Noted Jan. 3.

O., Columbus—Laundry—Amer. Laundry Co., 557 North 4th St., 2 story, 72 x 100 ft., brick and concrete, North 4th St., to F & Y Constr. Co., 141 East Broad St., $65,000.

Ind., Indianapolis—Factory—Real Silk Hosiery Mills, 624 North Noble St., 2 story and basement, 50 x 190 ft., rein.-con., steel and brick, North Noble St., to Ostrom Realty Co., Peoples Bank Bldg. Archts. est. $75,000.

Mich., Iron Mountain—Plant—Ford Motor Co., Highland Park (Detroit P. O.) 2 story, 90 x 310 ft. brick and steel, plain foundation, to Worden-Allen Co., 208 South LaSalle Blvd., Chicago. Noted Dec. 20.

Ill., Chicago—Factory—J. J. Harrington, c/o W. G. Uffendell, archt., 39 South State St., 3 story, fireproof, Center and Racine Sts., to Austin Co., 208 South La Salle St. Archts. est. $150,000.

Ill., Elgin—Storage Plant—Texas Co., 19 Battery Pl., New York City, 1 story, 118 x 334 ft., brick and rein.-con., to McKelvey Constr. Co., Detroit, Mich. Archts. est. $50,000. Noted Dec. 6.

Wis., Manitowoc — Factory — J. Weiers, 17th and Washington Sts., 1 story, 42 x 90 ft., brick and timber, plain foundation, Rapids Rd., to E. R. Herman, 1402 Hamilton St. $40,000. Private plans.

Wis., Manitowoc — Factory — J. Weires, 17th and Washington Sts., 1 story, 50 x 120 ft., brick and rein.-con. factory, plain foundation, to E. R. Herman, 1402 Hamilton St.

Wis., Manitowoc — Garage — Streich Oil Co., Rapids Rd., 1 story, 42 x 100 ft., brick and concrete, plain foundation, to E. R. Herman, 1402 Hamilton St. Engrs. est. $40,000.

Wis., Medford—Boiler House—Medford Canning Co., c/o Oconomowoc Canning Co., 1 story, 40 x 50 ft., brick and concrete, to Consolidated & Mfg. Co., Withee. Engrs. est. $40,000.

Wis., Milwaukee—Dye Works—Badger Dye Wks., 887 3rd St., 2 story and basement, 40 x 60 ft., brick and concrete, plain foundation, 3rd St., to H. Danischefsky, 1484 Humboldt Ave. Archts. est. $40,000.

Wis., Wausau — Factory — Wausau Abrasives Co., 1007 South 2nd Ave., 1 story, 40 x 100 ft., brick and steel addition, plain foundation, to W. Anderes, 313 3rd St. $40,000.

Wis., Wauwatosa — Plant — Milwaukee Structural Steel Co., 19th St. and St. Paul Ave., Milwaukee, 1 story, 120 x 300 ft., brick and steel plant, plain foundation, Watertown Rd., here, to Meredith Bros., 1043 Kinnickinnic Ave., Milwaukee. $75,000.

Mo., St. Louis—Garage and Service Station—L. B. Pfrimmer, 1645 South Grand Blvd., 1 story, 75 x 140 ft., rein.-con., brick and stone, Grand Blvd., to C. W. Pfrimmer, 1645 South Grand Blvd. Archts. est. $45,000.

Mo., St. Louis—Garage—A. A. Wagner, 901 Century Bldg., 2 story and basement, 103 x 281 ft., rein.-con. and brick, Delmar Blvd., by day labor. $150,000. J. T. Craven, Century Bldg., archt.

Tex., Galveston — Warehouse — Black Hardware Co., 23rd and A Sts., 1 story, 75 x 200 ft., concrete, tile and steel addition, to W. A. Kelso and Porter & Son, Galveston, $45,000.

Tex., Houston—Warehouse, etc.—H. C. House, c/o Jones & Tabor, archts., Union Natl. Bank Bldg., 6 story and basement, 100 x 100 ft., warehouse and office, brick and concrete, Milam and Capitol Sts., to J. B. Townsend, West Bldg., $130,000.

Calif., Auburn—Garage—Central California Corp., 1 story, brick or concrete, High St., to W. B. Lardner, Jr., Auburn, $42,000.

Calif., Culver City—Laundry—Paramount Laundry Co., c/o Norenberg & Johnson, archts., Railway Bldg., Los Angeles, 1 story and mezzanine, 115 x 125 ft., brick, here, to Los Angeles Bldg. & Contg. Co., Marsh-Strong Bldg., Los Angeles.

Calif., Long Beach—Creamery—J. Clamness, 2701 Anaheim Rd., 2 story, 60 x 130 ft., concrete and brick, to E. L. Chessman, 529 West 7th St.

Calif., Long Beach—Garage—City Transfer & Storage Co., 134 Pacific Ave., 1 story, 100 x 180 ft., brick, 5th St., by day labor.

Calif., Long Beach — Garage — L. Y. Cooper, 503 East Ocean Ave., 1 story, 100 x 150 ft., brick, Linden Ave., to J. D. Sherer, 1865 West Anaheim Rd.

Calif., Long Beach—Warehouse—Amer. Wholesale Hardware Co., 133 American Ave., 3 story, brick and concrete, Anaheim Rd., to Sherer & Son, 1865 East Anaheim Rd., $125,000. Noted Nov. 3.

Calif., Los Angeles—Garage—H. H. Cotton, Merchants Natl. Bank Bldg., 1 and 2 story, brick, 20th and Firueroa Sts., to J. A. Kemp, 803 East 28th St., Los Angeles, $45,000.

Calif., Los Angeles—Garage—Gilbert & Cole, c/o contractor, 1 story, 80 x 280 ft., brick, Imperial St. and Santa Fe Ave., to V. P. Gilbert, Citizens Natl. Bank Bldg., Los Angeles.

Calif., Los Angeles—Garage—W. B. Merwin, H. W. Hellman Bldg., 1 story, 100 x 150 ft., brick, North Western Ave., to Nance Constr. Co., 5503 Sunset Blvd.

Calif., Los Angeles—Warehouse—Kemplin & Nittinger, 2235 East 7th St., 2 story, brick, Western Ave., to W. B. Moorehead, 2300 South Union Ave., $42,000.

Calif., Monrovia — Laundry — Southern Service Co., c/o contractor, 1 story, 50 x 60 ft., brick, to Austin Co. of California, Bartlett Bldg., Los Angeles.

Calif., Pasadena—Garage—F. W. Alden, 425 North Raymond Ave., 1 story, 75 x 150 ft., brick, Fair Oaks Ave., by day labor.

Calif., San Francisco—Warehouse, etc.—Richmond Sanitary Mfg. Co., 460 2nd St., 4 story and basement, concrete, warehouse and office, 10th and Brannan Sts., to Cahill Bros., Sharon Bldg., San Francisco, $40,000.

Ont., Gananoque—Factory—Milk Foods Ltd. altering rein.-con. factory, to Carswell Constr. Co., 58 Wellington St., Toronto, $75,000.

Buildings

PROPOSED WORK

R. I., Auburn—Theatre—Playhouses, Inc., plans 2 story and basement, 76 x 150 ft., brick and steel, plain foundation, Park and Pontiac Aves. Private plans.

R. I., Newport—Courthouse—Newport Co. taking competative plans 3 story, brick, stone and steel, Washington Sq. $300,000. H. B. Baer, on com. Noted Nov. 29.

R. I., Pawtucket—Church, etc.—St. Johns Roman Catholic Church having plans prepared by O. E. Nault, 48 Hamilton St., Worcester, Mass., 1 story, 80 x 175 ft. church, also rectory building, brick and stone, plain foundation, Slater Ave. $300,000. A. J. Graton, pastor. Noted Mar. 1.

SEWER—TOLEDO, OHIO

Following are lowest three bids opened by city, Dec. 18, for constructing Relief Sewer No. 1432, from Swan Creek to Monroe St., (A) Anderson & Campbell, 81 Petersboro St., Detroit; (B) R. Mercier, Griswold St., Detroit; (C) Graham & Henderson, Cleveland. The unit bids were as follows:

	A	B	C
493 lin.ft. 30 in. sewer	$13.10	$10 00	$16 50
1,292 lin. ft. 36 in. sewer	13.60	12.00	16.50
2,016 lin.ft. 48 in. sewer	16.00	15 00	16.75
952 lin.ft. 60 in. sewer	19.25	17 75	20.75
949 lin..ft. 72 in. sewer	24.50	24 00	25.45
1,042 lin.ft. 84 in. sewer	27 50	29 00	28.25
1,530 lin.ft. 90 in. sewer	30 00	30 00	32.00
2,253 lin.ft. 96 in. sewer	33 00	34 00	36.00
5–8 in. vitrified pipe stub connections in 96 in. sewer	1 50	5.00	2.00
686 vertical ft. standard concrete manhole	12.00		17.50
686 vertical ft. standard brick manhole	14.00	10.00	17.50
22 standard manhole frames and covers	25.00	30.00	30.00
100 M.ft. B.M. extra lumber	50 00	50.00	38.00
100 cu.yd. rock excavation	2.00	10.00	4.00
20 cu.yd. brick masonry	25 00	20.00	20.00
1 concrete bulkhead at outlet, as per plans, lump sum	2,160 00	2,000.00	3,000.00
7 special connections to main sewer of lateral	140 00		250.00
Extended totals	$264,396	$266,013	$288,656

Buildings (Continued)

R. I., Pawtucket—High School—School Comn. having plans prepared by R. C. N. Monahan, 255 Main St., 3 story, brick and fireproof, Front St. $250,000.

R. I., Providence—Church—St. Adelberts Roman Catholic Church having plans prepared by H. F. Ludorf, Mutual Bldg., New Britain, Conn., and takes bids about Mar. 1, 1 story and high tower, brick and terra cotta, Atwells Ave. $175,000. Noted May 31.

R. I., Providence—Church—Tabernacle Methodist Episcopal Church having plans prepared by Woodbury & Stuart, 53 State St., Boston, Mass., 2 story, stone, brick and tile, in Olneyville section. $250,000. J. H. Slutz, pastor.

R. I., Woonsocket—High School—School Comn. plans 3 story, brick and steel school and assembly hall. $180,000. W. F. Fontaine, Federal Bldg., archt.

Conn., Hartford — Apartment — M. W. Delaney, 237 Greenfield St., plans 4 story, brick, plain foundation, Farmington Ave. $150,000. Engineer and architect not selected.

Conn., New Haven—Apartment—Carmelo Abbadessa, 159 Winthrop Ave., having plans prepared by L. J. A. Julianelle, 42 Church St., 3 story, 115 x 155 ft., brick and stone, Dwight St. $175,000.

Conn., New London—Clubhouse—Seaside Council, Knights of Columbus, plans 2 story, brick, plain foundation, Huntington St. $150,000. Private plans.

N. Y., Brooklyn — Synagogue — Union Temple, Bedford and Lafayette Aves., having plans prepared by Arnold W. Brunner, archt. and engrs., 101 Park Ave., New York, brick, steel and stone, plain foundation, Eastern Parkway and Plaza St. $1,000,000.

N. Y., Fort Edward—School—Bd. Educ. having plans prepared by Roth & White, archts. and engrs., 109 State St., Albany, and takes bids about Mar. 1, 3 story, 98 x 120 ft., brick and steel, plain foundation. $200,000.

N. Y., New Rochelle—Apartment—Pepperday Inc., Echo Ave. and Boston Rd., having plans prepared by L. M. Loeb, 49 Lawton St., 6 story and basement, 110 x 150 ft., brick and stone, Echo Ave. and Main St. $500,000.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., soon takes bids 4 story top addition, brick, steel and stone, 121 West 73rd St. $800,000. McKenzie, Voorhees & Gmelin, 344 Madison Ave., archts. and engrs. Noted Mar. 22.

N. Y., Niagara Falls—Theatre—H. Lumburg, c/o Lumburg Theatre, 36 Falls St., plans theatre, 3,000 seating capacity, Falls and Main Sts. To exceed $150,000.

N. Y., North Tonawanda—Schools—North Tonawanda School Dist. 1, election Feb. 2, to vote on $650,000 bonds new schools. Noted Nov. 15.

N. J., Lyndhurst—Grade and High School—Bd. Educ. having plans prepared by R. Hacker, 1012 Palisade Ave., Palisade, 2 story, 220 x 245 ft., brick, Weart, Grant, Post and Fern Aves. $350,000.

N. J., New Brunswick — Dormitory — Rutgers College, College Ave., plans Hegeman Dormitory. $150,000.

Pa., Phila.—Apartment—G. K. Davidgan, c/o T. B. Lippincott, archt., 11 South 16th St., having plans prepared 8 story and basement, 44 x 225 ft. brick and steel, plain foundation, 21st and Venango Sts. $400,000.

Pa., Phila.—Church—Church of Transfiguration, 55th and Cedar Sts., having plans prepared by H. D. Dagit & Sons Co., 34 South 17th St., 1 story, 75 ft. high, 62 x 175 ft. steel and granite, plain foundation, 55th and Cedar Sts. $400,000.

W. Va., Huntington—Hotel—L. J. Dean, archt., Foster Bldg., preparing plans 10 story hotel to be known as Park Tower Hotel. $250,000.

N. C., Winston-Salem—School—City having plans prepared and soon takes bids for Old Town Consolidated School Building. $150,000. Engineer and architect not announced.

Fla., Tampa—Office—V. M. Antuono, c/o C. H. H. Cigar Co., 1316 Spring St., had plans prepared by F. O. Adams, Jr., Grand Theatre, Tampa, and Hentz, Reid & Adler, 92½ North Forsyth St., Atlanta, Ga., 16 story, 75 x 83 ft., steel frame, Tampa and Lafayette Sts. $800,000.

La., Baton Rouge—Cafeteria—State Agricultural College plans Cafeteria building. $200,000.

La., New Orleans—Hospital—South Side Baptist Hospital plans $2,000,000 building here. First unit to cost $500,000. Address P. I. Lipsey, Jackson, Miss.

Tenn., Memphis — Jail — Shelby Co. had plans prepared by Jones & Furbringer, Porter Bldg., and takes bids about Feb. 1, brick and stone, Washington Ave. $700,000. Noted Aug. 7.

Tenn., Nashville—Apartment—Prichett-Thomas Co., Stahlman Bldg., soon takes bids 8 story and basement, rein.-con., brick and steel, 7th Ave. and Union St. $400,000. Asmus & Clark, Stahlman Bldg., archts. Noted Oct. 4.

Tenn., Nashville—Apartment—Washington Court Realty Co. had plans prepared by C. K. Colley, 4th and 1st Natl. Bank Bldg., concrete, brick and stone, in Hillsboro. $300,000

O., Columbus — Bank and Office — Columbian Building & Loan, 22 East Gay St., had plans prepared by F. L. Packard, 16 East Broad St., 4 story and basement (ultimately 12 story), 91 x 187 ft., rein.-con., Gay and Pearl Sts. $500,000.

O., Lakewood (Cleveland P. O.)—Apartment—Urban Realty & Development Co., c/o M. W. Bruml, 817 Guardian Bldg., Cleveland, having plans prepared by Braverman & Havermaet, Ulmer Bldg., Cleveland, 3 story and baseemnt, 110 x 125 ft., brick, Cook and Lake Aves., here. $250,000.

O., Toledo—Apartments—L. Nathanson, c/o Reuben Realty Co., 607 Madison Ave., plans 3 story, brick, Glenwood and Central Aves. $150,000. Engineer and architect not announced.

Ind., Ft. Wayne — School — Bd. Educ. having plans prepared by L. C. Ward, engr., c/o Bd. Educ., and takes bids in February, Lakeside Public School, Forest Park. $275,000. Noted Nov. 29.

Ind., South Bend — Clubhouse — Knights of Columbus take bids about Mar. 1, 3 story, 93 x 198 ft., brick, steel and terra cotta. $175,000. Nicol, Scholer & Hoffman, Ross Bldg., Lafayette, archts.

Ind., Valparaiso—Lodge—B. P. O. E. 500, plans 3 story and basement, rein.-con., steel and brick. $175,000. C. B. Weatherhogg, 250 West Wayne St., Ft. Wayne, archt.

Mich., Alma—School—Bd. Educ. having plans prepared by Lane, Davenport & Peterson, Charlevoix Bldg., Detroit, 3 story, 280 x 300 ft. rein.-con., brick and steel, plain foundation. $260,000.

Mich., Clawson—School—Bd. Educ. having plans prepared by Lane, Davenport & Peterson, Charlevoix Bldg., Detroit, 2 story and basement, 70 x 175 ft. rein.-con. and brick, plain foundation. $150,000.

Mich., Detroit—Clubhouse—Detroit Lodge B. P. O. E., Lafayette Blvd., plans 8 story, rein.-con., brick and steel. $1,250,000. J. J. Collins, secy. Architect not selected.

Mich., Kalamazoo—Hotel—E. S. Batterson, archt., 405 Hanselman Bldg., preparing plans 3 story, 50 room, brick and steel, plain foundation. $150,000. Owner's name withheld.

Ill., Chicago—Apartment—M. Astrahan, c/o J. J. Jensen, archt., 4815 North Lawndale St., having plans prepared 3 story, 105 x 183 ft., rein.-con., brick and steel, Spaulding St. near Fullerton St. $200,000.

Ill., Chicago—Apartment—P. Demes, c/o J. J. Jensen, archt., 4815 North Lawndale St., having plans prepared 3 story, 60 x 125 ft., fireproof, North and Artesian Sts. $150,000.

Ill., Waukegan—Apartment and Store—J. Detienne, 20 North Genesee St., having plans prepared by P. Gerhardt, 64 West Randolph St., Chicago, 3 story and basement, 50 x 100 ft., brick and concrete, plain foundation, West Washington St. $150,000.

Ill., Waukegan—Bank—Security Savings Bank, 214 Washington St., plans 3 story, 72 x 100 ft., brick, stone and concrete, plain foundation. $250,000. Engineer and architect not selected.

Ill., Winnetka — Hall — Village plans 3 story and basement, on Square. To exceed $150,000. Engineer and architect not selected.

Wis., Milwaukee—Apartment—Allied Investment Co., c/o Leenhouts & Guthrie, archts., 424 Jefferson St., preparing plans 3 story, 48 x 115 ft., brick and concrete, plain foundation, Juneau St. $150,000.

Wis., Milwaukee—Apartment—Clas, Shepherd & Clas, archts., 445 Milwaukee St., preparing plans 3 story, brick, tile and concrete, plain foundation, Grand Ave. $150,000. Owner's name withheld.

Wis., Milwaukee — Apartment — C. W. Valentine, archts., 405 Bway., soon takes bids 7 story and basement, 90 x 135 ft., brick, tile and concrete, plain foundation, Prospect Ave., for L. C. and L. Goldman, 534 Mitchell St. $250,000.

Wis., Milwaukee—Office—O. Brachman, 425 East Water St., plans 8 story and basement, brick and concrete, plain foundation, Grand Ave. $300,000. Engineer and architect not selected.

Wis., Wauwatosa—Asylum—Bd. Trustees c/o W. L. Coffey, mgr. Milwaukee Co. Institutions, plans 3 story and basement addition to Asylum for Insane, Watertown Rd., brick and concrete, plain foundation. $350,000. Engineer and architect not selected.

Wis., Wauwatosa—High School—Union Free High School Dist., c/o G. J. Davelaar, dir., plans 2 story, brick and concrete, plain foundation. $300,000-$400,000. Engineer and architect not selected.

Wis., West Bend—School—Holy Angels Congregation, J. Hyde, pastor, receiving competitive sketches 2 story and basement, brick, tile and concrete, plain foundation. $150,000.

Ia., Des Moines—Office—Southern Surety Co., Register and Tribune Bldg., having plans prepared by Sawyer & Watrous, 401 Hippee Bldg., and takes bids about Feb. 1, 13 story and basement, 66 x 132 ft., rein.-con., brick and stone, 6th and Mulberry Sts. $600,000.

Kan., Parsons—High School—Bd. Educ. having plans prepared by T. W. Williamson & Co., 312 Central Bank Bldg., Topeka, 3 story and basement, rein.-con., brick and stone. $500,000.

S. D., Rapid City—School—Bd. Educ. having plans prepared by Perkins & McWayne, Paulton Blk., Sioux Falls, 2 story and basement, rein.-con., brick and tile. $275,000.

Ark., Conway—Gymnasium—Hendrix College plans 2 story and basement, brick and rein.-con., plain foundation. $150,000. Private plans.

Ark., Little Rock—Hotel—Newcomb Hotel Co., c/o J. J. Newcomb, Marion Hotel, having preliminary plans prepared 10 story and basement, 110 x 140 ft., brick, rein.-con. and steel, 7th and Main Sts. First unit of 200 rooms and bath to start about Mar. 1. Engineer and architect not selected.

Tex., Dallas — Church — First Baptist Church, c/o T. A. Johnson, Ervay and Patterson Sts., having plans prepared by R. H. Hunt & Co., Southwestern Life Bldg., 7 story, brick, steel and concrete, St. Paul and San Jacinto Sts. $350,000.

Tex., Houston—Hotel and Store—Capitol Hotel Co., 912 Capitol St., plans to rebuild hotel recently destroyed by fire, Capitol and Main Sts. $400,000. Engineer and architect not announced.

Tex., San Antonio — Church — Grace Evangelical Lutheran Church, c/o P. F.

Buildings (Continued)

Hein, pastor, receiving competitive sketches, 75 x 144 ft. stone, Ave. E and 5th Sts. $150,000.

Tex., San Antonio—Hotel, etc.—Prudential Hotel Co. plans 3 story, 90 x 180 ft. top addition to present 4 story hotel, rein.-con., brick and stone, Main Plaza and Market Sts., $150,000; 6 story, rein.-con., brick and stone hotel, plain foundation, adjoining present hotel, East side Main Plaza and Market Sts., $250,000. A. Sanner, mg. and prop. Engineer and architect to be selected soon.

Tex., San Antonio—Real Estate—B. G. Irish, 405 Navarro St., pres. Real Estate Bd., receiving competitive sketches 3 story. $175,000.

Tex., Sweetwater—Lint House—Sweetwater Cotton Oil Co. having plans prepared lint house, concrete, brick and steel. $40,000. Engineer and architect not announced.

Okla., Blackwell — Hall and Store — Masonic Lodge had preliminary plans prepared by Smith & Senter, 401 Commerce Bldg., Okmulgee, 3 story, 50 x 140 ft., rein.-con. and brick, plain foundation, Main St. $150,000. Noted Dec. 27.

Okla., Oklahoma City—City Hall and Office—City having preliminary plans prepared 6 story and basement, 100 x 140 ft., rein.-con. and brick, plain foundation, Grand St. $600,000. B. M. Hart, city engr. Architect not selected.

Utah, Salt Lake City — Office — Ezra Thompson Investment Co., having plans prepared by Pope & Burton, New House Bldg., 10 story, 75 x 154 ft., concrete and brick, Main St. between 1st and 2nd Sts.

Calif., Bakersfield—Schools—Bd. Educ. plans additions to schools and new buildings in Alta Vista tract. $300,000. C. E. Teach, city supt. of schools.

Calif., Beverly Hills—Apartment, Bank, Store and Theater—J. A. Vaughan, 5930 Wilshire Blvd., Los Angeles, having preliminary plans prepared by Chisholm & Meikle, 509 South Western Ave., Los Angeles, 3 story, 115 x 150 ft., brick, Wilshire Blvd., here.

Calif., Calexico—Hotel and Store—W. A. Skinner, c/o A. C. Martin, archt., Higgins Bldg., Los Angeles, having plans prepared 3 story, 136 x 150 ft., rein.-con. $150,000.

Calif., Colma — High School — Jefferson Union High School Dist. having plans prepared by W. H. Weeks, 369 Pine St., San Francisco, rein.-con. $180,000.

Calif., Los Angeles — Apartment and Hotel—Los Angeles Income Properties Corp., Pacific Finance Bldg., having plans prepared by Dodd & Richards, Bracks-Shops Bldg., 6 story and basement, rein.-con. apartment, 6th St. and Benton Blvd., $350,000; also plans 4 story, brick or concrete apartment and hotel, 6th St. and Westmoreland Ave., $150,000, engineer and architect not announced.

Calif., Los Angeles—Bank and Office—Pacific Southwest Trust & Savings Bank, 565 South Spring St., having plans prepared by Parkinson & Parkinson, Title Insurance Bldg., 12 story and basement, fireproof, steel frame, 6th and South Spring Sts. $750,000.

Calif., Los Angeles—Store and Office—K. MacDonald, Jr., archt., Bracks-Shops Bldg., preparing plans 12 story, 115 x 175 ft., rein.-con., 7th and Flower Sts. Owner's name withheld.

Calif., Los Angeles—Theatre and Store—West Coast Theatres, Inc., Knickerbocker Bldg., having plans prepared by A. C. Martin, Higgins Bldg., 2 story, rein.-con., Washington and Vermont Aves. $175,000. Noted May 10.

Calif., Los Angeles—Hotel—W. H. Dearing, 5540 Santa Monica Blvd., had plans prepared by S. B. Birds, 1203 Huntley Dr., 4 story and basement, brick, Santa Monica Blvd. $150,000.

Calif., Point Loma—Hotel—Point Loma Hotel Co., c/o M. Hunt, archt., Hibernian Bldg., Los Angeles, having preliminary plans prepared 5 story, rein.-con., here. To exceed $500,000.

Calif., San Diego — Bath House — L. Rogers, archt., Spreckels Bldg., prepared plans rein.-con. and brick, Mission Beach. To exceed $150,000. Owners name withheld.

Calif., San Diego—Office and Store—J. and D. Parkinson, archts., Title Insurance Bldg., preparing preliminary plans 12 story, brick and steel. To exceed $750,000. Owners name withheld.

Calif., San Francisco—Apartment—A. Johnson, 47 Belvedere St., having plans prepared by Baumann & Jose, 251 Kearny St., three 3 story and basement, frame, Van Ness Ave. near Francisco St. $50,000 each.

Calif., Santa Monica—Hotel and Apartment—A. C. Blumenthal, et al., Loew State Bldg., Los Angeles, plans 12 story hotel and apartment, here. $1,250,000. Engineer and architect not selected.

Calif., South Pasadena—Home—Boys & Girls Aid Society, c/o M. Hunt, archt., Hibernian Bldg., Los Angeles, plans fireproof, rein.-con., home buildings, here. $150,000.

Calif., Talmage—Hospital—State Hospital Bd., Sacramento, having plans prepared receiving building, fireproof, state hospital grounds, here. $150,000. B. G. McDougall, Forum Bldg., Sacramento, state archt.

Ont., Ottawa—Hospital—Ottawa Hospital Comn. plans new childrens hospital in connection with Lady Grey Hospital, Carling Ave. $150,000. Engineer and architect not selected.

Ont., Port Arthur—Church—St. Andrews Catholic Church having plans prepared by Pennington & Boyde, Bartlett Bldg., Windsor, 1 story and basement, brick, steel and stone, plain foundation. $150,000.

Ont., Richmond Hill—High School—Bd. Educ. having plans prepared by Burden & Gouinlock, 101 King St. W., Toronto, 2 story and basement, 10 room, rein.-con., brick and steel, plain foundation, $150,000.

Ont., Toronto—School of Commerce—Bd. Educ., 155 College St., having plans prepared by C. E. C. Dyson, 155 College St., 3 story and basement, 56 rooms, rein.-con., brick and steel, plain foundation, Chatham St. $650,000.

Ont., Toronto—School—Bd. Educ. having plans prepared by C. E. C. Dyson, 155 College St., 3 story and basement, 60 room, rein.-con., brick and steel, plain foundation, either Oakwood or Humberside Aves. $800,000.

N. B., St. John—Hotel—Admiral Beatty Hotel Co. Ltd., takes bids in February, 10 story, 160 x 160 ft. brick, steel and stone, plain foundation, King Sq. $750,000. Ross & McDonald, Belmont St., Montreal, Que., archts. Noted Dec. 13.

BIDS DESIRED

R. I., Pawtucket—High School—School Com. taking bids 3 story, brick, steel and concrete, plain foundation, Silver Spring St. $350,000. R. C. N. Monahan, 255 Main St., archt.

Conn., Wallingford—Clubhouse—Jan. 26, by Wallingford Y.M.T.A.B. Society, 3 story, brick, plain foundation, Center St. $150,000. W. T. Arnold, 34½ West Main St., Meriden, archt. Noted Apr. 26.

Conn., Waterbury — Home — Feb. 1, by Southmayd Home Inc., 2½ story, brick, plain foundation, Boulevard. $150,000. W. H. Pierce, pres. W. A. Arnold, 34½ West Main St., Meriden, archt. Noted Jan. 10.

N. Y., Brooklyn—Nurses Home—Jan. 15, by H. J. Nurick, archt. and engr., 44 Court St., brick, steel and stone, plain foundation, Hart St. and Stuyvesant Ave., for Beth Moses Hospital, Hart St. $150,000.

N. Y., Brooklyn—School—Jan. 22, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 197, Elmore Pl. through to Delamere Pl. 200 ft. south of Ave. O, for Bd. Educ., 500 Park Ave., New York.

N. Y., Industry—Hospital—Feb. 13, by W. Whitney, pres. Bd. Mgrs. State Agricultural & Industrial School, rebuilding hospital. S. W. Jones, Albany, state archt.; adv. E. N.-R. Jan. 17.

N. Y., Troy—Bank—Jan. 19, by T. B. Boyd, Inc., engrs., 286 5th Aves., New York City, remodeling and constructing 2 story, 55 x 131 ft., brick, steel and stone addition, plain foundation, 1st St., here, for Natl. City Bank. $150,000. E. W. Loth, 286 5th Ave., New York City, archt.

Pa., Indiana—High School—Jan. 25, by Bd. Educ., 2 story and basement, 154 x 155 ft. concrete and brick. $400,000. Thayer & Johnson, 5716 Euclid Ave., Cleveland, O., archts.

Pa., Palmerton—High School—Jan. 18, by W. H. Lee, archt., 15th and Race Sts., 3 story and basement, 139 x 165 ft., 3rd and Lafayette Sts., for Bd. Educ. Noted Dec. 20.

Pa., Phila.—Hotel—Jan. 21, by W. L. Redditt, archt., Otis Bldg., 16 story and basement, 40 x 91 ft., brick and steel, plain foundation, 18th and Chestnut Sts., for R. J. Seltzer, 1423 Locust St.

Pa., Phila.—University Hall—Feb. 8 (extended time), by Sanderson & Page, archts., 315 South 15th St., 4 story and basement, brick and steel, plain foundation, 34th and Walnut Sts., for University of Pennsylvania, 34th and Spruce Sts. $350,000.

Md., Baltimore—Apartment—Jan. 30, by J. H. and F. J. Thuman, archts., 2401 Shirley Ave., 4 story, 101 x 102 ft., brick and steel, plain foundation, Harford Rd. and Parkside Dr., for Arcadia Building Corp., c/o archts. $350,000.

D. C., Wash.—School—Feb. 4, at Room 509 Dist. Bldg., 20 room school; adv. E. N.-R. Jan. 17.

W. Va., Huntington—Court House—Feb. 6, by County Court Cabell Co., 3 story addition. R. S. Douthat, clk.; adv. E. N.-R. Jan. 17.

La., Jeanerette—High School—Jan. 22, by Police Jury Iberia Parish, 1 story, 48 ft. high, 123 x 172 ft. concrete and brick. $150,000. W. T. Nolan, 1000 Canal Commercial Bldg., New Orleans, archt.

O., Cleveland — Apartment — B. Koslen, 10612 Olivet Ave., taking bids and opens same about Jan. 25, 3 story and basement, 90 x 99 ft., brick, East 125th St. and Edmonton Rd. $160,000. L. R. Walker, and J. L. Mauer, 1900 Euclid Ave., archts.

O., Columbus — Church — Jan. 22, by Miller & Reeves, archts., 20 South 3rd St., 1 story and basement, 100 x 100 ft., brick and concrete, 1,200 seating capacity, East Mound St., for St. Johns Lutheran Evangelical Church. $170,000.

O., Columbus—Medical Science—Jan. 30, by Bd. Trustees Ohio State University, 4 story and basement, 50 x 125 ft., rein.-con. and brick addition, to campus. $200,000. J. N. Bradford, Ohio State University, archt. Noted Dec. 27.

Ind., Indianapolis—Temple—Jan. 19, by Vonnegut, Bohn & Mueller, archts., 610 Indiana Trust Bldg., brick temple, 34th and Ruckle Sts. for Beth El Jewish Congregation. $150,000. Noted Dec. 13.

Mich., Algonac—School—Jan. 28, by R. Gilbert, secy. Bd. Educ., 3 story, 100 x 154 ft. rein.-con., brick and steel, plain foundation. $160,000. W. Holmes-Power Co., Lansing, archts.

Ill., Cicero—Hotel—Dubin & Eisenberg, archts., 14 West Washington St., Chicago, taking bids and open same about Feb. 1, 4 story and basement, 91 x 125 ft., brick, concrete, stone and terra cotta, 52nd and 24th Sts., here, for A. Bartelstein, 1340 Independence St., Chicago. $300,000. Noted Jan. 10.

Ill., Joliet—Theatre—Feb. 1, by C. W. and G. L. Rapp, 190 North State St., Chicago, 4 story and basement, rein.-con., brick and steel, Clinton and Scott Sts., for H. A. and M. L. Rubens, c/o Princess Theatre. $600,000.

Wis., Lancaster—High School—Jan. 29, by School Bd., J. F. Glanville, clk., 2 story and basement, brick, tile and concrete, plain foundation. $200,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts.

Wis., Mayville — High School — Jan. 31 (extended date) by School Bd., O. D. Naber, chn. building com., 2 story and basement, 72 x 157 ft. high school and 80 x 200 ft. gymnasium, brick, tile and concrete, plain foundation. $200,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts. Noted Jan. 10.

Wis., Prairie du Sac—School—Jan. 30, by Bd. Educ., c/o F. J. Schulz, clk., 2 story, 60 x 150 ft., brick, rein.-con. and stone, plain foundation. J. R. and E. J. Law, 1st Central Bldg., Madison, archts. Noted Nov. 15.

Minn., Northfield — Lodge — Feb. 2, by I. O. O. F. of Minnesota, A. L. Bolton, secy., 604 Pittsburgh Bldg., St. Paul, superstructure for 3 story and basement, 93 x 146 ft., rein.-con., brick and tile, here. Total $150,000. W. L. Alban, 347 Endicott Bldg., St. Paul, archt. Noted Aug. 9.

Minn., St. Paul — School — Jan. 22, by H. W. Austin, city purch. agt., 2 story and basement, rein.-con., brick and tile, known as Adams School. $250,000. F. X. Tewes, city archt.

Neb., Lincoln—Store—Jan. 20, by Gold & Co., c/o W. Gold, 6 story and basement, 75 x 140 ft. rein.-con., brick and stone, 11th St. $400,000. Davis & Wilson, Securities Bldg., archts.

Mo., Clayton—Convent and School—Jan. 21, by A. B. Groves, archt., Stock Exch., St. Louis, 2 and 3 story, brick, concrete and stone, here, for Sisters of St. Joseph, Kansas and Minnesota Sts., St. Louis. $700,000.

Mo., Webster Groves—Auditorium—Feb. 1, by Webster Groves Presbyterian Church, 1 story and basement, 75 x 160 ft., brick and stone, Lockwood and Gore Aves. $160,000. A. B. Grove, Stock Exch., St. Louis, archt.

Tex., Corsicana—Hotel—G. A. McGregor, Kirby Bldg., Dallas, taking bids 5 story and basement, 80 x 100 ft., brick and concrete, 11th St. Young & Young, Southwestern Life Bldg., Dallas, archts. Joor Eng. Co., Slaughter Bldg., Dallas, engrs. Noted Nov. 8.

Tex., San Antonio — Jan. 25 (extended date) by Adams & Adams, archts., 517

Buildings (Continued)

Gibbs Bldg., 6 story, 80 x 142 ft., rein.-con., brick and stone, Navarro and Martin Sts., for Y. M. C. A. Noted Jan. 10.

Colo., Ft. Collins—High School—Jan. 22, by School Bd., c/o School Dist. 5, Larimer Co., 3 story, 150 x 350 ft., rein.-con., brick and stone. $400,000. W. N. Bowman, Central Savings Bank Bldg., Denver, archt. Contract awarded for foundation, to P. Surie, Denver, $11,000.

Calif., Fillmore—High School—Jan. 22, by Trustees Fillmore Union High School Dist., rein.-con. and hollow tile, high school incl. auditorium. N. F. Marsh, Bway Central Bldg., Los Angeles, archt. Noted Sept. 20.

Calif., Palo Alto—Hotel—W. H. Weeks, archt., 369 Pine St., San Francisco, and B. M. Clark, archt., 600 Embarcadero Rd., Palo Alto, receiving bids 3 story rein.-con., Hamilton Ave. and Ramona St., for A. B. Peterson, et al. $200,000. Noted Nov. 15.

Calif., Sacramento — College — Trustees Christian Brothers College, Martinez, taking bids two 2 story, concrete, brick or hollow tile college buildings, 21st and Y Sts., here. Bids will be taken on three types of construction. $200,000. Private plans. Noted Sept. 6.

Calif., San Rafael—Orphanage—J. J. Foley, archt., 770 5th Ave., San Francisco, receiving bids five 2 story, rein.-con. orphanage buildings, incl. 3 dormitories, gymnasium and chapel, here, for Roman Catholic Archbishop of San Francisco, 110 Franklin St., San Francisco. $150,000. Noted Jan. 3.

BIDS RECEIVED

N. Y., Bellaire (Jamaica P. O.)—School—Bd. Educ., 500 Park Ave., New York, Jan. 8, P. S. 109, brick, steel and stone, plain foundation, 92nd Ave. and 213th St., here, from Hayson Constr. Co., Arverne, $1,007,000, A deduct $30,000, B deduct $7,000, C add $4,000. Noted Dec. 27.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, Jan. 8, P. S. 201, brick, steel and stone, plain foundation, 12th Ave and 80th St., here, from G. DeKempie, 30 Church St., New York, $798,000, A deduct $20,000, B add $5,500, C add $6,000. Noted Dec. 27.

N. Y., Buffalo — Bd. Educ., 1401 Telephone Bldg., general contract P. S. 71, 3 story, 200 x 225 ft., rein.-con. and brick, Lang Ave., general contract from G. Schaaf, 258 Kingsley St., $385,340; plumbing from Batt & Co., Inc., 955 Michigan Ave., $24,385; heating from J. J. Bresnahan, Inc., 41 Pearl St., $76,314. Noted Dec. 13.

N. Y., New York—School—Bd. Educ., 500 Park Ave., Jan. 8, P. S. 80, brick, steel and stone, plain foundation, East Mosholu Parkway, from Niewenhouse Co., Inc., 316 East 161st St., $779,000, A deduct $12,000, B add $5,570, C add $4,000. Noted Dec. 27.

Pa., Lebanon—School—Ritcher & Eiler, archts., 147 North 5th St., Reading, 2 story and basement, 78 x 247 ft. with 58 x 80 ft. wing, Lehman, Henry and Hauck Sts., for Bd. Educ., from J. G. Greiner, 826 Walnut St., Lebanon, $213,000. Noted Jan. 3.

Md., Baltimore — School — Bd. Awards, Jan. 9, [illegible] story and basement, 111 x 211 ft., concrete and brick, plain foundation, Jackson Sq., Fairmont Ave. and Fayette St., from P. C. Streett Eng. Co., 406 St. Paul St., $493,900; heating, ventilating and vacuum system, from Enterprise Steam and Hot Water Heating Co., 619 West Franklin St., $55,987. Noted Dec. 27.

Ga., Atlanta — Office — See "Industrial Works."

Calif., Oakland — Administration — Alameda Co., 4 story, rein.-con., on county hospital grounds, from Clinton Constr. Co., 923 Folsom St., San Francisco, $483,000. Noted Sept. 27.

CONTRACTS AWARDED

Me., Portland — Office — New England Telephone & Telegraph Co., 4 story, 50 x 60 ft. addition to central office, brick and steel, Forest Ave., to F. W. Cunningham & Sons, 181 State St., cost plus basis. Archts. est. $300,000.

Mass., Boston — Hotel and Theatre — Olympia Theatres Inc., 142 Berkeley St., 13 story and basement, 180 x 300 ft., 55,000 sq.ft. floor space, rein.-con., brick and stone, wood pile foundation, Tremont, Hollis, Dillaway and Dore Sts., to Olympia Constr. Co., 333 Washington St., cost plus commission basis. Archts. est. $8,500,000. Noted Jan. 25.

N. Y., Brooklyn—Apartment—Johnson & Deischel, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Kossuth Ave., by day labor. $200,000.

N. Y., Brooklyn—Store—A. I. Namm & Son, Fulton St., 8 story, brick, steel and stone, plain foundation, Fulton St., to Thompson-Starrett Co., 49 Wall St., New York.

N. Y., New York—Apartments—B. L. W. Constr. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build two 6 story, brick, steel and stone, plain foundations, Wadsworth Ave., by day labor. $500,000 each.

N. Y., New York—Apartment—Danzing Building Corp., c/o D. S. Lang, archt. and engr., 110 West 34th St., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Bryant Ave., by day labor. $250,000.

N. Y., New York — Apartment — Fifty-Five East 72nd St. Corp., c/o A. J. Bodker, archt. and engr., 62 West 45th St., will build 15 story, brick, steel and stone, plain foundation, 55 East 72nd St., by day labor. $600,000.

N. Y., New York—Apartment—C. Glazer, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 5 story, 125 x 200 ft., brick, steel and stone, plain foundation, 24th St., by day labor. $250,000.

N. Y., New York—Apartment—Lewman Realty Co., c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., will build 6 story, brick, steel and stone, plain foundation, East 169th St., by day labor. $200,000.

N. Y., New York—Apartment—Mandel Ehrich Corp., 1 Pershing Sq., 14 story, brick, steel and stone, plain foundation, Park Ave. and 79th St., to Leddy & Moore, 125 West 40th St. Archts. est. $600,000.

N. Y., New York—Apartment—Plough-Fox Co., c/o C. Schaefer, archt. and engr., 394 East 150th St., will build 5 story, 85 x 150 ft., brick, steel and stone, plain foundation, University Ave., by day labor. $250,000.

N. Y., New York — Apartment — Saul Constr. Co., c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 6 story, brick, steel and stone, plain foundation, Grand Concourse and 196th St., by day labor. $400,000.

N. Y., New York—Apartment—D. Schorn, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 175 ft., brick, steel and stone, plain foundation, Valentine Ave., by day labor. $175,000.

N. Y., New York—Apartment—S. Williams, c/o H. G. Miller, archt. and engr., 1482 Bway., will build 6 story, 125 x 175 ft., brick, steel and stone, plain foundation, Madison Ave. and 109th St., by day labor. $350,000.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., 3 story, 105 x 275 ft., brick, steel and stone, plain foundation, 204 2nd Ave., to Industrial Eng. Corp., 30 Church St. Archts. est. $700,000.

N. Y., New York—Office—Glaser Holding Corp., c/o H. Wolff, archt. and engr., 30 East 23rd St., will build 12 story, brick, steel and stone, plain foundation, 36 East 30th St., by day labor. $250,000.

Pa., Corry—School—Bd. Educ., 2 story and basement, 127 x 162 ft., to E. A. Austin & Co., Erie. Archts. est. $175,000. Noted Jan. 10.

Pa., Phila.—Schools—School Bd., (1) 4 story and basement, 111 x 133 ft., 4th, George and Orianna Sts., (2) 4 story and basement, 111 x 133 ft., 6th, Carpenter and Montrose Sts., general contracts to McCloskey & Co., 1620 Thompson St., (1) $427,427 (2) $418,666; heating to W. P. McKenzie & Co., 315 South 15th St. (1) $44,118 (2) $44,116; plumbing to S. Faith & Co., Inc., 2427 Penna. Ave., (1) $27,000; Bulman Bros., 5th and Cumberland Sts., (2) $27,666. Noted Jan. 10.

Md., Baltimore—Ward, etc.—Childrens Hospital School, c/o W. G. Beecher, archt., 12 East Pleasant St., 3 story, ward building, boiler house, laundry and garage, brick, plain foundation, Green Spring Ave. and 41st St., to Frainie Bros. & Haigley, 19 West Franklin St. $165,000. Noted Dec 20.

N. C., Raleigh—Library—State College of Agriculture and Engineering, rein.-con., brick and marble library, on Campus, to J. W. Stout & Co., Sanford, $227,500. Noted Aug. 30.

Ga., Atlanta—Hotel—Henry Grady Hotel Co., 13 story and basement, 120 x 170 ft. and 50 x 120 ft., rein.-con., to Gude & Co., 64 Poplar St.

Ga., Macon—Apartment—W. J. and O. J. Massee, Jr., 104 Vineville Ave., 8 story, rein.-con., to Southern Ferro Concrete Co., 50 East Ellis St., Atlanta.

O., Cleveland — Apartment — S. Epstein, 9303 Adams Ave., 3 story, 39 x 142 ft., brick, Wymore Ave., to Zuckerman Bros., 11605 Kinsman Rd. Archts. est. $150,000. Noted Nov. 15.

O., Cleveland—Apartment—M. Stein, 511 Schofield Bldg., 3 story and basement, 102 x 126 ft., brick, Page Ave., to Zuckerman Bros., 11605 Kinsman Rd. Archts. est. $200,000.

O., Cleveland—Commercial and Office—Rapid Transit Land Co., 2409 Euclid Ave., 3 story and basement, brick, steel and concrete, East 105th St., to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $150,000.

O., Cleveland—Lodge and Store—Aerie No. 135, Fraternal Order of Eagles, 2226 East 55th St., general contract incl. mechanical equipment, 10 story and basement, L shaped rein.-con., brick, tile and stone, Windsor Ave. N.E. and East 40th St., to Sperry Realty Co., 207 Pittsburgh Bldg., St. Paul, Minn., cost plus basis. Total cost about $1,000,000.

O., Dayton—Store—Simons & Co., North Main St., 3 story, 25 x 180 ft., rein.-con., stone and terra cotta, Main St., to Industrial Building Co., Reibold Bldg., $160,000. Noted Dec. 20.

Mich., Detroit—Mercantile—J. L. Hudson Co., Gratiot Ave., 15 story and basement, 100 x 244 ft. rein.-con., brick and steel, to Bryant & Detwiler Co., 2336 Dime Bank Bldg.

Mich., Redford—School—Redford Union Schools, Dist. 1, 2 story and basement, 10 room, brick and steel, plain foundation, Waterford Rd., to J. H. Patterson, Plymouth. Archts. est. $150,000.

Wis., Milwaukee — Apartment — Coddington Eng. Co., 290 3rd St., will build 3 story, 48 x 134 ft., brick and concrete, plain foundation, 12th St., by day labor. $150,000.

Wis., Milwaukee—Bank—Northwestern Natl. Bank, c/o J. Reutermann, 114 Grand Ave., foundation, 1st floor and excavation for 2 story and basement, 67 x 70 ft. and 30 x 65 ft., brick and concrete, plain foundation, Lisbon Ave., to Brun Constr. Co., 387 Clinton St. Total cost $150,000. Noted Dec. 27.

Wis., Milwaukee—Business—C. Niss & Sons, 697 3rd St., 4 story and basement, 85 x 150 ft., brick and concrete, plain foundation, to W. W. Oeflein, 86 Michigan St. Archts. est. $200,000.

Minn., Minneapolis—Office—Thorpe Bros. 206 Andrus Bldg., 8 story and basement, 47 x 109 x 120 ft., rein.-con., brick and tile, 521 Marquette Ave., general contract to Splady & Haagenson, 1022 Plymouth Bldg. Total $180,000. Noted Dec. 13.

Minn., St. Paul—School—Summit School Corp., 655 Holly Ave., general contract 2 story and basement, rein.-con., brick and tile, Goodrich Ave. and Dunlap St., to P. O. Nasvik, 1368 Ashland Ave., $176,000. Noted Dec. 20.

Kan., Emporia—Student Union—Kansas State Teachers College will build 2 story and basement, 110 x 137 ft., brick and rein.-con., on Campus, by day labor under supervision of S. H. Hill, supt. $150,000. J. H. Kellogg, Lawrence, Kan. archt.

Mo., Columbia—Memorial Hall Tower—E. E. Brown, business mgr. Missouri University, (1st unit) 43 x 376 ft., 140 ft. high, rein.-con., brick, white stone and limestone, on campus, to Simon Constr. Co., Columbia, $112,000. Cost complete $240,000. Noted Dec. 13.

Mo., St. Charles—Dormitory—Le Baume & Klein, archts., Compton Bldg., St. Louis, general contract 3 story, 42 x 154 ft., rein.-con. and brick, on campus, here, to J. J. Willner & Son, Alton, Ill., for Lindenwood College. Archts. est. $150,000. Noted Jan. 10.

Ark., Little Rock—Bank—Little Rock Federal Reserve Bank, general contract brick and stone bank, to Herman & McCain, Reigler Bldg.; heating, to Shaw Gas & Fuel Co., plumbing to Himstedt & Son, 320 Louisiana St., Engrs. est. $217,000.

Ark., Texarkana — Bank — Texarkana Natl. Bank, 8 story and basement, 25 x 140 ft., to Murch Bros. Constr. Co., Railway Exch., St. Louis, Mo. Engrs. est. $230,000.

Tex., Dallas — Church — East Dallas Christian Church, Peak and Junius Sts., 2 story and basement, 100 x 105 ft., brick and concrete, to Inge Constr. Co., Swiss and Hawkins Sts. $320,000. Noted Oct. 18.

Tex., Ft. Worth—Church—Travis Ave. Baptist Church will build 3 story and basement, 95 x 145 ft., brick and stone, by day labor. $150,000. C. Woodruff, Reynolds Bldg., archt.

Tex., Houston—Office—See "Industrial Works" under Warehouse, etc.

Ariz., Tucson—Library—Bd. Regents, 3 story and basement, 42 x 110 x 194 ft., brick, terra cotta, steel and rein.-con., on Campus, here, general contract to C. Campbell, 341 North 1st Ave., Phoenix, $190,760. Noted Dec. 20.

Buildings (Continued)

Wash., Seattle — Apartment — S. Berg, 3402 Woodland Park Ave., will build 6 story, 108 x 160 ft, rein.-con., 418 Loretta Pl., by day labor. $565,000. Stuart & Wheatley, Walker Bldg., archts.

Calif., Los Angeles—High School—City, 2 and 3 story, brick, Belvedere, general contract to J. F. Atkinson, Story Bldg., $238,-700; heating to T. Haverty, 316 East 8th St., $28,350. Noted Jan. 10.

Calif., Los Angeles—Store and Loft—Wurlitzer Co., 605 West 7th St., 12 story and basement, rein.-con., Bway. near 8th St., to Larsen-Siegrist Co., Bartlett Bldg., $395,000. Noted Nov. 22.

Calif., San Francisco—Office—See "Industrial Work."

Ont., Toronto—Theatre—Danforth-Woodbine Theatre Ltd., Danforth and Woodbine Aves., will build 2 story and basement, 50 x 100 ft. rein.-con., brick and steel plain foundation, Danforth Ave., by day labor. $150,000. Noted Jan. 10.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn—Quarters—Spec. 4937—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans officers quarters at Naval Hospital, here.

Pa., Aspinwall (Pittsburgh P. O.)—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., plans 260 bed hospital, here. F. Hines, dir.

Md., Perryville—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., plans 260 bed hospital, here. F. Hines, dir.

D. C., Wash.—Extension—Spec. 4936—Bureau Yards & Docks, Navy Dept., plans extension to nurses quarters, here.

Va., Hampton Roads—Dredging—Spec. 4935—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans dredging at Naval Operating Base, here.

S. C., North Island—Quarters—Spec. 4920—Bureau of Yards & Docks, Navy Dept., Wash., D. C., rejected bids for quarters at Naval Radio Compass Station, here. Noted Nov. 29.

Ky., Louisville—Steel Boat Hulls—U. S. Engineer, P. O. Box 72, plans to purchase two steel maneuver boat hulls 5 x 24 x 60 ft., one for Louisville Dist. and one for Huntington, W. Va. Dist.

Ky., Owensboro—Piles—U. S. Engineer, Louisville, plans to purchase hard wood piles for Dam 46, four hundred 20 ft., seven hundred and fifty 25 ft. and three hundred and fifty 30 ft. long.

Ky., Pikesville—Hospital—U. S. Veterans Bureau, Arlington Bldg. Wash., D. C., plans 60 bed hospital, here. F. Hines, dir.

Wis., Wilwaukee—Cement—U. S. Engineer, Milwaukee, takes bids in February furnishing 13,500 bbl. cement.

Tex., Ft. Worth—Mooring Masts—Spec. 4939—Bureau Yards & Docks, Navy Dept. Wash., D. C., plans mooring masts, here.

Wash., Camp Lewis—Mooring Masts—Spec. 4940—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans mooring masts, here.

Wash., New Dungeness—Power Plant—Spec. 4938—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans rebuilding power plant at Radio Compass Station, here.

California—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., plans 250 bed hospital in southern part of state. F. Hines, dir.

BIDS DESIRED

Mass., Northampton—Laundry—Feb. 11, by U. S. Veterans Bureau, Room 791 Arlington Bldg., Wash., D. C., laundry building at Veterans Hospital, here. F. T. Hines, dir.; adv. E. N.-R. Jan. 17.

N. Y., New York—Finding Tower—Jan. 26, at U. S. Engineer Office, Room 608 Army Bldg., one 100 ft. range finding tower; adv. E. N.-R. Jan. 17.

Ala., Florence—Steel Roof Trusses—Feb. 7, at U. S. Engineer Office, Florence, structural steel roof trusses, etc., for power house at Wilson Dam, Tennessee River; adv. E. N.-R. Jan. 17.

Ala., Florence—Turbines—Mar. 1, at U. S. Engineer Office, Florence, 4 hydraulic turbines; adv. E. N.-R. Jan. 17.

Ky., Louisville—Jan. 21, by U. S. Engineer, P. O. Box 72, furnishing 1,800 round bars and 200 flat bars, soft and cast tool steel, various sizes, also 125 steel plates, various sizes, f.o.b. Louisville.

Ky., Louisville—Steel, Castings, etc.—Feb. 11, at U. S. Engineer Office, P. O. 72, structural steel, castings, etc., for Lock 46, Ohio River; adv. E. N.-R. Jan. 17.

Ky., Owensboro—Steel Forgings, etc.—Feb. 11, at U. S. Engineer Office, P. O. Box 72, Louisville, furnishing 10 tons cold rolled steel forgings, 28 tons reinforcing bars, 1,700 lb. phosphor bronze.

Ariz., Prescott—Kitchen and Mess Hall—Feb. 15, by U. S. Veterans Bureau, Room 791, Arlington Bldg., Wash., D .C., kitchen and mess hall, etc., at U. S. Veterans Hospital 50, Whipple Barracks, here. F. T. Hines, dir.; adv. E. N.-R. Jan. 17.

Ore., Portland—Stone—Feb. 14, at U. S. Engineer Office, 216 New Post Office Bldg., furnishing stone for north and south jetties at Coos Bay; adv. E. N.-R. Jan. 17.

BIDS RECEIVED

D. C., Wash.—Bungalows—Dept. Interior, constructing 7 bungalows at St. Elizabeths Hospital, from B. H. Ennis, 1933 East 31st St., Baltimore, Md., $46,197 (150 days). Noted Dec. 27.

D. C., Wash.—Underpinning Foundations—Spec. 4934—Bureau Yards & Docks, Navy Dept., Wash., D. C., underpinning foundations, here, from Underpinning Foundation Co., 342 Madison Ave., New York City, (1a) $42,800, add $1,050 deduct $850, for two pile pier, add $1,100 deduct $900, for 3 pile pier (1b) add $1,125 deduct $800, for 2 pile pier add $1,075 deduct $850 for 3 pile pier, Alternate 1, Item 2, $39,875, (a) add $1,000 deduct $800, 2 pile pier, add $1,900 deduct $1,600 for 3 pile pier, (b) add $1,000 deduct $800, 2 pile pier, add $1,900 deduct $1,600, for 3 pile pier; Foundation Co., 120 Liberty St., New York City, (1) $54,000 (1a) add $1,250 deduct $770 (1b) add $1,250 deduct $770; R. J. Mansfield Co., 53 Park Pl., New York City, (1) $53,125 (1a) $1,400 (1b) $1,300 (2) $47,-460 (2a) $1,300 (2b) $1,200 (3) $53,125 (3a) $1,400 (3b) $1,300. Noted Dec. 20.

Va., Norfolk—Remodeling—Spec. 4912—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling officers quarters at Marine Corps Base, here, from Agostini Bros., 243 Arcade Bldg., (1) $3,240 (2) $100. Noted Dec. 27.

N. C., Cape Hatteras — Storage and Recreation—Spec. 4931—Bureau Yards & Docks, Navy Dept. Wash., D. C., storage and recreation room here, from J. B. Daily, Manteo, $1,785. Noted Dec. 20.

Ala., Florence—Lumber—U. S. Engineer Office, Florence, furnishing 200,000 ft. 2 x 10, and 50,000 ft. 3 x 10 yellow pine, various lengths, from Jefferson Lumber Co., Jefferson Co. Bank Bldg., Birmingham, Ala., $6,600.

CONTRACTS AWARDED

Va., Langley Field — Barracks — Constructing Quartermaster, U. S. Army, Wash., D. C., constructing barracks, to Cunningham Constr. Co., Newport News, $73,749.

N. C., Poyners Hill—Quarters and Boathouse—Spec. 4907—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling quarters and constructing boathouse, here, to A. R. Masters Co., Inc., Bank of Hampton Bldg., Hampton, Va., $7,250.

Fla., Jacksonville — Catamarans — U. S. Engineer, 15 steel pontoon catamarans, to Novelty Steam Boiler Wks. Co., 917 South Howard St., Baltimore, Md., $14,430. Noted Nov. 8.

Ky., Addison—Lumber—U. S. Engineer, P. O. Box 72, Louisville, 30,000 ft. white oak select dimension, 35,000 ft. white oak common dimension, to W. H. Daulkins Lumber Co., Parkersburg, W. Va., $60 per M. Noted Jan. 3.

Ky., Louisville—Lock Gates—U. S. Engineer, furnishing and erecting lock gates for Lock and Dam 45, Ohio River, to Penn Bridge Co., Beaver Falls, $62,468.

Ky., Louisville—Metal Work—U. S. Engineer, P. O. Box 72, metal work for Dams 44 and 45, Ohio River, to Amer. Car & Fdry. Co., Jeffersonville, Ind., $76,300. Noted Jan. 10.

Ia., Carroll—Post Office—Treas. Dept., Wash., D. C., constructing Post Office, here, to J. S. Gebuhr, 214 Locust Lodge, Council Bluffs, Ia., $47,770.

Tex., Paris — Post Office, etc. — Treas. Dept., Wash., D. C., 1 story and basement, 88 x 109 ft., brick and stone Post Office and Court House, here, to C. Weitz Sons, 713 Mulberry St., Des Moines, Ia., $143,990. Noted Jan. 10.

Wash., Keyport—Extension—Spec. 4926—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to operating building, to J. G. Wethers, 720 33rd Ave., Seattle, $5,379. Noted Jan. 10.

Ore., Portland—Rock—Office U. S. Engineer, P. O. Bldg., 230,000 tons rock for Umquah Jetty, to Joplin & Eldon, McKay Bldg., $326,600. Noted Dec. 6.

Calif., Livermore—Plumbing, Heating, etc.—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., plumbing, heating and electric work in Veterans Hospital here, to Latourette Fical Co., 2761 Sacramento Blvd., Sacramento, $238,800. Noted Dec. 1

Unclassified

PROPOSED WORK

Heating System—New Britain, Conn.—School Bd. plans installing new oil heating system in building. $25,000. S. H. Holmes, supt.

Transmission Line — New York — Upper Hudson Electric & Railroad Co., Catskill, plans 14 mi. high tension transmission lines, 3 mi. distribution lines, transformers, etc., between Lexington and Jewett. $75,000.

Gas Tank—Albany, N. Y.—Municipal Gas Co., 126th St., had plans prepared additional gas tank, 3,000,000 cu.ft. capacity, 300 cu.yd. excav. and 100 cu.yd. rein.-con. Private plans.

Swimming Pool — Albany, N. Y. — Mid City Park Corp., Troy Rd., plans structure to house 30 x 75 ft. swimming pool with shower baths, etc. $75,000. W. Hassard, Albany, engr.

Grand Stand—Altamont, N. Y.—Albany Schenectady Co. Fair Assn. plans wooden grand stand, concrete foundation, 5,500 seating capacity. $30,000. Engineer and architect not selected.

Dock—Buffalo, N. Y.—General Chemical Co., 350 Abbott Rd., plans 650 ft. pile and concrete dock in Buffalo River, at Abbott Rd. To exceed $100,000.

Bulkhead—Camden, N. J.—See "Industrial Works."

Transmission Line, Coal Handling Equipment, etc.—Baltimore, Md.—See "Industrial Works."

Subdivision—Huntington, W. Va.—Arlington Land Co. plans developing 130 acre subdivision, roads, sidewalks, etc. $25,000.

Gas Mains—Fort Meyers, Fla.—See Industrial Work.

Service Tunnels—Baton Rouge, La.—State Agricultural College plans service tunnels to carry heating, gas and electric supply mains. $75,000.

Storage Tanks—Clarksville, Tenn.—Gulf Refining Co. plans 4 gasoline and oil storage tanks. $25,000.

Barns—Knoxville, Tenn.—East Tennessee State Fair Assn. plans exhibition barns, pens, etc., on Fair Grounds, near here. $50,000.

Stadium — Cleveland, O. — Western Reserve University, c/o R. L. Vinson, pres., 10940 Euclid Ave., plans 1 story, steel and concrete, Adelbert Rd. $250,000. Engineer and architect not selected.

Track Elevation—Ft. Wayne, Ind.—New York, Chicago & St. Louis R.R., Columbia Bldg., Cleveland, O., plans to expend $3,000,000 on improvements. Work includes track elevation on Clay, Barr, Lafayette, Clinton, Harrison, Calhoun, Ewing, Fulton and Van Buren Sts., here. E. E. Hart, ch. engr.

Grade Crossing Abolition—Milwaukee, Wis.—City included $1,000,000 bond issue in 1924 budget, for grade crossing abolition. J. Schwada, City Hall, engr.

Harbor Improvements—Milwaukee, Wis.—City included $500,000 bond issue in 1924 budget, for harbor improvements. Harbor Comn., City Hall, in charge.

Street Lighting—Shorewood (Milwaukee P. O.), **Wis.** — Having preliminary plans prepared ornamental street lighting system incl. concrete posts, hangers, cable, etc., on Oakland Ave., etc. $25,000. H. A. Schmitt, Village Hall, engr.

Street Sweeper—Mitchell, S. D.—City plans to purchase one motor driven street sweeper.

Levee—Jonesboro, Ark.—Bay St. Francis D. D. having preliminary plans prepared 25 mi. levee work and drainage ditches in Craighead Co. Cobb & Lee, Amer. Trust Bldg., engrs.

Levee—Lake City, Ark.—Cane Island D. D. 26, had plans prepared and takes bids about Feb. 15, levee construction and floating dredge work. $90,000. Cobb & Lee, Amer. Trust Bldg., Jonesboro, engrs.

Transmission Line—Texas—Texas Power & Light Co., Interurban Bldg., Dallas, had plans prepared high power transmission line from Tyler to Corsicana. $100,000. R. E. Keck, c/o owner, engr.

Levee—Ennis, Tex.—Ellis Co. rejected bids 1,000 ft. levee, 50,000 cu.yd. excav., etc. $250,000. Will readvertise at once. C. T. Forest, Waxahachie, engr. Noted Oct. 4.

Unclassified (Continued)

Levee — Kaufman, Tex. — Kaufman Co. Levee Dist. 1, having plans prepared excavation for levee, $140,000, C. T. Forest, Waxahachie, engr.; had plans prepared and soon takes bids about Feb. 1, levee improvements in Dist. 4, incl. 1,000,000 yd. earth work, two 24 in. centrifugal pumps, oil engine driven, and spillway, $175,000, B. F. Williams, Rosser, engr. Noted Dec. 13.

Levee — Rowlett, Tex. — Dallas Levee Impvt. Dist. 9, Court House, Dallas, plans levee improvements near here, Dallas Co. $55,000. McKay & Montgomery, Andrews Bldg., Dallas, engrs.

Grain Elevator—Weatherford, Tex.—H. J. Bradfish Elevator Co. plans grain elevator. $50,000-$75,000. Engineer and architect not announced.

Levee—Wylie, Tex.—L. Blaylock, mayor of Dallas, interested in formation of Levee Dist., for improvements at Wylie Lake and vicinity, Rockwall Co. $1,000,000. Engineer not announced.

Electric Light System—Waynoka, Okla.—Election Jan. 15, to vote on $28,000 bond issue for new switch board, boiler, stack, extensions and repairs to distribution system. J. D. Bomford, Enid, engr.

Transmission Lines — Washington — See "Industrial Works."

Tunnels — California — Southern Pacific R.R. Co., 65 Market St., San Francisco, having plans prepared several tunnels on Ogden route in Sierra Mountains. To exceed $25,000. G. W. Boschke, ch. engr.

Shaft—Dos Rios, Calif.—Carbon Coal Co., c/o A. L. Fisher, genl. mgr., 312 Henshaw Bldg., Oakland, plans sinking several thousand feet of double shaft equipped with steam power plant, hoists, cars, cables, etc.; also constructing 7 mi. railroad to connect with Northern Pacific line.

Power Line Extensions—Fresno, Calif.—San Joaquin Light & Power Co., 1801 Tulare St., appropriated $6,000,000 for power line extensions and developments to system, $1,000,000 to be used by Midland Counties Public Service Corp. and Fresno City Water Corp., subsidiary companies.

Pier — Hamilton, Ont. — Harbor Bd. of Dept. Pub. Wks., Parliament Bldg., Ottawa, having plans prepared pier, 3,000 ft. long, 200 ft. wide at Ottawa St., here. K. M. Cameron, ch. engr.

BIDS DESIRED

Dikes — New York — See "Excavation, Drainage, Irrigation."

Heating and Ventilating Apparatus — New York, N. Y.—Jan. 25, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 98, West 212th St. 100 ft. westerly from 10th Ave., Manhattan Boro, also in P. S. 78, Fish Ave. between Needham Ave. and Hicks St., Bronx Boro, here, for Bd. Educ., 500 Park Ave.

Bulkhead—Bayonne, N. J.—Jan. 28, by Hudson Co. Park Comn., 1 Exchange Pl., Jersey City, bulkhead at Bayonne Park, here. C. N. Lowrie, c/o owner, landscape archt.; adv. E. N.-R. Jan. 17.

Pier—Baltimore, Md.—Jan. 22, by Baltimore & Ohio R.R., B. & O. Bldg., 2 story, 185 x 1,046 ft., concrete and brick, Locust Pt. $1,500,000. H. A. Lane, ch. engr.

Stadium—Lexington, Ky.—University of Kentucky receiving bids and opens same about Mar. 10, concrete stadium, 16,000 seating capacity. $150,000. A. O. Whipple, 421 Rase St., Lexington, archt. Noted June 14.

Wharf — Houston, Tex. — Jan. 24, by Harris Co. Navigation Dist., Court House, concrete wharf with concrete piles and footing for grain carrier house. $190,000. E. A. Tucker, c/o owner, engr.

Distributing Lines—Calif., Modesto—Jan. 24, by C. S. Abbott, secy., Modesto Irrigation Dist., power distributing lines, rural territory: 60 mi. of 3 phase, 4 wire line and 160 mi. single phase, 2 wire line; city territory; 9 mi. 3 phase, 4 wire overhead line and 20 mi. single phase, 2 wire overhead lines. Schedules: (1) 3,200 Butt treated poles (2) 1,600 crossarms (3) line hardware (4) metal and wood pines (5) insulators (6) wire (7) labor for construeting over head system. Separate bids for labor and materials. E. J. O'Connell, dist. electrical engr.

CONTRACTS AWARDED

Pier—Biloxi, Miss.—Biloxi Park Comn., pier to C. A. Thompson Biloxi. Engrs. est. $25,000.

Levee—Osceola, Ark.—St. Francis Levee Bd. 3,200 ft. loop in levee, to Roach, Stancil, Lowrance Bros. & Co., North Memphis Savings Bank Bldg., Memphis, Tenn., $125,000.

Grain Elevator—Beaumont, Tex.—Josey-Miller Grocery Co. 100,000 bu. grain elevator, concrete, to E. H. Ingram, Joplin, Mo. $75,000.

Shipping Terminal — Seattle, Wash. — Pacific Steamship Co., L. C. Smith Bldg., first unit of $2,000,000 terminal development, freight shed, 160 x 1,000 ft., steel frame and corrugated iron, general contract to Albertson, Cornell Bros. & Walsh, South 12th and Pacific Sts., Tacoma. Archts. est. $500,000. Noted Nov. 15.

Tunnel, etc.—Oregon—Southern Pacific R.R. Co., Southern Pacific Bldg., San Francisco, Calif., 3,700 ft. tunnel and 7 mi. railway in Klamath Co., (through Cascade Range), here, to Stewart & Welch, Empire Bldg., Seattle, Wash. Noted Oct. 18.

Pier Shed—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., pier shed, Islais Creek Terminal, to Grant & Hart, 571 42nd Ave., San Francisco, $45,623. Noted Jan. 10.

Materials and Equipment

PROPOSED WORK

Iron Pipe—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., received no bids Jan. 14, 864 ft. 12 in. iron pipe. Noted Jan. 10.

Concrete Mixer—Pittsburgh, Pa.—J. J. Curten, 207 Corliss St., plans to purchase 7 ft. concrete mixer, Blystone or Besser preferred.

Pumps, Grader, etc.—Milwaukee, Wis.—Central Bd. Purchases soon takes bids for equipment for use Dept. Pub. Wks. incl. 1 pump, 1 turbine sewer flusher, 1 boiler feed pump, 1 road grader, 1 road repair outfit, two 1 ton and two 5 ton motor trucks, fourteen 5 ton tractor trucks, 8 trailers, two 5 ton caterpillar tractors, 1 street sweeper with broom, one 3 ton tandem roller, five 1 bag concrete mixers, 2 tar kettles, 1 gasoline shovel and 1 rock crusher. R. E. Stoelting, comr. Pub. Wks.

Structural Steel—Chicago, Ill.—Illinois Central R.R., 135 East 11th St., plans to purchase 240 tons structural steel for bridge work. $15,000. F. L. Thompson, ch. engr.

Concrete Mixer—Los Angeles, Calif.—City Harbor Dept., G. W. Wade, secy., Byrne Bldg., plans to purchase heavy duty portable concrete mixer.

Steel Forms—San Francisco, Calif.—M. J. Hvorslev, 1216 Clay St., plans to purchase 4,000 sq.ft. 14 in. removable steel forms with 20 in. base for concrete joists.

BIDS DESIRED

Tractor, etc.—Troy, N. Y.—Bd. Contr. & Supply, 21 City Hall, in market for one 5 ton caterpillar tractor with snow plow attached, and 1 snow loader.

Cable Guard Rail, etc.—Trenton, N. J.—Jan. 29, by Mercer Co., 7,000 ft. cable guard rail, post, etc., for Brunswick Pike. $7,000. H. F. Harris, Court House, engr.

Truck Chassis, Cabs, etc. — Georgia — Feb. 1, by State Hy. Dept., East Point, 39 one ton truck Chassis, 39 one yd. steel hand dump bodies, 39 truck cabs. W. R. Neel, state highway engr.

Drag Line, etc.—What Cheer, Ia.—What Cheer Products Co., in market 9 x 14 drag line, 1 steel water tower and tank.

Norway Pine—Minneapolis, Minn.—Jan. 22, by F. S. Gram, city purch. agt., 185,000 ft. No. 1 rough Norway pine. N. W. Elsberg, city engr.

Steam Shovel, etc.—Cherryvale, Kan.—Edgar Zinc Co. in market for large size steam shovel and tram loading cars.

Steam Shovel—Scammon, Kan.—Carbon Coal Co. in market for 200 or 250 hp. steam shovel. A. Robinson, purch. agt.

Steam Pile Hammer—Dallas, Tex.—J. Smith, Box 1094, taking bids one No. 1 Vulcan steam pile hammer or similar equipment.

Mixer—Tulsa, Okla—E. G. Fiske & Co., Nebraska Bldg., in market for sack or half sack Koehring mixer.

Cletracs—Gilroy, Calif.—Feb. 4, by H. Pfister, clk. Santa Clara Co., San Jose, furnishing and delivering one or more cletracs for Rd. Dist. 1. R. Chandler, co. surv.

BIDS RECEIVED

Broken Stone, etc. — Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Jan. 14, 21,000 cu. yd. broken stone, and 5,000 cu.yd. sand grit, from W. P. McDonald Constr. Co., 17 West 42nd St., New York, $61,530 and $12,150 respectively; 11,000 cu.yd. sand, and 14,000 tons steam ashes, from Peace Bros., Inc., 57 North Laurence St., Flushing, $19,250 and $24,560 respectively; 25,000 vitr. paving blocks, from G. B. Raymond & Co., 293 Borden Ave., $62. Noted Jan. 10.

Asphaltic Cement, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., Jan. 9, 600,000 gal. asphaltic cement from Warner Quinlan Co., 79 Wall St., $32,520; 2,500 cu.yd. sand grit from Colgan & Colgan, $5,275; 20,000 cu.yd. asphalt sand and 20,000 bags Portland cement, from W. F. Cunningham, $13,500 each; 500,000 wood paving blocks, from Southern Wood Preserving Co., 10 East 43rd St., $21,800; 120,000 gal. gasoline in tanks, from Standard Oil Co., 26 Bway., $15,136. Noted Jan. 3.

Road Surfacing Material, etc. — New York, N. Y. — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Jan. 14, 75,000 gal. road surfacing material and 50 tons pitch joint filler, from F. J. Lewis Mfg. Co., Eastern Blvd. and East 177th St., $12,270 and $1,199 respectively; 600,000 gal. asphalt road oil, from Texas Co., 17 Battery Pl., $31,980; 3,000 cu.yd. hard coal ashes, from McGirr Bros., Inc., 461 8th Ave., $2,175; 500 cu.yd. fine sand, from Gallagher-Shand, Inc., 420 East 105th St., $875; Broken stone and trap rock screening, also 500 cu.yd. paving gravel, from Ames Building Material Co., 3437 Kingsbridge Rd., $27,810 and $1,550 respectively; 2,000 bags Portland cement, from C. J. Mallett, Inc., 2554 St. Raymond Ave., $1,390; 1,200 tons asphaltic cement, from Standard Oil Co. of New York, 26 Bway., $22,356; 300,000 gal. tar road oil, from Barrett Co., 40 Rector St., $32,730; 7,500 cu.yd. binder stone, from Calvin Tompkins Co., 30 Church St., $14,850; 7,500 cu.yd. sand grit, from Rosoff Sand & Gravel Co., 152 West 42nd St., $17,850; 500 tons limestone dust, from New York Trap Rock Corp., 101 Park Ave., $2,800; 10,000 cu.yd. asphalt sand, from C. W. Crane, 17 Battery Pl., $13,200; steam rollers, from Buffalo Springfield Roller Co., Brisbane Bldg., Buffalo, $6,850. Noted Jan. 10.

Snow Removing Machinery — Madison, Wis. — Snow removing equipment, from Barber Greene Co., West Park Ave., Aurora, Ill., $5,400. Noted Nov. 29.

Portland Cement—Springfield, Ill.—Dept. Pub. Wks. opened bids Jan. 14 on cement. Bids show same prices as before. Bids presented on 3,400,700 bbl. of the 4,500,000 asked for. Noted Jan. 10.

Portland Cement—Minneapolis, Minn.—F. S. Gram, city purch. agt., Jan. 4, 125,000 bbl. portland cement for City Eng. Dept., from Hydraulic Press Brick Co., 1250 Builders Exch.; L. W. Northfield Co. 2532 Central Ave.; Landers-Morrison-Christensen Co., 800 Builders Exch.; P. B. Speakes Co., 2845 2nd Ave. S; Minneapolis Builders Supply Co., 721 Lumber Exch., all bid $2.52 per bbl. f.o.b. Minneapolis. Noted Jan. 3.

Cable—Los Angeles, Calif.—City, furnishing cable for fire alarm system, from Standard Underground Cable Co., Citizens Natl. Bank Bldg., Los Angeles, $384,769.

CONTRACTS AWARDED

Cement — Wisconsin — State Hy. Comn. Madison, furnishing 400,000 bbl. cement, to Universal Portland Cement Co., 210 La Salle St., Chicago; 160.000 bbl. to Marquette Portland Cement Co., Chicago; 150,000 bbl. to Lehigh Portland Cement Co., 111 Washington St., Chicago; 60,000 bbl., to Sandusky Portland Cement Co., Engineers Bldg., Cleveland, O.; 75,000 bbl., to Alpha Portland Cement Co., 140 South Dearborn St., Chicago; 30,000 bbl., to Petoskey Portland Cement Co., Petoskey, Mich.; 40,000 bbl., to Northwestern States Portland Cement Co., Mason City, Mich.; 50,000 bbl., to Western Lime & Cement Co., Representatives for Huron Portland Cement Co., 68 Wisconsin St., Milwaukee; 60,000 bbl., to Manitowoc Portland Cement Co., Manitowoc. Base price on which all awards were made was $1.65 per bbl. net, Buffington and $1.65 per bbl. net La Salle, Ill. Noted Jan. 10.

Reinforcing Steel—St. Paul, Minn.—H. W. Austin, city purch. agt., 418 tons reinforcing steel rods, to Clinton Bridge Wks., Clinton, Ia., $26,400. Noted Dec. 20.

Crushed Stone, etc.—Jefferson City, Mo.—State Hy. Dept., to McDowell & Co., Kansas City, 675,000 tons crushed stone for road construction in northwestern part of Missouri to be used during next 3 years, $1.25 per ton at quarry, screenings $0.55 per ton, quarries to be operated at Smithville, Clay Co, and Gallatin, Davies Co., to Joplin Crushed Flint Co, with quarry near Kansas City, 50,000 tons annually $1.10 f.o.b. quarry.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Jan. 31.

State Hospital Work

Ray Brook, N. Y.

Sealed proposals for Construction, Heating, Sanitary, Electric and Refrigerating Work—Storehouse and Cold Storage Building at the State Hospital for the Treatment of Incipient Pulmonary Tuberculosis, Ray Brook, N. Y., will be received by Dr. Frank Erdwurm, President, Board of Trustees, State Hospital for the Treatment of Incipient Pulmonary Tuberculosis, Ray Brook, N. Y., until 10 o'clock a.m., Thursday, January 31, 1924, when they will be publicly opened and read. Proposal shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification Nos. 4213, 4214, 4215, 4216 and 4217. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the State Hospital for the Treatment of Incipient Pulmonary Tuberculosis, Ray Brook, N. Y., at the New York Office of the Department of Architecture, 18th Floor, Fuller Bldg., B'way & 23rd Street, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the States Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: January 8th, 1924.

Bids: Jan. 24.

NOTICE TO CONTRACTORS.

Building Removal

Proposals for completely and entirely removing buildings known as Nos. 263 and 269 64th St., Borough of Brooklyn, City of New York, and all the materials connected therewith, down to the level of the street, will be received by the Commission created by and under Chapter 471, Laws 1923 of the State of New York, at the office of the New York National Guard, Room 829 Municipal Building, Borough of Manhattan, City of New York, at 2 o'clock P.M., on the 24th day of January, 1924, and then and there to be opened and read.

Proposals must be made on proposal forms and enclosed in envelopes, both of which are furnished by the State, envelopes to be sealed and endorsed as directed in the proposal forms.

Proposal forms and envelopes may be obtained and copies of requirements, specifications or proposed contract consulted or obtained at the above mentioned office of the Commission.

Dated: New York, N. Y., Jan. 8th, 1924.

ALFRED E. SMITH, Governor of the State of New York.

JAMES W. FLEMING, Comptroller of the State of New York.

EDWARD J. WESCOTT, The Adjutant-General of the State of New York, constituting the Commission created by and under Chapter 471, Laws of 1923 of the State of New York.

OFFICIAL PROPOSALS

Bids: an. 28.

Bulkhead

Jersey City, N. J.

Sealed proposals will be received by the Hudson County Park Commission at its office, 1 Exchange Place, Jersey City, N. J., on Monday, January 28, 1924, at eleven o'clock a.m. for the construction of a bulkhead at Bayonne Park, Bayonne, N. J., and work connected therewith in accordance with Plans and Specifications of Charles N. Lowrie, Landscape Architect, on file at the office of the Hudson County Park Commission and which will be loaned to the prospective bidders on a deposit of a certified check to their order in the sum of Ten ($10.00) dollars.

Blank forms for bids showing estimates of quantities may be obtained at the office of the Hudson County Park Commission.

Each bidder must accompany his bid with a certified check drawn to the order of the Hudson County Park Commission to the amount of 5 per cent of his bid.

The successful bidder will be required to furnish a surety company's bond to be approved by the Hudson County Park Commission in the full amount of his bid with satisfactory security conditioned for the faithful performance of his contract.

There shall be two contracts, the original and a copy which shall first be signed and executed by the successful bidder and then presented to the Hudson County Park Commission for signature.

Bids must be enclosed in sealed envelopes indorsed "Proposals for Bulkhead and work connected therewith, Bayonne Park, Bayonne, N. J.," directed to the Hudson County Park Commission and delivered to the Secretary of the Hudson County Park Commission at or before the hour above specified. The commission reserves the right to reject any or all bids.

Dated January 7, 1924.

Hudson County Park Commission.
BY JOSEPH FILORAMO, JR.,
Secretary.

Bilds: Feb. 5.

Highway Work

STATE DEPARTMENT OF PUBLIC WORKS—BUREAU OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at the office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m., on Tuesday, February 5, 1924, for the construction and reconstruction of highways in the following counties:

ALLEGANY......One contract: 1.18 miles
DUTCHESS.......One contract: 1.19 miles
MADISON.........One highway: 4.85 miles
ONTARIO.........One highway: 8.79 miles
ORANGE..........One highway: 3.82 miles
ORLEANS........One highway: 5.30 miles
OSWEGO..........One contract: 4.75 miles
WYOMING.......One highway: 4.34 miles

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Bureau in Albany, N. Y., and also at the office of the division engineers in whose division the roads are to be improved or reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

LOWELL GROSSMAN,
Commissioner.

OFFICIAL PROPOSALS

Bids: Jan. 25.

Street Paving

Waterloo, N. Y.

For paving certain streets in the Village of Waterloo, Seneca County, N. Y. Bituminous Macadam Pavement, Penetration Method.

Sealed proposals for the above mentioned work, endorsed "Proposals for Paving" will be received at the office of the Board of Trustees, Waterloo, N. Y., until 12 o'clock M. of January 25, 1924.

Estimated quantity of pavement is 18,500 square yards, using two applications of bituminous material, totaling two gallons per square yard. Bid price to include excavation and all material and labor.

Each bid must be made out on the forms of proposals furnished by the Board of Trustees, and must be enclosed in a sealed envelope addressed to the Board of Trustees, Waterloo, N. Y.

Contractors will be paid monthly, approximate estimates, 90% of the amount due for work at that time done.

A certified check payable to the order of the Village Treasurer of the Village of Waterloo, N. Y., will be required in the amount of $1,500.00 (Fifteen hundred dollars) to accompany each bid.

The successful bidder will be required to give a bond in the sum of at least 50% of the contract price conditioned for the faithful performance of all parts of the contract with sureties to be approved by the Board of Trustees.

The Board of Trustees reserves the right to reject all bids not deemed for the best interest of the Village and adjacent and contiguous property owners.

Plans may be seen at tne office of the Board of Trustees, and specifications, forms of proposal, contract, etc., obtained from the Village Clerk.

The Contractor is required to furnish the Engineer, previous to the time fixed for receiving bids, samples of the bituminous material proposed to be used.

By order of the Board of Trustees of the Village of Waterloo, N. Y.

ADELBERT H. MOORE,
Village Clerk.

Waterloo, N. Y., Jan. 3rd, 1924.

Bids: Jan 30.

24-Inch Gravity Pipe Line

Greenville, S. C.

Sealed proposals will be received by The Water Commission of the City of Greenville, South Carolina, until 3 o'clock p.m., Wednesday, January 30th, 1924, for furnishing and laying a 24-inch cast iron or reinforced concrete gravity pipe line approximately 40,000 feet long.

Plans and profile will be on file and may be seen at the office of The Ludlow Engineers, Winston-Salem, N. C., or at the office of the Water Works Superintendent, Greenville, S. C., after January 20th. Specifications, bid blank, contract form, etc., may be obtained from the Engineers.

Each bid for excavating trench and laying the pipe line shall be accompanied by a certified check or bid bond in the sum of $5,000, payable to the Treasurer of The Water Commission.

Proposals will be opened publicly with the usual rights reserved.

H. W PERRY,
Supt. Water Works.

J. L. LUDLOW,
Consulting Engineer.

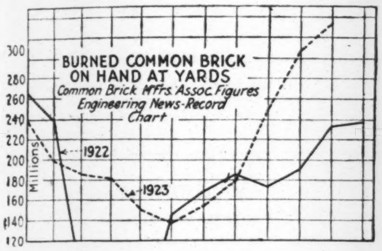
CONSTRUCTION NEWS

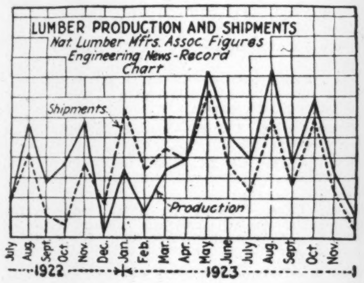
Engineering News-Record, January 24, 1924

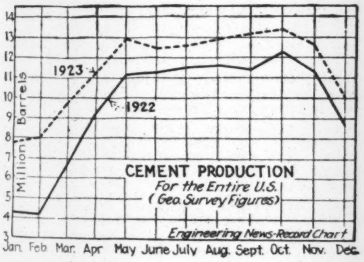
The Construction Barometer

Brick, Lumber, Cement Production Heavier Than Year Ago—Record Iron Ouput in 1923—Gain in Unfilled Steel Tonnage

ALTHOUGH the steel ingot output dropped nearly 9 per cent during **December**, the consequent rise of about 2 per cent in unfilled orders, on books of the U. S. Steel Corporation, was not entirely due to the slowing down in production. More active buying in iron, steel, lumber and other basic materials has been noted during the last three weeks. Structural steel bookings are unusually heavy but in this, as well as in most other materials, buying is conservative and confined to actual and immediate requirements. Production of cement and lumber is heavier than a year ago, and there are at least 44 per cent more burned brick on hand than at this time last year. The pig-iron output, however, is tending downward, owing to the recent slowness in demand.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Jan. 3	$10,163,000	$15,275,000	$25,438,000
Jan. 10	13,625,000	23,761,000	37,386,000
Jan. 17	9,074,000	28,657,000	37,731,000
3 weeks	$32,862,000	$67,693,000	$100,555,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

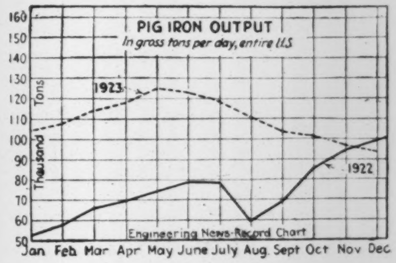
Week Ended	No.	Public Work	No.	Private Work
Jan. 3	10	$3,148,000	30	$11,480,000
Jan. 10	12	3,219,000	42	18,138,000
Jan. 17	9	2,551,000	38	20,232,000
3 weeks	31	$8,918,000	110	$49,850,000

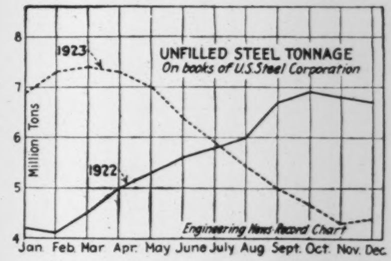
E. N.-R. CONSTRUCTION VOLUME INDEX NUMBER

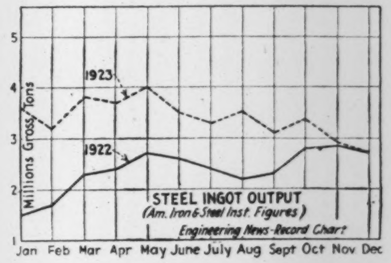
(1913 = 100)

	1918	1919	1920	1921	1922	1923
Jan.	59*	41*	146*	41	91	126
Feb.	125	72	114	43	100	105
Mar.	74	43	107	88*	202*	195*
Apr.	50	83	142*	86	150	160
May	71*	85*	107	90	179	171*
June	90	108	74	117*	187*	148
July	99	137*	85*	90	118	128
Aug.	122*	116	65	94	154*	111*
Sept.	119	96	85*	114*	129	137
Oct.	70*	224*	73	109	127	127
Nov.	54	58	51	101	122*	125*
Dec.	24	35	58*	118*	111	101

* Five issues of *Engineering News-Record.*







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Jan. 28	Detroit, Mich.	Jan. 24
Jan. 28	Beachhaven, N. J.	Jan. 24
Jan. 30	Greenville, S. C.	Jan. 10
	Adv. Jan. 10 to 24.	
Jan. 30	North Wilkesboro, N. C.	Jan. 24
Jan. 30	Long Island City, N. Y.	Jan. 24
Jan. 31	Massachusetts	Jan. 10
Feb. 1	Phillips, Wis.	Jan. 10
Feb. 4	Denver, Colo.	Jan. 17
	Adv. Jan. 17 and 24.	
Feb. 5	Ft. Wayne, Ind.	Jan. 24
Feb. 8	Goderich, Mich.	Jan. 24
Feb. 11	Fairmont, Okla.	Jan. 17
	Adv. Jan. 10 to 24.	
Feb. 11	McKeesport, Pa.	Jan. 17
	Adv. Jan. 17 and 24.	
Feb. 19	Bloomington, Ind.	Jan. 24
	Adv. Jan. 24	
Feb. 19	Corsicana, Tex.	Jan. 24
	Adv. Jan. 24.	
Feb. 20	San Francisco, Calif.	Jan. 24

SEWERS

Bids Close		See Eng. News-Record
Jan. 23	Wash., D. C.	Jan. 24
	Adv. Jan. 24.	
Jan. 29	Muncie, Ind.	Jan. 24
Jan. 29	St. Paul, Minn.	Jan. 24
Jan. 30	Fostoria, O.	Jan. 3
Jan. 30	La Porte, Ind.	Jan. 24
Jan. 30	New York, N. Y.	Jan. 24
Feb. 1	Trenton, N. J.	Jan. 24
Feb. 5	Baton Rouge, La.	Jan. 3
	Adv. Jan. 10 and 24.	
Feb. 5	Gallatin, Tenn	Jan. 17
Feb. 5	St. Louis, Mo.	Jan. 10
Feb. 6	Oelwein, Ia.	Jan. 17
	Adv. Jan. 17 and 24.	
Feb. 11	Pleasantville, N. Y.	Jan. 17
	Adv. Jan. 10 to 24.	
Feb. 12	Big Springs, Tex.	Jan. 24
Feb. 12	University (St. Louis P. O.), Mo.	Jan. 24
Feb. 12	Elizabethtown, Ky.	Jan. 17

BRIDGES

Bids Close		See Eng. News-Record
Jan. 28	New Jersey	Jan. 10
Jan. 28	Phila., Pa.	Jan. 24
Jan. 29	Missouri	Jan. 24
Feb. 1	Cambridge, O.	Jan. 17
Feb. 1	Georgia	Jan. 24
Feb. 4	California	Jan. 17
Feb. 5	Yankton, S. D.	Jan. 17
Feb. 5	Duluth, Minn.	Jan. 24
Feb. 8	Tennessee	Jan. 24

Bids Close		See Eng. News-Record
Feb. 11	Pembroke, Ont.	Jan. 24
Feb. 13	Phila., Pa. Adv. Jan. 17 and 24.	Jan. 17
Feb. 14	Mendota, Minn.	Jan. 24
Feb. 20	New York Adv. Jan. 17 and 24.	Jan. 17
Mar. 3	St. Paul, Minn.	Jan. 24
May 1	Tientsen, North China	Oct. 11

DAMS

Feb. 7	Kingston, N. C.	Dec. 27

RAILWAYS

Jan. 31	Texas	Jan. 24
Mar. 18	New Zealand	Sept. 20
Apr. 1	Indiana	Jan. 24

EXCAVATION, DRAINAGE IRRIGATION

Jan. 25	New York, N. Y.	Jan. 24
Jan. 29	St. Louis, Mo.	Jan. 3
Jan. 31	St. Catherines, Ont.	Jan. 17
Feb. 4	Minneapolis, Minn.	Jan. 10
Feb. 15	Morehead City, N. C. Adv. Jan. 17 and 24.	Jan. 24
Feb. 18	Tampa, Fla.	Jan. 24

STREETS AND ROADS

Jan. 28	New Jersey Adv. Jan. 10 to 24.	Jan. 10
Jan. 28	Akron, O.	Jan. 17
Jan. 28	New York, N. Y.	Jan. 24
Jan. 28	Long Island City, N. Y.	Jan. 24
Jan. 28	South Carolina	Jan. 24
Jan. 29	Missouri	Jan. 24
Jan. 29	Hibbing, Minn.	Jan. 17
Jan. 29	Uvalde, Tex.	Jan. 10
Jan. 29	Baton Rouge, La.	Jan. 3
Jan. 29	Virginia	Jan. 10
Jan. 29	Auburn, Neb.	Jan. 17
Jan. 29	Palo Pinto, Tex.	Jan. 17
Jan. 29	Bennettsville, S. C.	Jan. 24
Jan. 30	Michigan	Jan. 17
Jan. 30	Nevada	Jan. 17
Jan. 30	Baltimore, Md.	Jan. 24
Jan. 30	Kendallville, Ind.	Jan. 24
Jan. 30	Saluda, S. C.	Jan. 24
Jan. 30	New York, N. Y.	Jan. 24
Jan. 31	Laredo, Tex.	Jan. 17
Jan. 31	North Carolina Adv. Jan. 17 and 24.	Jan. 17
Jan. 31	Michigan	Jan. 17
Feb. 1	Winchester, Ind.	Jan. 17
Feb. 1	Charleston, W. Va.	Jan. 10
Feb. 1	Huntsville, Ala.	Jan. 24
Feb. 1	Cincinnati, O.	Jan. 24
Feb. 1	Des Moines, Ia.	Jan. 24
Feb. 2	Crawfordville, Fla. adv. Jan. 24	Jan. 24
Feb. 4	Burlingame, Calif.	Jan. 24
Feb. 4	Pacific Grove, Calif.	Jan. 24
Feb. 4	New Mexico	Jan. 17
Feb. 4	Newport, Ind.	Jan. 17
Feb. 4	Shoals, Ind.	Jan. 17
Feb. 4	Houston, Tex.	Jan. 24
Feb. 5	Leland, Miss.	Jan. 17
Feb. 5	New York Adv. Jan. 17 and 24.	Jan. 17
Feb. 5	Kosciusko, Ind.	Jan. 17
Feb. 5	Kendallville, Ind.	Jan. 24
Feb. 5	Toledo, O.	Jan. 24
Feb. 5	Stockton, Calif.	Jan. 24
Feb. 5	Wabash, Ind.	Jan. 24
Feb. 5	Indiana	Jan. 24
Feb. 6	Salina, Kan.	Jan. 24
Feb. 8	Boonville, Ind.	Jan. 24
Feb. 8	Nashville, Tenn.	Jan. 17
Feb. 8	Tennessee	Jan. 24
Feb. 11	Scottsburg, Ind.	Jan. 17
Feb. 14	Jasper, Ind.	Jan. 17
Feb. 15	Anniston, Ala.	Jan. 24
Feb. 18	New Philadelphia, O.	Jan. 24
Feb. 19	St. Louis, Mo.	Jan. 24
Feb. 28	Kenosha, Wis.	Jan. 17
Mar. 11	Washington	Jan. 10

INDUSTRIAL WORK

Jan. 28	Princeton, Ind.	Jan. 17
Jan. 30	Columbus, O.	Jan. 10
Jan. 31	Ray Brook, N. Y. Adv. Jan. 17 and 24.	Jan. 10
Feb. 1	Peoria, Ill.	Dec. 27
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Bids Close		See Eng. News-Record
Jan. 25	Middleboro, Mass.	Jan. 24
Jan. 25	Phila., Pa.	Jan. 24
Jan. 26	Wallingford, Conn.	Jan. 17
Jan. 28	Algonac, Mich.	Jan. 17
Jan. 28	East Washington, Pa.	Jan. 24
Jan. 28	Wilmington, N. C.	Jan. 24
Jan. 28	Fayetteville, N. C.	Jan. 24
Jan. 29	Hickory, N. C.	Jan. 24
Jan. 29	Mt. Pleasant, Mich.	Jan. 24
Jan. 29	Santa Ana, Calif.	Jan. 24
Jan. 29	Indianapolis, Ind.	Jan. 24
Jan. 29	Midland Park, N. J.	Jan. 10
Jan. 29	Bloomington, Ind.	Jan. 10
Jan. 29	Lancaster, Wis.	Jan. 17
Jan. 29	St. Paul, Minn.	Jan. 24
Jan. 30	Vernon, Tex.	Jan. 10
Jan. 30	Millville, N. J.	Jan. 10
Jan. 30	Baltimore, Md.	Jan. 17
Jan. 30	Columbus, O.	Jan. 17
Jan. 30	Prairie du Sac, Wis.	Jan. 17
Jan. 31	Mayville, Wis.	Jan. 17
Jan. 31	Milwaukee, Wis.	Jan. 24
Feb. 1	Bordentown, N. J.	Jan. 24
Feb. 1	Oklahoma City, Okla.	Jan. 10
Feb. 1	Lambertville, N. J.	Jan. 10
Feb. 1	Dorchester, Mass.	Nov. 29
Feb. 1	Joliet, Ill.	Jan. 17
Feb. 1	Webster Groves, Mo.	Jan. 17
Feb. 1	Waterbury, Conn.	Jan. 17
Feb. 1	Baltimore, Md.	Jan. 24
Feb. 1	River Forest, Ill.	Jan. 24
Feb. 4	Rome, N. Y.	Jan. 10
Feb. 4	Urbana, Ill.	Dec. 13
Feb. 4	Columbus, O.	Dec. 27
Feb. 4	Wash., D. C.	Jan. 17
Feb. 4	St. Johns, Mich.	Jan. 24
Feb. 4	Los Angeles, Calif.	Jan. 24
Feb. 5	Baltimore, Md.	Jan. 24
Feb. 5	Coffeyville, Kan.	Jan. 24
Feb. 6	Huntington, W. Va. Adv. Jan. 10 to 24.	Jan. 17
Feb. 6	Marcy, N. Y. Adv. Jan. 24.	Jan. 24
Feb. 6	Amsterdam, N. Y.	Jan. 24
Feb. 7	Bellaire (Jamaica P. O.), N. Y.	Jan. 24
Feb. 7	Brooklyn, N. Y.	Jan. 24
Feb. 8	Phila., Pa.	Jan. 17
Feb. 8	Northfield, Minn.	Jan. 24
Feb. 8	Cedargrove, N. J.	Jan. 24
Feb. 10	Trenton, N. J.	Jan. 10
Feb. 11	Claymont, Ill.	Jan. 24
Feb. 13	Industry, N. Y. Adv. Jan. 17.	Jan. 17
Feb. 15	Waukegan, Ill.	Jan. 24
Feb. 20	Irvington (branch of Newark), N. J.	Jan. 24
Mar. 1	Akron, O.	Jan. 24

FEDERAL GOVERNMENT WORK

Jan. 26	Finding Tower—New York, N. Y. Adv. Jan. 17 and 24.	Jan. 17
Jan. 28	Snagboat—Wilmington, N. C. Adv. Jan. 3 to 24.	Jan. 3
Jan. 29	Extension—Kansas City, Mo.	Jan. 3
Jan. 29	Hard Wood Piles—Owensboro, Ky.	Jan. 24
Jan. 30	Ward—Great Lakes, Ill.	Nov. 15
Jan. 31	Extension — Haverhill, Mass.	Jan. 10
Feb. 1	Steel House—Wilmington, Del.	Jan. 10
Feb. 4	Hospital—Augusta, Ga.	Jan. 10
Feb. 4	Sand Pumps — Portland, Ore.	Jan. 24
Feb. 5	Steel Piling — Louisville, Ky.	Jan. 10
Feb. 5	Steel Piles—Wash., D. C.	Jan. 24
Feb. 5	Cranes—Florence, Ala. Adv. Jan. 24.	Jan. 24
Feb. 6	Storehouse—Pearl Harbor, H. T.	Dec. 20
Feb. 6	Jetty—Jacksonville, Fla. Adv. Jan. 24.	Jan. 24
Feb. 7	Steel Roof Trusses—Florence, Ala. Adv. Jan. 17 and 24.	Jan. 17
Feb. 8	Steel and Bolts—Owensboro, Ky.	Jan. 10
Feb. 11	Sub-Post Office—Memphis, Tenn.	Jan. 10
Feb. 11	Laundry — Northampton, Mass. Adv. Jan. 17 and 24.	Jan. 17
Feb. 11	Steel Castings, etc.—Louisville, Ky. Adv. Jan. 17 and 24.	Jan. 17
Feb. 12	Gasoline Hoist, etc.—Ketchikan, Alaska	Jan. 10
Feb. 12	Roof—Baltimore, Md. Adv. Jan. 24.	Jan. 24
Feb. 14	Stone—Portland, Ore. Adv. Jan. 17 and 24.	Jan. 17
Feb. 14	Breakwater — Gulfport, Miss. Adv. Jan. 24.	Jan. 24
Feb. 15	Kitchen and Mess Hall — Prescott, Ariz. Adv. Jan. 17 and 24.	Jan. 17
Feb. 15	Steel Forging, etc.—Owensboro, Ky.	Jan. 17
Feb. 20	Cement—Milwaukee, Wis.	Jan. 24
Feb. 20	Steel Bars—Milwaukee, Wis. Adv. Jan. 24.	Jan. 24
Feb. 25	Laundry—American Lake, Wash. Adv. Jan. 24.	Jan. 24
Mar. 1	Turbines—Florence, Ala. Adv. Jan. 17 and 24.	Jan. 17
Mar. 10	Stone—Humboldt Bay, Calif.	Jan. 24

UNCLASSIFIED

Bids Close		See Eng. News-Record
Jan. 25	Heating and Ventilating Apparatus—New York, N. Y.	Jan. 17
Jan. 28	Bulkhead—Bayonne, N. J.	Jan. 17
Jan. 28	Overhead Crossing—South Carolina	Jan. 24
Feb. 11	Transformers and Spares—Melbourne, Australia	Jan. 3
Feb. 14	Tower—New Orleans, La. Adv. Jan. 24.	Jan. 24
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIALS AND EQUIPMENT

Jan. 28	Lumber—Milwaukee, Wis.	Jan. 24
Jan. 28	Steam Roller—Long Island City, N. Y.	Jan. 24
Jan. 29	Cable Guard Rail, etc. — Trenton, N. J.	Jan. 17
Jan. 30	Crushed Stone, etc.—Baltimore, Md.	Jan. 24
Jan. 30	Asphaltic Cement, etc.—Long Island City, N. Y.	Jan. 24
Jan. 31	Concrete Mixer, etc.—Cape May, N. J. Adv. Jan. 24.	Jan. 24
Feb. 1	Crusher, Elevator, etc. — Oglesby, Ga.	Jan. 10
Feb. 4	Cletracs—Gilroy, Calif.	Jan. 17
Feb. 4	Shell—Houston, Tex.	Jan. 24
Feb. 5	Rock Asphalt—Pass Christian, Miss.	Jan. 24
Feb. 13	Pipe—Pierre, S. D.	Jan. 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

W. Va., Wheeling—Plans addition to filter plant incl. pump, addition to tank system, etc. $16,000. J. F. Laboon, city engr.

Fla., Auburndale — See "Streets and Roads."

Fla., Lake Alfred—Having plans and estimates made main, hydrants, 75 ft. tower and 60,000 gal. tank.

Tenn., Coal Creek—Voted $30,000 bonds for waterworks.

Ky., Clay—Plans water supply system. To exceed $15,000. A. E. Blackwell, city clk.

Ind., Peru—Water & Light Dept. plans addition to supply system. Work includes drilling 2 new wells. $15,000. B. F. Freeland, supt.

Ia., Carlisle—Defeated $35,000 bonds for waterworks system. New election later. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs. Noted Nov. 20.

Ia., Hazelton—Plans waterworks system. $20,000. Engineer not announced.

Kan., Brookville—Making plans waterworks system. $20,000. S. H. Sulentic, Ellsworth, engr. Noted Nov. 22.

Kan., Goff—Soon takes bids waterworks and distribution system, $24,000; sanitary sewers. $18,000. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, Mo., engrs. Noted Sept. 27.

Mo., Norborne — Defeated $95,000 bonds for water works plant, distribution mains and sewerage system. J. P. Davis, Jefferson City, engr. Noted Dec. 20.

Tex., Dallas—Having plans prepared extending mains to Southern Methodist University and Highland Park West, 16 in. mains and smaller. $50,000. E. A. Kingsley, city engr.

Tex., Lockhart—Citizens Light & Water Co., having plans prepared water and sewer mains, and street lights. $75,000. Private plans.

Tex., Ranger—Voted $190,000 bonds to purchase present system and build additional mains and new filter plant. Elrod Eng. Co., 4124 Elm St., Dallas, engrs. Noted Nov. 1.

Okla., Apperson—Preparing plans waterworks system incl. well, motor driven triplex pumps, elevated tank, etc., 31,000 ft. 4- to 8-in. c.i. pipe. $70,000. Engineer not selected.

Okla., Newkirk—Plans new mains and feeder lines, 15,000 ft. 8- and 10-in. c.i. pipe. $30,000. Musson & Gayle, Grain Exch. Bldg., Oklahoma City, engrs.

Okla., Okemah—City takes bids about Feb. 1, waterworks, incl. dam and main extensions. $65,000 bonds voted Holway Eng. Co., 505 Wright Bldg., Tulsa, engrs.

Waterworks (Continued)

Calif., Glendale—See Material and Equipment.

Calif., Pasadena—Taking bids furnishing and delivering water pipe required by city for 1924. To exceed $25,000. S. B. Morris, ch. engr.

Calif., Oroville—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, appropriated $50,000 for reservoir in hills east of Highland Park, here, in connection with water system.

Ont., North Bay—Voted $38,000 bonds extending waterworks, pumphouse and reservoir. F. G. Mackie, town engr.

BIDS DESIRED

N. Y., Long Island City—Jan. 30, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Hawtree Creek, Hasbrouck, Hutton and Meyer Rds., Lefferts Blvd., Ocean Ave., Gold, North, and Silver Sts., and across Bunton Canal between Hawtree Creek Rd. and Ocean Ave., here.

N. J., Beach-haven—Jan. 28, by A. P. King, boro clk., 400 ft. vitr. and 500 ft. c.i. pipe, 17 x 27 ft. brick pumping station, electric motor driven centrifugal pumping machinery in 2 horizontal water lift units with 1 wet vacuum priming pump, 1 horizontal air compressor with 1 vertical air receiver on venturi meter register, 2 vertical sewage lift units, etc. W. H. Boardman, 426 Walnut St., Phila., engr.

N. C., North Wilkesboro — Jan. 30, by Mayor, 1 m.g. purification plant. Carolina Eng. Co., Wilmington, engrs. Noted Nov. 15.

Ind., Bloomington—Feb. 19 (extended date), at office of Bloomington Water Co., waterworks improvements, incl. dam, pumping station and pipe lines. U. S. Hanna, secy.; adv. E. N.-R. Jan. 24. Noted Jan. 3.

Ind., Ft. Wayne—Feb. 5, by W. G. Riethmiller, secy. Bd. Pub. Wks., furnishing 15 tons ⅝-in., 10 tons ¾-in., 5 tons 1-in., 3 tons 1½-in. and 2 tons 2-in. lead pipe; 150 tons 16-in., 40 tons 12-in., 320 tons 6-in. and 30 tons 4-in. Class B c.i. pipe with fittings, also option to purchase 70 tons 12-in. and 130 tons 6-in. additional; two 16-in., two 12-in., fifty 16-in. and twenty-five 4-in. hub end water gates.

Mich., Detroit—Jan. 28, by G. J. Finn, comr. Purchases & Supplies Dept., 710 Marquette Bldg., furnishing 11,311 tons of 6 and 8 in. c.i. pipe. G. H. Fenkell, genl. mgr.

Wis., Madison—City c/o H. C. Buser, clk., taking bids furnishing and installing motor driven deep well pump together with all auxiliary devices for delivering not less than 1,200 gal. of water per minute against 80 lb. pressure at point of discharge. E. E. Parker, City Hall, engr.

Tex., Corsicana—Feb. 19, by J. Harper, city secy., concrete spillway and filter equipment. W. W. McClendon, city engr.; adv. E. N.-R. Jan. 24.

Calif., San Francisco — Feb. 20, by Bd. Pub. Pub. Wks. of City and Co. of San Francisco, flexible joint cast iron pipe, for submarine portions of Hetch Hetchy Aqueduct, (Hetch Hetchy Water Supply Contr. 90). M. M. O'Shaughnessy, city engr.; adv. E. N.-R. Jan. 24.

Ont., Goderich—Feb. 8, by W. T. Murney, chn. com., new intake pipe, 2,400 ft. c.i. pipe, 1,300 ft. steel intake pipe, intake well and crib $75,000. E. H. Darling, 47 Home Bank Bldg., Hamilton, engr.

BIDS RECEIVED

O., Cincinnati—Furnishing all 4, 6, 8 and 10 in. c.i. pipe to be laid during 1924, also special castings, from U. S. Cast Iron Pipe & Fdry. Co., Addyston, $55,000. Noted Jan. 17.

Wis., Milwaukee — Furnishing brass goods, from H. Mueller Mfg. Co., 434 West Cerro Gordo St., Decatur, Ill., one thousand ⅝ in. corporation cocks $0.67 each, 1,500 ¾ in. $0.86, 1,000 ¾ in. curb cocks $0.71, 1,400 1 in. $1.03, 2,500 ⅝ in. meter cocks $0.57, 2,500 ¾ in. $0.72, 5,000 ⅝ in. meter couplings $0.15, 5,000 ¾ in. $0.23; from Michigan Valve & Fdry. Co., 3631 Parkinson St., Detroit, Mich., 100 more or less fire hydrants $82.50. Noted Jan. 10.

Calif., Sacramento—H. G. Denton, clk., furnishing and delivering 58,000 lin.ft. c.i. pipe from R. W. Kinney Co., 645 Howard St., San Francisco, 2,000 ft. 12 in. $2.20, 1,000 ft. 10 in. $1.70, 5,000 ft. 8 in. $1.235, 15,000 ft. 6 in. $0.855, for delivery as soon as possible; 10,000 ft. 6 in. $0.855, 2,000 ft. 8 in. $1.235, for delivery about June 1; 10,000 ft. 6 in. $0.855, 3,000 ft. 8 in. $1.235, about Sept. 1; 2,000 ft. 12 in. $2.20, 2,000 ft. 10 in. $1.70, 5,000 ft. 6 in. $0.855, about Dec. 1. All bids f.o.b. steamer landing, Sacramento. Noted Dec. 27.

CONTRACTS AWARDED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bedford, Livonia and Morgan Aves., here, to Grippo Contg. Co., $19,991. Noted Jan. 3.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Oak Point Ave., etc., to Beaver Eng. & Contg. Co., 51 Chambers St., $9,993; Brinsmade Ave., etc., to C. De-Blasio, 339 7th Ave., Mt. Vernon, $10,600. Noted Dec. 27.

Pa., North East—Boro Council, rapid sand filtration plant, 1,200,000 gal. per day capacity, to G. Offenbacher, North East, equipment to International Filter Co., 333 West 25th Pl., Chicago, Ill., total bid $29,500; earth embankment dam of 17,500 cu.yd., for impounding reservoir, to W. H. Supplee, Erie, $18,850. Noted Dec. 27.

N. C., Laurinburg — Pumping station, filtering plant, reservoir, auxiliary station, laying pipe line, furnishing pumps, etc., to Tucker & Laxton, Realty Bldg., Charlotte, $100,000. Noted Nov. 22.

O., Cincinnati—For approximately 10,000 ft. 10 and 16 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry., Addyston, $94,166. Noted Jan. 10.

Ill., River Grove—Laying several miles 4- and 6-in. mains, to J. M. Donahue, Stevens Point, Wis., $160,568.

Wis., Athens — C. J. Hamilton, village clk., drilling deep well for additional water supply, to S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, Minn., $15,000 Noted Nov. 29.

Wis., De Pere — Reaming, casting and shooting 3 wells for water supply, to W. L. Thorne Co., Des Plaines, Ill. Engrs. est. $15,000. Noted Nov. 29.

Kan., Waterville—Additional c.i. pipe distribution lines, motor driven deep well centrifugal pump, etc., to Reed & Wheelock, Clay Center. Noted Nov. 15.

S. D., Milbank—Furnishing and laying 47,600 lin.ft. 8 and 10 in. c.i. mains, to Phelps-Drake Co., 623 Metropolitan Life Bldg., Minneapolis, Minn., $94,018; repairing elevated steel tank, to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, Ill., $2,275. Noted Jan. 10.

Mo., Chillicothe—Bd. Pub. Wks., storage reservoir and spray pond for water and light plant; 5,600 cu.yd. earth excav. to J. N. Wilhide, Chillicothe, $2,800; 28,500 sq.ft. 4 in. and 125 cu.yd. of other concrete to Pratt-Thompson Constr. Co., 500 Republic Bldg., Kansas City, $13,598. Noted Jan. 3.

Tex., San Benito—Rio Grande Valley Electric & Ice Co. will build pumping plant, additional mains and 40 x 60 ft. pump house, by day labor. Trench digging underway. $30,000. Under supervision H. Clark, c/o owner.

Calif., Glendale—City, 15 m.g. reservoir, to Kinne & Westerhouse, I. W. Hellman Bldg., Los Angeles, $78,650, for excavation, $61,650 lining and excavation, and $16,540 for roofing. Noted Jan. 10.

Calif., San Francisco—Bd. Public Wks., electric transmission line insulators for Hetch Hetchy power and water supply, to Westinghouse Electric & Mfg. Co., Union Bank Bldg., Pittsburgh, Pa., $90,000. Noted Dec. 6.

Sewers

PROPOSED WORK

N. Y., Youngstown — Plans election to vote on $75,000 bonds disposal plant. Will mature in spring. Hopkins Eng. Co., Cutler Bldg., Rochester, engrs.

Ala., Birmingham—Jefferson Co. plans to spend approximately $1,000,000 during next 2 years for sanitary sewers and is having surveys made by J. H. Slater, co. sanitary engr., 7 mi. Shades-Cahaba trunk from Country Club to Oxmoor, $550,000; 4 mi. Possum Valley trunk, $300,000; plant at outlet of Shades Cahaba trunk, $90,000; Inglenook trunk joining Boyles system, $30,000.

Ala., Birmingham—Soon takes bids supplementary sewerage system in down town district, 8- to 30-in. mains. $275,000. A. J. Hawkins, City Hall, engr.

Mich., Detroit—Plans prepared for lateral sewers of vitr. crock and 2 ring brick, 5,652 ft. 33 and 36 in. 2 ring brick in Lateral 3981, 1,125 ft. 10- to 18-in. crock in Lateral 4063, 498 ft. 12- to 15-in. crock in Lateral 4070, 1,558 ft. 3 ft. 6 in. 2 ring brick in Lateral 4071, 865 ft. 12- to 18-in. crock in Lateral 4073, 890 ft. 12- to 15-in. crock in Lateral 4074. C. Jerome, city engr.

Ill., Elgin—Bd. Trustees Elgin Sanitary Dist. will call election Jan. 26 to vote on $700,000 bond issue for sewage disposal plant, etc.

Kan., Goff—See "Waterworks."

Neb., Fremont — Voted $100,000 bonds for sewage disposal plant. L. M. Roessler, city engr. Noted Jan. 10.

Mo., Norborne—See "Waterworks."

Tex., Lockhart—See "Waterworks."

Okla., Apperson—Having surveys made 5 mi. sewerage system and disposal plant, Imhoff tank. $30,000. Engineer not selected.

Calif., Glendale—Voted $1,600,000 bonds for outfall sewer and intercepting mains. Bids will be received about Mar. 15. Burns & McDonnell Eng. Co., 415 Marsh-Strong Bldg., Los Angeles, consult. engrs. Noted Dec. 6.

Calif., Tulare—See "Streets and Roads."

Ont., Windsor — Having plans prepared and takes bids about March 1, extending sewers. $235,000. M. E. Brian, city engr.

BIDS DESIRED

N. Y., New York—Jan. 30, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Melville St. and Van Nest Aves.; in sewer easement between Sedgwick and Claflin Aves. about 450 ft. north of West 197th St., Claflin Ave. between West 197th St. and point about 125 ft. north of sewer easement, Webb Ave. between sewer easement and West 197th St.

N. J., Trenton—Feb. 1, 2,530 ft. 27, 30, 36 and 48 in. drain in Heil Ave. $26,000. A. C. Gregory, City Hall, engr.

D. C., Wash.—Jan. 28, by Washington Suburban Sanitary Comn., Evans Bldg., New York Ave., c.i. and terra cotta pipe, Contrs. 39-W, 40-W, and 41-S. R. B. Morse, Hyattsville, Md., ch. engr. of Dist.; adv. E. N.-R. Jan. 24.

Ind., LaPorte—Jan. 30, by E. Gildersleeve, constr. comr. of Edward W. Kablein et al. drain, mains drain contains 1,600 ft. 72-in. tunnel, 8,512 ft. 30- to 42-in. sectional or circular tile, 20,824 cu.yd. excav.; lateral contains 128 ft. 30-in. segment block or equal, 2,672 ft. 18-in. vitr. shale sewer pipe, 1,886 ft. 12-in. and 2,164 ft. 10-in. common drain tile, 5,134 cu.yd. excav. $95,000. B. P. Thomas, Masonic Temple, city engr.

Ind., Muncie—Jan. 29, by M. Anderson, clk. Bd. Pub. Wks., 212 Wysor Blk., sewers in Hackley St., and alley between Willard and 5th Sts. $25,000. Bd. Pub. Wks., engr.

Minn., St. Paul—Jan. 29, by H. W. Austin, city purch. agt., constructing sewer in West 7th St. from Palmer St. to Albion Ave., 788 lin.ft. 4-ft. and 75 lin.-ft. 36-in. sewer, 1,364 ft. 15- to 21-in. vitr. sewer pipe, etc. Former bids rejected. G. H. Shepard, city engr., Noted Jan. 17.

Mo., University (St. Louis P. O.)—Feb. 12, 1,603 ft. 10- to 36-in. vitr. clay and 872 ft. 51 and 54 in. segmental block sewer in Colby Ave., etc., $25,808; 3,161 ft. 12 to 36-in. vitr. clay sewer in River Des Peres Sewers Sect. A-2, $33,357; 575 ft. 42 in. segmental block and 2,650 ft. 12- to 36-in. vitr. clay sewer in North Pennsylvania St., $25,642; 1,150 ft. 12 in. vitr. clay sewer in Dist. Sewer 39, $2,704; 4,475 ft. 10- to 24-in. vitr. clay sewer in Dist. Sewer 26, $12,194; 787 ft. 10 and 12 in. vitr. clay sewer in Dist. Sewer 29, $1,963. W. A. Heimbuecher, city engr.

Tex., Big Springs—Feb. 12, by City Comn., disposal plant and 50,000 ft. 6- to 12-in. mains. Montgomery & Ward, City Natl. Bank, Wichita Falls, engrs.

BIDS RECEIVED

Md., Baltimore—City Register, 400,000 lb. manhole, sewer inlet and similar castings, from Amer. Brake Shoe Fdry. Co., Fulton Station, $0.335 per lb. Noted Jan. 10.

Mich., Detroit—Dept. Pub. Wks., Lateral sewer between Livernois, Belven, Santa Clara Aves. and Six Mile Rd., from Liberty Constr. Co., 1026 Detroit Savings Bank Bldg., $21,700; Lateral between Greenlawn, Prairie, Margaretta Aves. and Seven mile Rd., from S. Healy, 400 Penobscot Bldg., $25,200; Lateral between Crawford, Artillery, Lafayette and Regular Aves., from A. Arcari, 425 Puritan Ave., Highland

Sewers (Continued)

Park, $6,500; Lateral betweer Livernois, Petoskey, Puritan and Florence Aves., from Western Constr. Co., 1208 Ford Bldg., $2,696.

Calif., Orange—For 2 sections outfall sewer (a) concrete (b) vitr. pipe, from C. E. Green, Western Mutual Bldg., Los Angeles, Sect. 1 (a) $41,982, Sect. 2 (a) $19,944 (b) $23,172; M. Culjak, 182½ North Brannak St., Los Angeles, Sect. 1 (b) $49,216. Noted Jan. 10.

CONTRACTS AWARDED

Massachusetts—Metropolitan Dist. Comn. of Commonwealth of Massachusetts, 1 Ashburton Pl., Boston, 3,476 ft. 20- and 30-in. earthern pipe sewer, to A. Cefalo, Belgrave Ave., Roslindale (Boston P. O.), $59,608. Noted Dec. 20.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, sewers in Narrows Ave., to C. F. Vacharas, 645 40th St., 108% engrs. est. ($800); Forbell Ave., to Fenlon Contg. Co., 99% ($700); 24th Ave. and East 36th St., to B. Peconi & Sons, 73% ($37.586) and 90% ($2,245) respectively; Miller Ave., 70th and East 31st Sts., to R. Iobino, 91% ($400), 88% ($400) and 92% ($400) respectively. Noted Jan. 17.

Tenn., McKenzie—General contract sewerage system, to Sherman Machine & Iron Wks., 18-32 East Main St., Oklahoma City, Okla., $59,200. Noted Dec. 27.

O., Mariemont—Mariemont Company, 3,000 ft. 18 and 20 in. vitr. pipe, connection to Cincinnati sewerage system, also small tunnel under tracks of Norfolk & Western R.R., etc., to Cannel-Conrad Constr. Co., Madison Rd., Cincinnati, $34,717. Engrs. est. $40,000.

Mo., Carrollton—For 34,000 ft. 8- to 21-in. vitr. sewers, etc., to T. M. Walsh, 2953 Victor St., Kansas City, $37,608. Noted Dec. 27.

Bridges

PROPOSED WORK

Conn., Middletown—New York, New Haven & Hartford R.R., New Haven, City of Middletown, and State Highway Dept., Hartford, will finance construction of steel girder bridge to eliminate crossing at Bridge St. Work involves 35,000 cu.yd. rein.-con., 1,000 ft. 16 ft. fill. Owners pay $150.000, $50,000, and $100,000 respectively.

New York—Bd. Estimate, Municipal Bldg., New York City, had plans prepared 1,800 ft. steel and concrete bridge, 118 ft., over East River, from 1st Ave. and 8th St., New York City to North 5th St. and Metropolitan Ave., Brooklyn. $41,820,000. Noted Jan. 4, 1923.

N. Y., Cohoes—Making surveys removing steel bridge on Columbia and Bedford Sts., and constructing new span from Columbia and Bedford Sts. to White St. $90,000. A. Thompson, city engr.

Fla., Arcadia—DeSoto Co., election Feb. 2, to vote on $25,000 bonds for bridge over Peace River.

Fla., Sarasota—See "Streets and Roads."

O., Columbus—City, Cleveland, Cincinnati, Chicago & St. Louis R.R., La Salle St., Chicago, Pennsylvania R.R., Penn. Sta., Pittsburgh and Union Depot Co., having plans prepared remodeling and rebuilding Union Sta. viaduct over High St. $150,000. R. R. Chaney, asst. engr. under direction of R. H. Simpson, city engr., preparing plans.

Ind., Goshen—State Hy. Dept., Indianapolis plans bridge over Elkhart River on Hoosier-Dixie Highway, 4 mi. south of here, to replace one which collapsed. $50,000. B. C. O'Brien, Goshen, state supt. of highways.

Tex., Ft. Bend—See "Bids Received."

Tex., Madisonville—Madison and Houston Counties plan bridge across Trinity River. $150,000. C. R. Haile, Chamber of Commerce Bldg., Houston, div. highway engr.

Calif., Eureka—Humboldt Co. had plans prepared concrete arch bridge over Van Dusen River, 755 ft. long, 22 ft. wide, 3 arches, 2 approaches, supported on 2 piers and 2 abutments. J. B. Leonard, 57 Post St., San Francisco, consult. engr.

Calif., Santa Ana—Orange Co. plans bridge over Santa Ana River, probably trestle construction, 60 ft. movable span in center, also bridge over channel of Newport Bay, probably rein.-con. Each to exceed $30,000. J. L. McBride, co. rd. comr.

Alaska—See "Contracts Awarded."

BIDS DESIRED

Minn., St. Paul—Mar. 3, by Comrs. Ramsey Co., bridge on Robert St. G. J. Ries, aud.; adv. E. N.-R. Jan. 24. Noted Dec. 6.

Pa., Phila.—Jan. 28, at Engineer Office Philadelphia & Reading R.R. Co., Reading Terminal, 324 ft. rein.-con. and steel trestle, 30 ft. average width, at Pier 18, Richmond St. Private plans.

South Carolina—Jan. 28, by State Highway Engineer, 1626 Main St., Columbia, approaches to overhead crossing of Seaboard R.R. near Dixiana, 39,280 cu.yd. common excav., 641 cu.yd. sand clay surfacing etc.

S. C., Saluda—See "Streets and Roads."

Georgia—Feb. 1, by State Hy. Dept., East Point, bridge over Big Indian Creek on Perry-Hawkinsville Rd., Federal Aid Project 380, for Houston Co., 402 cu.yd. excav., 506.13 cu.yd. concrete, 7,298 lb. reinforcing steel, etc.; 3 creosoted timber bridges on Appling-Lincolnton Rd., Federal Aid Project 350, for Columbia Co., $23,456 ft. treated timber, 20,480 ft. untreated timber, 1,628 lin.ft. treated piles, 24 cu.yd. concrete; removing old bridge and constructing bridge on Valdosta-Adel Rd., Federal Aid Project 357, for Lowndes Co., 90.47 cu.yd. concrete, 11,431 lb. reinforcing steel, etc. W. R. Neel, East Point, engr. H. L. Furlow, Tifton, engr. in latter project.

Tennessee—Feb. 8, by Tennessee Dept. Hys. & Pub. Wks., Nashville, overhead crossing Southern R.R. near Knoxville, Federal Aid Project 41, Sect. C, Knox Co., rein.-con. pier and slabs; 14 rein.-con. bridges, concrete abutments, each over 20 span, timber pilings, Federal Aid Project 100, Haywood Co.; reconstructing old bridge over Clinch River, 508 ft., one 220 ft. and two 144 ft. spans, new floors, timber and steel work, etc., State Aid Project 152, Anderson Co.; 60 ft. concrete bridge over McBrides Branch, State Aid Project 151, Coffee Co. J. G. Creveling, comr.

Tennessee—Feb. 8, by Dept. Hys. & Pub. Wks., Nashville, 114 ft. steel span and 18 wooden spans, concrete and wood substructure, over Roaring River, in Jackson Co. About $60,000. J. G. Creveling, comr. Noted Nov. 8.

Minn., Mendota—Feb. 14, by A. P. Erickson, aud. Hennepin Co. (Minneapolis), 4,055 ft. bridge over Minnesota River, here, alternate bids on rein.-con. arch, $1,570,000, and concrete pier, steel deck trusses and concrete deck, $1,400,000. W. H. Wheeler, 1112 Metropolitan Life Bldg., Minneapolis, and C. A. P. Turner, 627 1st Ave. N., Minneapolis, engrs. Noted Nov. 29.

Minn., Duluth—Feb. 5, by W. H. Borgen, aud. St. Louis Co., Bridge C.-2-26-1 on Shagawa Lake Rd., 75-ft. truss with standard abutments, 18 ft., $6,000; Bridge M. Y-M-6-26-1 on Pike River Rd., 165 ft. truss, $10,000; Bridge D. T-5-16-1, 250 ft. long, incl. 18,500 ft. lumber, 68,940 lb. structural and 13,340 lb. reinforcing steel, etc., $12,000; Bridge L. 1-28-1, 60 ft. truss, $5,000. R. W. Acton, co. engr.

Missouri—Jan. 29, by State Hy. Dept., Jefferson City, bridges over Eleven Points River, and over Middle Fork River, Oregon Co.; over Grand River and overflow of Grand River, Livingston Co.; over Current River on Stations 1636 plus 44 and 1634 plus 65; Shannon Co.; on Sta. 385 plus 40, Jasper Co.; over tracks of St. Louis & San Francisco R.R., Phelps Co.; over tracks of Chicago & Alton R.R., Jackson Co. B. H. Piepmeier, state highway engr. Noted Dec. 27 and Jan. 10.

Ont., Pembroke—Jan. 25, by Town Council, furnishing structural steel for bridge over Muskrat River on St. Marys St. Total cost. $375,000.

BIDS RECEIVED

La., New Orleans—Bd. Port Comrs., Suite 200, New Court Bldg., furnishing 213 tons steel for bridges, approaches, span and machinery house, (constituting part of Canal St., ferry landing) from Bethlehem Fabricating Co., Bethlehem, Pa., $25,342 (90 days); furnishing machinery for operating bridge at Canal St., from Earle Gear & Mchy. Corp., 4707 Stenton Ave., Phila., Pa., (a) $15,000, (b) $15 per day (120 days). Noted Jan. 3.

Tex., Ft. Bend—Richmond Co., bridge across Brazos River from J. De Puy, Bedell Bldg., San Antonio, and Austin Bridge Co., 1813 Clarence St., Dallas. Plans are to be revised to reduce cost to about $265,000, undecided whether contracts will then be given to low bidders or new bids called for. C. H. Kendall, Sugarland, engr. Noted Oct. 4.

Tex., Robert Lee—Coke Co. [illegible]7 ft. bridge over Oak Creek, one 70 ft. steel span, concrete approaches on concrete piers, from Hannah Constr. Co., Box 994, Waco, $20,035. Engrs. est. $25,000. Noted Dec. 27.

California—State Hy. Comn., Sacramento, Jan. 14, 240 ft. bridge with three 50 ft. and two 30 ft. concrete girders, over San Lorenzo Creek, Monterey Co., from Rocca & Caletti, 920 Mission Rd., San Rafael, $26,415. Noted Jan. 3.

CONTRACTS AWARDED

Vermont—Dept. Highways, Montpelier, 68 ft. span, low Warren truss bridge, concrete abutments, gravel surface approaches, in Bloomfield, and 40 ft. span, T-beam concrete bridge with gravel surfaced approaches, Federal Project 44, in Ferdinand, to E. D. Young, Colebrook, N. H., $14,967 and $10,597 respectively. Noted Oct. 18.

N. C., Spray—Rockingham Co. (Wentworth) 2 way rein.-con. bridge over Dam River, near here, to Luten Bridge Co., 405 East 4th Ave., Knoxville, Tenn., $40,000.

Florida—State Hy. Dept., Tallahassee, bridge between Pensacola and Milton, incl. 1,676 671 cu.yd. embankment, 932 ft. treated trestle structural timber, 52,000 lin.ft. treated trestle and 32,000 lin. ft. treated bulkhead piling, 542, ft. of 2 x 10 in. treated sheathing, to Hardaway Contg. Co., Columbus, Ga., $513,248. Noted Nov. 15.

Fla., New Smyrna—Volusia Co., Deland, steel draw bridge, swing type over Indian River, 60 ft. clear openings, 45,000 cu.yd. earth embankment, 400 cu.yd. concrete, to Austin Bros. Bridge Co., Mickleberry St., Atlanta, Ga., $54,700; creosoted timber bridge over Callalera Creek, to W. T. Hadlow, Baldwin Bldg., Jacksonville, $10,350. Noted Dec. 27.

Alabama—See "Streets and Roads."

Oregon—State Hy. Dept., Salem, 1,200 ft. trestle bridge on Roosevelt Highway between Coquille and Bandon, Coos Co., to Hillstrom Bros., Marshfield, $25,000.

Wash., Seattle—Bd. Pub. Wks., West Spokane St. viaduct, to H. Pederson, Alaska Bldg., $154,536. Noted Jan. 17.

California—State Hy. Comn., Sacramento, constructing 6 rein.-con. girder bridges and approaches across Mill Race, Salt Creek, Craig Creek, Salt Creek Overflow, Butler Slough and New Creek in Tehama Co., to McKenzie & Pollard, Gerber, (frame bents) $48,646.

Alaska—Alaskan Eng. Comn., Seattle, Wash., furnishing 240 tons structural steel for bridge over Placer River, to Independent Bridge Co., May Bldg., Pittsburgh, Pa., $23,760.

Dams

BIDS DESIRED

Tex., Wolf City—Taking bids digging dam for storage purposes, 40,000 yd. earth to be removed. $50,000. Address Mayor.

Railways

PROPOSED WORK

Ohio—Cleveland Ry. Co., Hanna Bldg., Cleveland, plans crosstown car line in Lakewood. $50,000. Address E. F. Weagan, mayor of Lakewood.

Arkansas—See "Industrial Works" under Bethesda.

Texas—E. P. Turner, Gaston Bldg., Dallas, plans to resume construction at once 15 mi. line, Dallas-Irving Interurban, will let new contract or do work by day labor. $200,000. Former contractor quit job when money ran out.

Texas—San Antonio Southern Ry. Co., Calcasieu Bldg., San Antonio, plans extension from Callihan to Hebronville, construction will not start until extension from Christine to Callihan, now under way, is completed. Work includes grading right of way, laying steel, etc. $80,000. H. R. Briscoe, genl. mgr.

Oklahoma—Oklahoma Union Ry. Co., 103 West 4th St., Tulsa, completing plans 130 mi. track between Keifer to West Tulsa, incl. passenger and freight depots, switches, storage yards, shops, etc. $3,500,000. W. Matthews, ch. engr.

California—Oakland Terminal Rys. Co., 22nd and Grove Sts., Oakland, plans to double track Park St. between Santa Clara and San Jose Aves., at Alameda. $40,000.

Railways (Continued)

California—Atchison, Topeka & Sante Fe R.R. Co. Kerckhoff Bldg., Los Angeles, completed specifications, 40 mi. double tracks between Hicks near Barstow and Summit. R. B. Ball, ch. engr. coast lines.

BIDS DESIRED

Indiana—Apr. 1, by New York, Chicago & St. Louis R.R., Columbia Bldg., Cleveland, O., double tracking road between Claypool and Knox, 40 mi. standard guage. E. E. Hart, ch. engr.

Texas—Jan. 31, by H. L. Washburn, aud. Harris Co. Navigation Dist., Court House, reconstructing Ave. O line of Public Belt R.R. on south side Turning Basin. $50,000. S. E. A. Tucker, Court House, engr.

Texas—Southern Pacific R.R., Southern Pacific Bldg., Houston, taking bids 9 mi. trackage from Southern Pacific Belt Line Union Terminal to Metzger and Texas & Pacific R.R. $600,000. G. H. Lawrence. Union Terminal, Dallas, engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

New York—J. A. Delaney, comr. Docks, Pier A foot of Battery Pl., New York City, rejected bids Jan. 14, dredging channel, constructing dikes, etc., Queens Boro, Contr. 1818. Noted Jan. 17.

O., Cleveland—Plans to develop lake front section into harbor, will expend $1,500,000 for cutting down lake front to 8 or 10 ft. above water level, same now as high as 38 ft. in some places. W. S. Ferguson, dir. Pub. Serv.

Ark., Lake Village—Chicot Co. D.D., c/o J. Sloss, Lake Village, takes bids in February, 12,000,000 cu.yd. drainage canals and levee work. $1,400,000. Ayers & Miller, McCall Bldg., Memphis, Tenn., engrs.

Wash., Grand Dalles—North Dalles Irrigation Dist. plans election to vote on $425,000 bonds for irrigating 5,000 acres, etc. L. A. Duncan, The Dalles, Ore., pres. W. J. Roberts, 616 Puget Sound Bank Bldg., Tacoma, engr. Noted Dec. 27.

Ore., Prineville—Powell Butte Irrigation Dist. applied for 200 cu.ft. water from Deschutes River, to irrigate 130,000 acres $800,000.

BIDS DESIRED

N. Y., New York—Jan. 25, by Superintendent Bd. Educ., 500 Park Ave., excavating and removing earth and rock from property adjoining P. S. 30, East 141st St. $40,000.

N. C., Morehead City—Feb. 15, by North Carolina Fisheries Comn. Bd., at their office here, dredging and other construction required for re-opening New Inlet about 6 mi. north of Rodanthe, Dare Co. B. S. Drane, 710-711 Commercial Bldg., Charlotte, engr.; adv. E. N.-R. Jan. 24.

Fla., Tampa—Feb. 18, by Interstate Investment Co., removing about 130,000 yd. sand, clay and rock in Tampa Harbor; adv. E. N.-R., Jan. 24.

BIDS RECEIVED

N. Y., Rochester—R. K. Fuller, comr. Canals & Waterways, Albany, Jan. 17, completing excavation of canal channel in Genesee River and placing rock spoil protection along river banks, here, Contr. 214, from James Stewart Co., 30 Church St., New York City, $85,000. Noted Dec. 20.

Calif., Long Beach—City, excavating 1,720,000 yd. in Channel 2, from F. C. Franks, Amer. Natl. Bank Bldg., San Francisco, $0.1385 per yd.; 1,668,000 yd. in Turning Basin, from United Dredging Co., 414 13th St., Oakland, $0.1469 per yd.; 916,000 yd. in Channel 3 and 1,174,000 yd. connecting channel, from San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, $0.154 and $0.168 per yd. respectively.

CONTRACTS AWARDED

N. J., Cape May—Bd. Commerce & Navigation, State House, Trenton, redredging 11,000 ft. inland waterway in Grassey Sound Channel, Richardsons Channel and Suaires Channel, Cape May Co., to Hill Dredging Co., Atlantic Ave., Atlantic City, $0.60 per cu.ft. Noted Jan. 3.

Miss., Senatobia—Tate—Panola D. D. 1, 309,400 cu.yd. in main canal, 90,000 cu.yd. in Protee Canal and 22,000 cu.yd. old ditch enlargement, to A. V. Wills & Sons, Title Guarantee Bldg., St. Louis, Mo., $0.132 per cu.yd. Noted Dec. 27.

Streets and Roads

PROPOSED WORK

New Jersey—State Hy. Dept., Trenton, plans concrete paving 3 mi. Route 9. Sect. 14, from Somerset-Hunterdon Co. line to North Branch, Hunterdon Co. W. G. Sloan, highway engr.

N. C., Morganton—Feb. 11, to vote on $150,000 bonds improvements Avery, Green, Sterling, Burkemont and Valdese Sts.

N. C., Wadesboro — Plans paving various streets. $40,000.

Fla., Arcadia—DeSoto Co. election Feb. 2 to vote on $25,000 bonds, Rd. 2 and Carlston Field Rd.; $40,000, Nocatee to Thomas Spur and Charlotte Co.; $50,000, Peace River Swamp and surface No. 1 of Special Rd. and Bridge Dist. 2 to Manatee; $60,000 Door Field to Highlands Co. L. A. Durrance, clk. Noted Dec. 27.

Fla., Auburndale — City voted $310,000 bonds for paving streets and extending waterworks.

Fla., Sarasota—J. Ringling and associates plan causeway across Sarasota Bay, 2 mi. long, from foot of Pineapple Ave., draw and high span. $1,000,000. Engineer not announced.

Fla., Umatilla—Voted $45,000 bonds for street improvements.

Fla., Winter Park—Plans paving, 16 ft. wide, Mizel and Phelps Sts., section of Palmer, Rollins Kentucky, French and Lakeview Sts., $35,518; paving with vitr. brick or equivelent, 16, 18 and 24 ft. wide, Palmer and New England Sts., also section Boulevard, $39,750, 16 and 20 ft. wide, Indiana, New England, Henkle Sts., etc., $25,083, 20 ft. wide, Canton St., Palmer and Georgia Aves., $25,972, 16 and 20 ft., Alabama Dr., West Park and Lyman St., $25,432, 20 ft. wide, Fairbanks, Comstock and Lyman Sts., $28,222, 18 ft. Chase Ave., Kentucky, Chapman and Comstock Sts., $26,864. E. F. Bellows, city clk. Noted Sept. 6.

Miss., Greenwood—Takes bids in spring, grading, surfacing with brick on concrete, concrete curbs and gutters, on 15,000 ft. 1st Alley, Church, Washington, Cotton, Henderson, Mississippi, Leflore, 4th, George, Front and Walthall Sts. $150,000. W. S. Hawkins, City Hall, engr.

Tennessee—Dept. Hys. & Pub. Wks., Nashville, having surveys made roads, bridges, etc., on road from Waynesboro to Hardin Co. line, 16 ft. J. G. Creveling, comr. Noted Dec. 27.

Tenn., Selmer—McNairy Co. voted $200,000 bonds for roads will be built under supervision of State Hy. Dept., J. G. Creveling, comr.

Kentucky—State Hy. Dept., Frankfort, plans constructing and surfacing 11.9 mi. Frenchburg-Mt. Sterling Rd., 18 ft., State Project 32, Montgomery Co. J. S. Boggs, state highway engr.

Ky., Clay—Plans asphalt paving Main and Elm Sts. $50,000. A. E. Blackwell, city clk.

O., Akron—Plans widening ½ mi. Bowery St. from 66 to 99 ft., asphalt. $75,000. E. A. Kemmler, Delaware Bldg., engr.

O., Canton — Plans relaying curb and asphalt paving ¼ mi. 3rd St. N.W., 60 ft. $30,000. W. E. Sarver, City Hall, engr.

O., Cincinnati—Plans paving Plum and 5th Sts., Hamilton Ave. from Chase to Bruce Aves. and from Hoffner St. to Chase Ave. $235,773. F. Krug, City Hall, engr.

O., Columbus—Had preliminary estimates made removing parkways and grass plots, and asphalt paving 3,500 ft. East Broad St., 46 ft. $114,600. R. H. Simpson, city engr.

O., East Liverpool—Plans improving and widening (20 ft.) ¼ mi. West 4th St., 50 ft. $25,000-$30,000. J. A. George, East Liverpool, engr.

O., Warren—Trumbull Co. plans improving ¾ mi. Warren-Lordstown Rd., 20 ft. $75,000.

O., Wooster—Making plans approximately 115,000 sq.yd. paving during 1924. C. L. Orr, City Hall, engr.

Ind., Ft. Wayne—Dept. Pub. Wks. plans paving 20 alleys also Pauline St. To exceed $100,000.

Ind., South Bend—St. Joseph Co. plans concrete paving Nasturtium Rd., 20 ft. wide with 3 ft. berm of gravel. $50,000. Engineer not selected.

Mich., Detroit—Having plans prepared paving 1,500 sq.yd. Boston Blvd. $8,610 and 1,100 sq.yd. Grove Ave. $6,110, 3½ in. sheet asphalt on 8 in. concrete; also one course 6 in. concrete in 12 alleys $41,880. G. Jerome, city engr.

Ill., Dundee—Kane Co. (Geneva) having preliminary plans made grading and concrete paving $4,500 ft. Higgins Extension Rd., 18 ft., near here. $40,000. I. F. Stern, 38 South Dearborn St., Chicago, engr.

Ill., East St. Louis—Soon takes bids grading, paving and curbing 2,400 ft. streets, 30 ft. average width, in Winstanley and Lansdowne Dists. $250,000. W. McK. Brown, City Hall, engr.

Ill., Peoria—Takes bids in spring grading and paving with brick, concrete, etc., 10,000 ft. various streets. $100,000. L. Jeffries, City Hall, engr.

Wis., Fond du Lac—Making plans paving Oak Ave., 4th, Bank, South Bell and Bannister Sts., bids on rein.-con., sheet asphalt, asphaltic-concrete and vibrolithic concrete. G. H. Stanchfield, City Hall, engr.

Wis., Horicon — Plans concrete paving Finch St. and Mayville Rd., 30 ft. $25,000. E. H. Higbee, city clk. Engineer not selected.

Wis., Stoughton—Having plans prepared concrete paving 12,000 sq.yd. and concrete curbing and guttering Main St. $25,000. T. Pankow, Washington Bldg., Madison, engr.

Ia., Arnold Park—Preparing plans grading, paving and curbing 12 blocks $40,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Ia., Marion—Linn Co. election soon to vote on $800,000 bond issue paving 6 mi. Lincoln Highway, and gravel surfacing 150 mi. Primary and Secondary Rds. F. W. Gearhart, co. engr.

Ia., Sioux City—Plans repaving 1 mi. 4th St. and 10 blocks West 17th St. $60,000. L. M. Hintgin, city engr.

Kan., Mound City—Linn Co. completing plans grading 20.5 mi. road, Kansas City Eng. Co., 1233 Western St., Topeka, engrs.

South Dakota—State Hy. Dept., Pierre, plans grading, etc. 33 mi. Federal Aid Project 172, Edmunds Co. F. D. Hudgins, ch. engr.

S. D., Sioux Falls—Plans to pave 44 blocks. $145,000. W. C. Leyse, city aud.

N. D., Devils Lake—Ramsey Co. plans grading road from here to Starkweather, graveling 13 mi. west on Edmore-Starkweather Rd., and 6 mi. Edmore Rd. from point 9 mi. west of Edmore, and 12 mi. new road east of Edmore. $60,000. J. A. Kramer, aud.

Missouri—State Hy. Dept., Jefferson City, plans grading 5 mi. State Project Route 12, Sect. 39, 30 ft., Osage Co. B. H. Piepmeier, state highway engr.

Mo., Hannibal—Plans grading, concrete curbing, guttering and rein.-con. paving 2,700 ft., North, 6th, 7th, 8th, 9th, 11th, and Hubbard Sts., 36 ft. average. $29,211. W. R. Gettler, City Hall, engr.

Ark., Pine Bluff—Takes bids early in February grading, 3,300 sq.yd. concrete or asphalt paving, and 2,200 lin.ft. concrete curb and gutter in Jefferson Co. Rd. and Street Impvt. 1. F. Bennett, Citizens Bank Bldg., engr.

Ark., Pine Bluff—Soon takes bids grading, paving with concrete or asphaltic 7,200 sq.yd. in Street Impvt. Dist. 75. F. Bennett, Citizens Bank Bldg., engr.

Tex., Canyon—Plans paving 6 blocks 5th Ave., probably brick. $25,000. C. N. Harrison, mayor.

Tex., Corpus Christi—Nueces Co. having plans prepared improving 5.23 mi. highway from Robstown to Robb, 18 ft., macadam base with 1 in. bituminous topping. $105,000. C. E. Cocke, co. engr.

Tex., Crockett—Houston Co. defeated $250,000 bonds improving Grapeland Rd. Dist. New election to be called at once. C. H. Milburn, co. engr. Noted Dec. 13.

Tex., Dallas—Plans widening, paving, etc. Browder St. $50,000. E. A. Kingsley, city engr.

Tex., El Paso—El Paso Co. having plans prepared concrete or bituminous paving 17.5 mi. highway between Yselta to Fabers, 18 ft. $483,000. L. A. White, co. engr.

Tex., Graham—Young Co. defeated $850,000 bonds for road work. New election will be called. W. H. Reeves, co. judge.

Tex., Kerrville—Kerr Co. having plans prepared graveling 6.3 mi. State Highway 7, 16 ft. $91,237 incl. $26,000 Federal aid. W. E. Simpson Co., Natl. Bank Commerce Bldg., San Antonio, engrs.

Streets and Roads (Continued)

Tex., Mexia—Had plans prepared paving North Kaufman St., miscellaneous types incl. brick and bituminous. $25,000. R. D. Morgan, city engr.

Tex., Paducah—Cattle Co. voted $50,000 bonds highway improvements. J. M. Whatley, co. judge. Noted Jan. 10.

Tex., Pecos—Reeves Co. takes bids after Jan. 20, caliche surfacing and bridging 3.78 mi. road from State Highway 1 to Cedar Gap, 16 ft. A. J. Adcock, Balmorhea, engr.

Tex., Teague—Freestone Co. having plans prepared grading, gravel and bituminous surfacing various state highways and county roads. $632,000. J. E. Johnson, co. engr.

Tex., Venus—Voted $25,000 bonds paving business streets, various types. H. N. Roberts, 4227 Irving Ave., Dallas, engr.

Okla., Oklahoma City—Plans grading and paving 5 blocks, Blackwelder Ave., 12th, 29th and 44th Sts., 5,100 sq.yd. asphalt, 3,250 lin.ft. curbing, 2,100 cu.yd. excav. $27,000. B. M. Hart, city engr.

Okla., Sioux City—Preparing plans paving 20 blocks various streets. W. E. Buell & Co., 205 Davidson Bldg., engr.

Wash., Seattle—Bd. Pub. Wks. rejected bids Jan. 11, paving Jackson St. et al. Will readvertise immediately. J. D. Blackwell, city engr. Noted Jan. 17.

Calif., Marysville—Having plans prepared improving portions 2rd, 3rd and Chestnut Sts., etc. 3½ in. bituminous base, 1½ in. Warrenite-bituminous wearing surface, concrete curbs, gutters, etc. To exceed $25,000. J. O. Wanzer, city mgr.

Calif., Oakland—Had plans prepared improving 5th St., 202,627 sq.ft. grading, 194,754 sq.ft. 6 in. concrete base with 2 in. Warrenite-bituminous surface, 6,299 lin. ft. concrete curb and 707 lin.ft. concrete curb with steel guards, also 7,873 sq.ft. concrete gutter, etc. W. W. Harmon, city engr.

Calif., San Diego—Had plans prepared improving Cedar and Date St., 27,346 sq.yd. paving, 1½ in. sheet asphalt on 3 in. asphalt concrete, 8,636 sq.yd. cement sidewalk; A, Ash, Beach and 7th Sts., 19,030 sq.yd. paving 1½ in. asphaltic concrete on 2½ in. asphaltic concrete, 9,820 sq.yd. 4 in. concrete, 1,522 lin.ft. curbing, 4,100 sq.ft. cement sidewalk; 22nd St., 23,645 sq.yd. paving, 2½ in. asphaltic concrete base and 1½ in. asphaltic concrete wearing surface; Woolman Ave., 22,911 sq.yd. paving, 3 in. asphaltic concrete base and 1½ in. wearing surface, 1,571 lin.ft. cement curbing, 7,816 sq.ft. cement sidewalk. F. A. Rhodes, city engr.

Calif., Santa Ana—Had plans prepared improving portion Fairview Ave., 106,213 sq.ft. grading, 106,213 sq.ft. 6 in. concrete pavement, 3,670 lin.ft. concrete curb, etc.

Calif., Stockton—San Joaquin Co. having plans prepared grading and 6 in. surfacing 2½ mi. Atherton Rd., 12 ft., crushed rock or gravel. F. E. Quail, co. surv.

Calif., Tulare—Having plans prepared improving various streets and alleys, 4, 5 and 6 in. concrete pavement, curbs, gutters, walks, also 6, 8 and 10 in. cement pipe storm sewers, etc. To exceed $60,000. J. P. Williams, city engr.

Calif., Woodland—Yolo Co. having plans prepared 10 mi. highway between Madison and Winters. A. G. Proctor, co. surv.

Que., Montreal—Plans concrete pavement on 950 ft. lane between Bourbonniere and Orleans Sts. $7,854, also 462 ft. lane north of Chenier St. $4,370, concrete sidewalks on 560 ft. Pervillier St. $2,540, 2,472 ft. Jarry St. $13,904. E. Gauthier, asst. city. clk.

Ont., St. Thomas—Having plans prepared paving Moore St., asphalt on concrete. $30,000. W. C. Miller, city engr.

BIDS DESIRED

N. Y., Long Island City—Jan. 28, by M. E. Connolly, pres. Queens Boro. Queens Subway Bldg., sheet asphalt paving, Hallet and 41st Sts., Hayes and 103rd Aves., etc.; grading, curbing and laying sidewalks on 41st St. and 103rd Ave., etc.

N. Y., New York—Jan. 28, by J. Miller, pres. Manhattan Boro, Municipal Bldg., granite block repaving Maiden Lane, Washington St., Lexington, 1st and 2nd Aves.

N. Y., New York—Jan. 30, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, crosswalks, etc., on La Salle Ave. from East Tremont to Crosby Aves.; grading La Salle Ave. from Crosby Ave. to Eastern Blvd.

Md., Baltimore—Jan. 30, by Bd. Awards, grading Granada, Eldorado, Oakford, Belle and Hawthorne Aves., 16,450 cu.yd. excav., Contr. 248-OANA. R. K. Compton, chn. Paving Comn.

Fla., Crawfordville—Feb. 2, by Wakulla Co., constructing roads: Wakulla to St. Marks, 6 mi.; Wakulla to Newport, 3.5; Crawfordville to Arran, 2.9 mi.; Crawfordville to Ivan and Leon Co. Line, 8.1 mi.; Medart to Panacea, 4 mi.; Sopchoppy to Leon Co. Line via Smith Creek, 26 mi. L. L. Pararo, clk., Armes & Winthrop, engrs.; adv. E. N.-R. Jan. 24.

Ala., Anniston—Feb. 15, by City Clerk, asphalt paving 1,25 mi. South Noble St., $180,000.

Ala., Huntsville—Feb. 1, by Clerk, Madison Co., 5 mi. concrete roadway from Huntsville to Triana Pike, 20 ft. $60,000. Above road will be owned by county but paid for by following cotton mills: Merrimack Mfg. Co., Lowe Mills, Huntsville Knitting Co. and West Huntsville Cotton Mills.

South Carolina—Jan. 28, at offices of State Highway Engineer, 1626 Main St., Columbia, 16,869 cu.yd. common and 200 cu.yd. rock excav., 7,550 cu. top soil surfacing, etc., on State Route 161.

S. C., Bennettsville—Jan. 29, by Mayor, hard surfacing 50,000 sq.yd. various streets. H. Beebe, Spartanburg, engr.

S. C., Saluda—Jan. 30, by Saluda Co. Hy. Comn., improving 5.59 mi. State Route 24, Federal Aid Project 52-A, 46,635 cu. yd. common and 500 cu.yd. rock excav., 17,346 cu.yd. top soil surfacing, etc., 2 rein.-con. bridges on same incl. one with 3 twenty-two ft. and one with 5 twenty-two ft., two 32 ft. and one 43 ft. spans; 10.9 mi. State Route 392, State Project S-510, 69,307 cu.yd. common and 400 cu. yd. rock excav., 34,200 cu.yd. top soil surfacing, etc.

Tennessee—Feb. 8 by Dept. Hys. & Pub. Wks., Nashvile, grading 16.07 mi. Brownsville-Tipton Co. Rd., 18 ft., Federal Aid Project 100. J. G. Creveling, comr. Noted Aug. 23.

Tennessee—Feb. 8, by State Dept. Hys. & Pub. Wks., Nashville, grading and 3 rein.-con. bridges over 20 ft. spans each on Crossville-Whitie Co. Rd., 18 ft., State Project 130, Cumberland Co.; grading 0.63 mi. road from Cumberland River Bridge to City Ferry Rd., 16 ft., State Project 139, Montgomery Co., 13.49 mi. Linden-Lewis Co. Rd., 16 ft., State Project 116, Perry Co.; grading, coarse stone base, bituminous macadam surface or cement concrete paving and 1 rein.-con. bridge over 20 ft. span on 3.64 mi. Sparta-Warren Co. Rd., 18 ft., Federal Aid Project 201, White Co.; concrete paving, grading, etc., and 2 rein.-con. bridges each over 20 ft. spans on 14.41 mi. Blountsville-Kingsport Rd., 18 ft., Federal Aid Projects 95 and 97, Sullivan Co.; surfacing with waterbound macadam 2.25 mi. road from Nolichucky River to Cavey Branch, 10 ft., Federal Aid Project 153, Greene Co.; concrete paving and 2 rein.-con. bridges each over 20 ft. spans on 7.6 mi. Manchester-Hillsboro Rd., 9 ft., State Project 150, Coffee Co. J. G. Creveling, comr. Noted Jan. 17.

O., Cincinnati—Feb. 1, by Hamilton Co., paving 20,000 sq.yd. Mullen Rd., waterbound macadam. $31,726. E. A. Gast, Court House, co. surv. Noted Dec. 13.

O., New Philadelphia—Feb. 18, by Tuscarawas Co. paving 7 mi. road, waterbound macadam. E. Stingel, co. surv.

O., Toledo—Feb. 5, by Lucas Co. grading, curbing and concrete paving Barrows St. Impvt. 215, Balkan Pl. Impvt. 216, Brussells St. Impvt. 217, Mansfield St. Impvt. 219, Talbot St. Impvt. 218. A. E. Schmitt, clk.

Indiana—Feb. 5, by State Hy. Comn., Indianapolis, paving with either brick, bituminous concrete or concrete, 6.032 mi. Sect. B and 8.785 mi. Sect. C, Louisville Rd., Clark Co., Federal Aid 21; Yellowstone Trail: 6.499 mi. Sect. D, Kosciusko Co., 5.834 mi. Sect. E, Kosciusko and Whitley Counties, 6.98 mi. Sect. F, Whitley Co., 7.699 mi. Sect. G, Whitley Co. and 7.352 mi. Sect. H, Allen Co., Federal Aid 66; Lafayette Pike: 7.736 mi. Sect. A, Boone Co., and 8.095 mi. Sect. D, Tippecanoe Co., Federal Aid 74. J. D. Williams, dir.

Ind., Boonville—Feb. 8, by Bd. Comrs. Warrick Co., improving Twp. Unit Rd., Greer Twp., known as Susott. $35,647.

Ind., Kendallville—Feb. 5, by City Council, paving 14 streets and 4 alleys, bids on various materials, especially brick, concrete, asphalt and macadam. $100,000. City Bureau of Eng., City Bldg., engrs.

Ind., Wabash—Feb. 5, by W. Beauchamp, aud. Wabash Co., improving H. P. Jenkins et al. Rd. $72,344.

Ia., Des Moines—Feb. 1, by Auditor Polk Co., paving and incidental work on 6 mi. Des Moines-Mitchellville Rd., Polk Co. $150,000. F. O. Laing, co. engr. Noted Nov. 3.

Kan., Salina—Feb. 6, at office of City Clerk, curbing, guttering, excavating, grading and paving streets, 10,300 cu.yd. excav., 500 ft. curb, 12,200 ft. curbing and guttering, 31,600 sq.yd. paving, bids on 3 in. brick on 5 in. concrete, 2 in. asphaltic concrete on 5 in. concrete and 6 in. rein.-con. W. L. Theisner, city engr.

Missouri—Jan. 29, by State Hy. Dept. Jefferson City, gravel surfacing 212,840 sq.yd. roads in Moniteau, Washington, Knox, Pike, Dallas, Ralls and Taney Counties; concrete paving 38,176 sq.yd. roads in Cass and Jasper Counties; grading roads in Putnam, Laclede and Dent Counties, 72,715 cu.yd. earth and 5,491 cu.yd. rock excav. B. H. Piepmeier, state highway engr. Noted Jan. 10 and 17.

Mo., St. Louis—Feb. 19, by Bd. Pub. Wks., 208 City Hall, granite curbing and asphaltic cement paving 40,740 sq.yd. Garrison and Laclede Aves., Maffitt, Sacramento, Stoddard, and Meramec Sts., $263,440; willite resurfacing 8,476 sq.yd. Pendleton St., $27,520; granite curbing and warrenite bitulithic paving 24,705 sq.yd. Reber Pl., Kossuth and Loughborough Sts. $136,910. W. W. Horner, City Hall, engr.

Tex., Houston—Feb. 4, by Comrs. Harris Co., shelling Battle Ground Rd. and Genoa Interurban Rd., graveling Alief Clodine Rd.; resurfacing Bellaire Blvd. and Kirby Dr. $100,000. Howe & Wise, co. engrs.

Calif., Burlingame—Feb. 4, by City Trustees, improving Bway between El Camino and San Mateo Dr., incl. 25,000 sq.ft. grading, 985 tons asphaltic concrete base, 60,000 sq.ft. asphalt concrete surface, 2,700 lin.ft. concrete curb and 2,400 sq.ft. concrete gutter. C. A. Torello, city engr. Noted Jan. 17.

Calif., Fresno—Taking bids improving Moroa and Vassar Aves., 122,123 sq.ft. grading, 2,722 lin.ft. curbing, 12,070 sq.ft. sidewalks and 88,562 sq.ft. asphalt paving. Former bids rejected. W. Stranahan, city engr. Noted Jan. 17.

Calif., Pacific Grove—Feb. 4, by City Trustees, improving Central and Fountain Aves., 175,000 sq.ft. grading, 175,000 sq.ft. of 3½ in. asphaltic concrete base with 1½ in. Warrenite bituminous surface pavement, 5,200 lin.ft. concrete curb and gutter, etc. H. D. Severance, city engr. Noted Oct. 4.

Calif., San Francisco—State Harbor Comn. receiving bids 70,830 sq.ft. 1½ in. Topeka wearing surface on concrete, 11,700 sq.ft. 2 in. Topeka wearing surface on timber deck, 1,980 sq.ft. seal coat wearing surface, all at China Basin; 76,120 sq.ft. 2 in. Topeka wearing surface on timber deck, 8,060 sq.ft. seal coat wearing surface on timber deck at Pier 34; 6,810 sq.ft. 2 in. Topeka wearing surface on timber deck on bulkhead wharf near Pier 14; 4,200 sq.ft. concrete fill at China Basin. Alternate bids will be submitted for Willite process Topeka wearing surface. State will furnish cement. Noted Dec. 6.

Calif., Stockton—Feb. 5, by Supervs. San Joaquin Co., improving Bainbridge Rd., 4,500 cu.yd. grading, 10,350 tons road gravel or 8,780 tons rock and 27 cu.yd. concrete (culverts), to exceed $25,000; Harney Lane, incl. 12,000 cu.yd. grading, 5,450 tons gravel and 25.78 cu.yd. concrete (culverts); Eight Mile Rd., 9,520 cu.yd. grading 9.930 tons gravel and 49.94 cu.yd. concrete (culverts), to exceed $25,000. F. E. Quail, co. surv.

Calif., Stockton—Feb. 5, by F. E. Quail, surv. San Joaquin Co., improving Taylor Ferry Rd., 3,000 cu.yd. grading, 10,710 tons rock, 1,035 bbl. asphaltic oil. To exceed $25,000.

BIDS RECEIVED

Maryland—State Rds. Comn., Baltimore, Jan. 15, paving Park Heights Ave., Contr. Bc-41, from P. Flanigan & Son, Harford Rd. and 25th St., Baltimore, 15,200 cu.yd. excav. $0.25, 44,500 sq.yd. 6-in. concrete base course 1.38, 44,000 sq.yd. bituminous surface course $1.57, 17,400 lin.ft. armored concrete curbing $0.82, etc., total $160,711. Noted Jan. 3.

Louisiana—State Hy. Comn., Raymond Bldg., Baton Rouge, grading and hard surfacing 5.9 mi. Federal Aid Project 143, Beggs-Palmetto Highway, St. Landry Parish, from A. L. Byrd, Melville, $67,781. Noted Dec. 20.

Tex., Cameron—Milam Co. grading, etc. 11.38 mi. State Highway 43, incl. 2,179 cu.yd. concrete, 195,947 lb. reinforcing steel, from J. E. Thomas, Rogers, $73,822. Noted Jan. 3.

Tex., Franklin—Robertson Co., grading and gravel surfacing 9.74 mi. State Highway 43-A, incl. 484 cu.yd. concrete, 31,335

Streets and Roads (Continued)

cu.yd. earth and 13,827 cu.yd. borrow excav., 39,008 lb. reinforcing, from Thomas & Ratcliff, Rogers, $36,536; 18,822 cu.yd. gravel to be furnished by county. Engrs. est. $77,260. Noted Dec. 27.

Tex., Robert Lee—Coke Co., grading, etc., 14.47 mi. State Highway 70 from Bronte to Nolan Co., 965 cu.yd. concrete, 70,000 cu.yd. earth and 33,000 cu.yd. borrow excav., 40,500 lb. reinforcing, and 11.477 mi. State Highway 70, from here to Bronte, incl. 1,435 cu.yd. concrete, from Hannah Constr. Co., Box 994, Waco, $40,552 and $45,750 respectively. Engrs. ests. $40,000 and $42,000.

Nevada—State Hy. Comn., Carson City, improving 17.59 mi. from Mormon Mesa to Nevada-Arizona State line, Route 6, Sect. H., Clark Co., 222,000 cu.yd. excav., 11,200 cu.yd. loading and screening, 29,400 yd. mi. hauling and 11,200 cu.yd. spreading gravel, 190 cu.yd. Class A and 220 cu.yd. Class B concrete, etc., from Dodge Bros. & Dudley, Fallon, $217,537. Noted Dec. 20.

Oregon—State Hy. Dept., Salem, Jan. 8, surfacing 16.9 mi. Roosevelt Highway, Coos Co., (1) 16,500 cu.yd. (a) broken stone or (b) crushed gravel base course (2) 18,000 cu.yd. (a) broken stone (b) crushed gravel top course, (3) 2,000 cu.yd. filler, from A. D. Kern, Exchange Bldg., Portland, (1a) $4.44 (2a) $4.44 (3) $0.75, total $178,005; P. Hennesey, Marshfield, (1b) $4.40 (2b) $4.37 (3) $0.80, $175,992.

California—State Hy. Comn., Sacramento, grading 8.2 mi. and concrete paving 3.5 mi. road between Huntington Beach and Corona, Del Mar, Orange Co., from W. S. Beal, Brawley, $188,025.

Calif., Compton—Improving streets from Oswald Bros., 366 East 58th St., Los Angeles, portion Raymond Ave., 35,597 sq. ft. grading $0.025, 35,597 sq.ft. of 5 in. concrete pavement $0.20, 12,400 sq.ft. walks $0.19, etc.; portion Hickory Ave., 63,440 sq.ft. grading $0.015, 63,440 ft. of 5 in. concrete pavement $0.20.

Calif., Los Angeles—Los Angeles Co., improving 4.06 mi. Las Flores Canyon and Hume Rds., 91,600 cu.yd. earth excav., shaping 21,418 lin.ft. roadbed, 38,076 sq.yd. oil and sand surface, etc., from Francisco & Ellington, 1232 West 5th St., $93,000; Pacific and Hanford Aves., etc., in Tract 4224, 69,422 cu.yd. excav., shaping, 25,791 lin. ft. concrete curb, 104,066 sq.ft. walks, 452,000 sq.ft. oil and screenings surface, from Butterfield-Sears Co., 410 6th St., San Pedro, $93,598. Noted Jan. 10.

Calif., Stockton — Improving portions Milton, Worth and East Anderson Sts., incl. 77,878 ft. of 4 in. crushed rock base with 2 in. asphalt concrete surface, etc., from F. C. McIntyre, Farmers & Merchants Bank Bldg., $22,755. Noted Dec. 27.

CONTRACTS AWARDED

N. Y., Syracuse—Bd. Contr. & Supply, paving Westminster Pl., Fellows and Roosevelt Aves., asphalt, to J. H. Gallup, Union Bldg., $19,037, $64,471 and $33,351 respectively; Spring St., bituminous concrete, and Kirkpatrick St., asphalt, to G. B. Dickison, Union Bldg., $25,394 and $51,962 respectively; Clairemont Ave., to Dale Eng. Co., Mann Blg., Utica, $23,112; Glenwood Ave., bituminous concrete, to F. J. Baker, University Blk., $28,675. Noted Dec. 20.

N. C., Raleigh — Concrete sidewalks, curbs, gutters and paving 80,000 sq.yd. various streets, asphalt on concrete, to R. G. Lassiter, Citizens Bank Bldg.

Fla., Punta Gorda—Charlotte Co., grading, etc., 10.885 mi. Project 564, Sect. of Rd. 5, 167,070 cu.yd. excav., 51,300 ft. untreated and 98,100 ft. untreated structural timber, 5,104 lin.ft. untreated and 3,320 lin.ft. treated trestle piles, to E. Chapman, Plant City, $83,991. Noted Nov. 29.

Alabama—State Hy. Dept., Montgomery, constructing 3.82 mi. road in Jefferson and Blount Counties, to J. Gwin, Birmingham, $110,476; graveling 8.77 mi. in Perry Co., to W. C. McCoy, La Fayette, $110,781; bridges on above roads, to C. W. Cooper, Oxford, $28,053.

Kentucky—State Hy. Dept., Frankfort, waterbound macadam paving 15.133 mi. Owenton-Georgetown Rd., 14 ft., State Project 49, Sect. A, Scott Co., to Georgetown Constr. Co., Georgetown, $293,206; rein.-con. paving 3.747 mi. Louisville-Bardstown Rd., 20 ft., Federal Aid Project 50, Sect. B, Jefferson Co., to Louis deCognets Co., 413 East Main St., Lexington, $191,209; grading 3.167 mi. Harlin-Pineville Rd., 24 and 28 ft., State Project 6, Sect. C, Harlan Co., to J. S. Lusk Co., Barboursville, $33,603. Noted Jan. 17.

Indiana — State Hy. Dept., Indianapolis, grading 9.698 mi. Federal Aid Rd. 68, Sect. B, 18 ft., Parke Co., to P. O. Leary, Terre Haute, $46,653. Noted Jan. 10.

Ia., Manchester—Paving, etc. 48 blocks, 51,130 sq.yd. 2-in. asphalt on 5-in. concrete, to Bryant Asphalt Paving Co., 807 Black Hawk Bank Bldg., Waterloo, $2.51 per sq.yd. Noted Dec. 20.

Kan., Topeka—Shawnee Co., concrete paving Federal Aid Project 177, Sect. A, to Stimson Constr. Co., Topeka, $127,762. Noted Dec. 6.

Mo., Richmond Heights (St. Louis, P. O.) —Grading, concrete curbing and guttering and paving Bellevue Ave., 17,600 sq.yd. asphalt trap rock on waterbound macadam, to Watson Constr. Co., Richmond Heights, $63,000. Engrs. est. $65,000. Noted Dec. 27.

Tex., Decatur—Wise Co., hauling and placing 33,125 cu.yd. gravel on State Highway 2, Federal Aid Project 14-B, to R. B. Sparks, Gaston Bldg., Dallas, $23,594; gravel to be furnished by county $26,500. Engrs. est. $50,000. Noted Jan. 17.

Tex., Del Rio—Val Verde Co., grading and gravel surfacing 13 mi. State Highway 12, 18 ft., to W. T. Montgomery, Alamo Bank Bldg., San Antonio, $93,733. Noted Dec. 27.

Tex., San Angelo—Tom Green Co., gravel surfacing 9.75 mi. highway from point 5 mi. north of San Angelo to Carlsbad, 16 ft., to Metcalfe & Thompson, San Angelo, $40,500.

Tex., Sierra Blanca—Hudspeth Co. grading and gravel surfacing 9.03 mi. State Highway 1, Federal Aid Project 399, 18 ft., to Valient & Toomey, F. & M. Bank Bldg., Ft. Worth, $30,532. Noted Jan. 17.

Okla., Davis — Grading and paving 4 blocks Main St., 6,115 sq.yd. concrete, 2,100 cu.yd. excav., to M. A. Swatek & Co., Security Bldg., Oklahoma City, $25,311. Noted Jan. 27.

Okla., Muskogee—Muskogee Co., gravel surfacing 6 mi. Boynton Rd., 63,000 sq.yd. gravel, to Salina Gravel Co., Manhattan Bldg., $27,665.

Nevada—State Hy. Comn., Carson City, improving 5.03 mi. between Carroll Summit and Campbell Creek Ranch, Project 56-B, Lander 2-A, Contr. 96, $58,200 cu.yd. excav., 1,900 cu.yd. load and screen selected material, 155 cu.yd. Class A concrete 2,350 cu.yd. riprap, etc., to K. Hodgman, Winnemucca, $103,948. Noted Dec. 20.

Oregon—State Hy. Dept., Salem, to Bauers & Bauers, Dayton, Wash., surfacing 22.7 mi. Old Oregon Trail, Umatilla Co., 4,000 cu.yd. broken stone base course $2.65 per cu.yd. 25,000 cu.yd. broken stone top course $2.65, 8,000 cu.yd. filler sand $0.75, etc., total $88,831.

California—State Hy. Dept., Sacramento, grading and surfacing with gravel or broken stone, 9.9 mi. between Bayha and Halfway Creek, Shasta Co., to Nevada Contg. Co., Fallon, Nev., $480,862; paving with Portland cement concrete, 16.2 mi. between San Diego and Oceanside, San Diego Co., to Jann & Bressi, McLaughlin Bldg., Los Angeles, $436,045; 7.2 mi. surfacing with gravel or broken stone, 4.3 mi. paving with Portland cement concrete between Schellville and Beltane, Sonoma Co., to Galbraith & James, San Mateo, $274,261; grading 7.3 mi. between Truckee and Boca, Nevada Co., to Irey & Horden, Lodi, $67,852; paving 1.9 mi. with Portland cement concrete, between south Boundary and railroad near Galt, to Kaiser Paving Co., Amer. Bank Bldg., Oakland, $53,354. Noted Nov. 15, Jan. 3 and Jan. 17.

Calif., Lodi — Paving Garfield, Central and Harold Sts., 206,590 sq.ft. 2½ asphaltic concrete base with 1½ warrenite bituminous surface, to Clark & Henery Constr. Co., Chancery Bldg., San Francisco. Noted Jan. 3.

Calif., Oakland—Alameda Co., 18 ft. concrete pavement in towns of Pleasanton and Livermore, to Heafey-Moore-McNair, 2030 High St., $32,541. Noted Jan. 17.

Calif., Salinas—Paving portion Main St., 110,980 sq.ft., remove present bituminous pavement and grade to binder course, 110,980 sq.ft. 1½ in. warrenite bituminous surface pavement; portions of North Main and Markets Sts. 55,326 sq.ft. grade roadway to cross-section and subgrade, 55,326 sq.ft. warrenite bituminous surface pavement, gutters, 500 tons base rock, etc., to Clark & Henery Constr. Co., Chancery Bldg., San Francisco, $37,175. Noted Jan. 10.

Calif., Santa Ana—Improving streets to S. Finley, Santa Ana, Fairview Ave., 106,213 sq.ft. regrading and 6 in. concrete pavement $0.23 ft., 3,670 ft. curb $0.60 ft., East 4th St., 1,338 sq.ft. regrading and 5 in. concrete pavement base $0.50 ft., 1½ in. asphalt concrete surface $0.30 ft.

Calif., Venice—Improving portion Grand View Ave., grading and paving with National pavement, concrete curbs, etc., to Braun, Bryant & Austin, 1680 4th St., Santa Monica, $28,825.

Industrial Works

PROPOSED WORK

Vt., Pownal—Mill—M. Manes, 138 Church St., North Adams, Mass., having preliminary plans prepared 1 story, 60 x 200 ft., rein.-con. and brick, plain foundation, here. To exceed $150,000 with equipment. Engineer and architect not selected.

Mass., Dorchester (Boston P. O.)—Factory—Natl. Can Co., 36 North Washington St, Boston, having revised plans prepared by Krokyn & Brown, 7 State St., Boston, and takes bids in spring, 1 story and basement, 120 x 160 ft., rein.-con. and brick, Locust St. $150,000.

Conn., Hartford—Lofts—Hartford Stove Repair Co., 94 Morgan St., having plans prepared by Berenson & Moses, 30 Allyn St., 2 story, brick and steel, plain foundation, Morgan St. $40,000.

Conn., Hartford—Repair and Warehouse —Bd. Water Comrs., 1026 Main St., having plans prepared by Whiton & McMahon, 36 Pearl St., 3 story, 150 x 200 ft., Homestead Ave. $150,000. Noted Jan. 17.

N. Y., Brooklyn—Bakery—General Baking Co., 342 Madison Ave., New York, having plans prepared 2 story, 212 x 255 ft., rein.-con., brick and steel, plain foundation, Washington Ave. near Lefferts Ave., here. $50,000. Private plans.

N. Y., Buffalo—Garage and Repair Shop —Natl. Biscuit Co., 245 Urban St., plans garage and repair shop. $45,000. Private plans.

N. Y., New York—Warehouse—J. F. Magan, c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., having plans prepared 10 story, 50 x 172 ft., brick, steel and stone, plain foundation, 161st St. near Morris Ave. $300,000.

N. C., Rhodhiss—Plants—Southern Power Co., 432 Church St., Charlotte, plans 2 plants; hydro-electric plant along Catawba River, here, and steam plant at Duncan, near Spartanburg, S. C. $5,000,000. W. S. Lee, 433 East Morehead St., Charlotte, engr.

N. Y., Schenectady — Warehouse — See "Buildings."

Pa., Johnstown—Plant—Johnstown Sanitary Dairy Co., South Side, plans 3 story and basement, 100 x 120 ft. milk plant, warehouse and garage rein.-con., brick and steel, Grant and Sherman Sts. $150,000.

Pa., Kane—Warehouse—Miles-Kane Co., Fraley St., plans warehouse, Fraley St. $75,000. Engineer and architect not selected.

Pa., Pittsburgh—Factory—Federal Electric & Radio Corp., Park Bldg., plans 1 story factory. $40,000.

Va., Winchester — Plant — Natl. Fruit Product Co. plans to rebuild pressing and drying unit recently destroyed by fire. $50,000 loss.

W. Va., Fairmont—Plant—West Virginia Chemical Co. plans addition to exceed $40,000. W. C. McAdoo, mgr.

N. C., Greensboro—Factory—Blue Bell Overall Co. plans 2 and 3 story, 63 x 348 ft. addition to factory. $85,000. C. C. Hudson, pres.

N. C., Wilson—Plant—City plans to expend $186,500 enlarging and improving electric plant.

Fla., St. Petersburg — Electric Power Plant—Pinellas Power Co. plans electric power plant. $1,500,000. B. Latham, genl. mgr.

Fla., St. Petersburgh—Plant—A. B. Hale and associates, 1612 Highland Ave., Tampa, having plans prepared ice and refrigeration plant, here. $75,000. Private plans.

Tenn., Clarksville—Warehouse—Gulf Refining Co. purchased 40 x 60 ft. site on Franklin and 22nd Sts., for warehouse, includes 290 ft. railroad spur. $40,000.

Tenn., Cleveland — Factory — Cleveland Chair Co. plans 3 story, 80 x 100 ft. $65,000.

Tenn., Knoxville — Warehouse — C. M. McClung Co., West Jackson Ave., having plans prepared by R. F. Graf & Son, Arnstein Bldg., mill constructed warehouse. $100,000.

Tenn., Memphis—Garage and Store—D. Derman & A. Jett plan 2 story garage and store, covering 44,000 sq.yd., brick and concrete, South 3rd and Gayora Ave. $75,000.

Ky., Campbellsville—Warehouse—Burley Tobacco Growers Cooperative Assn. plans

Industrial Work (Continued)

to rebuild warehouse recently destroyed by fire. $60,000.

Ky., Ferguson—Shop Addition—Southern R.R. Co., Southern Railroad Bldg., Cincinnati, O., plans 1 story, 100 x 130 ft. addition to car repair shops. $75,000.

Ky., Louisville—Mill, etc.—W. J. Hughes & Sons Co., 14th and Maple Sts., plans to rebuild structures and lumber yard recently destroyed by fire. $150,000.

O., Bedford—Garage and Commercial—L. Abrams, Engineers Bldg., Cleveland, had plans prepared by G. Rudolph, Hunkin-Conkey Bldg., Cleveland, 1 and 2 story, 98 x 154 ft., brick, Main St., here. $60,000.

O., Carthage (Cincinnati P. O.)—Factory—Lunkenheimer Co., 74th St., having plans prepared by H. Hake, Telephone Bldg., Cincinnati, 1 story, 300 x 400 ft., 74th St. $300,000.

O., Cincinnati—Warehouse—Cincinnati & Suburban Bell Telephone Co., Telephone Bldg., plans warehouse to cover 2 acres, Woodburn Ave. along tracks of Norfolk & Western R.R. To exceed $150,000. H. Hake, Telephone Bldg., archt.

O., Cleveland—Foundry—Bowler Fdry. Co., 1688 Columbus Rd., having plans prepared by E. McGeorge, Stuyvesant Bldg., 1 story, 200 x 500 ft., brick and steel, Newburgh Ave. along tracks of South Shore R.R. $200,000.

O., Cleveland—Factory—L. Specht Co., 642 Frankfort Ave., plans 2 story and basement, brick and timber, West 6th St. $50,000. Private plans.

O., Cleveland—Garage and Salesroom—C. F. Thomas, 1478 East 116th St., plans 2 story and basement 66 x 139 ft., brick, West 25th St. and Henninger Ave. $40,000. Engineer and architect not selected.

O., Columbus—Plant—Dispatch Publishing Co., High and Gay Sts., having plans prepared by F. L Packard, 16 East Broad St., and H. H. Heistand, associated archt., Eaton, 4 story and basement, 62 x 187 ft., rein.-con. and brick, South 3rd St. $400,000.

O., Vermillion—Factory—Lampe Constr. & Trading Co., plans factory. $50,000. E. G. Lampe, mgr. Engineer and architect not selected.

Ind., Bloomington — Factory — Showers Bros. Co., Bloomington, plans extensions to plant, also new factory. $200,000.

Ind., Evansville — Garage, Shop and Warehouse — Ideal Dairy Co., 7th and Penn. Ave., having preliminary plans prepared by A. E. Neucks, 515 Peoples Savings Bank Bldg., 2 story, 95 x 122 ft., rein.-con. addition, 7th and Penn. Aves. $50,000.

Ind., Greencastle — Plant — Mid-West Crushed Stone Co. plans to rebuild portion of plant recently destroyed by fire. $50,000. Engineer and architect not selected.

Ind., Indianapolis — Garage — Bd. Pub. Wks. having plans prepared by F. B. Hunter, State Life Bldg., 1 story, 50 x 105 x 200 ft., rein.-con. and brick, New York St. $75,000.

Ind., Indianapolis—Warehouse—Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, Pa., having plans prepared by Hunting-Davis Co., Century Bldg., Pittsburgh, Pa., 2 story and basement, 162 x 204 ft., rein.-con., steel and brick, West Pratt St. $200,000.

Ind., Princeton—Garage—Byron Toney Motor Co. plans to rebuild garage recently destroyed by fire. $50,000.

Ind., Shelbyville — Cold Storage — C. P. and H. Sindlinger plan 1 story, brick. $40,000.

Wis., Arcadia—Shop—Trempealeau Co., c/o E. F. Rotering, highway comr., plans to rebuild 1 story repair shop, recently destroyed by fire, brick, plain foundation. $40,000. Engineer and architect not selected.

Wis., Janesville—Factory—Parker Pen Co., Division and Court Sts., plans 4 or 5 story, 113 x 132 ft., brick and concrete, plain foundation, South Bluff St. Engineer and architect not selected.

Wis., West Allis—Garage—Mertz-Knippel Co., 6520 Greenfield Ave., having plans prepared by R. Allison, 425 East Water St., Milwaukee, 1 story, 60 x 120 ft., brick and timber, plain foundation, Greenfield Ave. $40,000.

Wis., Wisconsin Rapids—Garage—J. E. Daly, 101 2nd St., having plans prepared by F. J. Henry, Wisconsin Rapids, 1 story, 54 x 100 ft., brick and concrete garage, plain foundation, 2nd St.

Ia., Cedar Falls — Factory and Office — Viking Pump Co. having plans prepared by J. L. Ralston, Waterloo, 2 story, 66 x 132 ft., brick and concrete. $40,000.

Minn., St. Paul—Factory—Twin City Bedding Mfg. Co., c/o F. and S. Yankelowitz, 474 University Ave., plans 2 story and basement, 50 x 160 ft., rein.-con. and brick, 479 University Ave. $90,000. Engineer and architect not selected.

Ark., Bethesda—Plant—Batesville White Lime Co., Ruddells, plans large hydrated lime building and chemical plant on quarry site near here, 3 kiln fire-proof calcining and hydrating plant 5 ton per hr., also 2 mi. narrow gauge railroad from plant to company's quarry. $150,000.

Tex., Houston — Laundry — Burkhart Laundry & Dye Wks., 1702 Capitol St., plans brick and concrete laundry. $45,000. Engineer and architect not announced.

Tex., Houston—Mill—C. S. E. Holland & Associates, Chamber of Commerce, plan cotton mill along ship channel. $750,000. Engineer and architect to be appointed at once.

Tex., San Antonio—Plant—Beacon Hill Ice Co., 216 Garza St., having plans prepared by L. Harrington & Co., engrs., Houston Bldg., 2 story, 80 x 160 ft., brick and rein.-con. $100,000.

Okla., Tulsa—Ice Plant—Pub. Serv. Co., 107 East 4th St., taking bids 1 story, 106 x 135 ft., brick, concrete and steel addition. $60,000. Ice making equipment $160,000. Atkinson & Olston, 202 Mid-Continent Bldg., archts.

Okla., Tulsa—Shops—See "Railways."

Calif., Fresno—Ice Plant—Peoples Ice Co., 2035 Bway. purchased 75 x 150 ft. site on Bway. and Woodward Ave., for additions. $40,000.

Calif., Los Angeles — Factory — White-Smith Furniture Mfg. Co., 1634 East 1st St., having plans prepared by F. D. Chase Co. Inc., Title Insurance Bldg., 60 x 550 ft., brick and mill construction, incl. dry kilns, boiler room, lumber sheds, etc.

Calif., Los Angeles—Ice Storage—Jefferson Ice Co., 157 East Jefferson St., having plans prepared by E. J. Borgmeyer, California Bldg., 5 story, 100 x 148 ft., rein.-con. $95,000.

Calif., Los Angeles—Roundhouse, etc.—Union Pacific R.R. Co., 610 South Main St., plans 11-stall brick addition to roundhouse, $70,000; 40 x 300 ft. frame and corrugated iron warehouse. $18,000, frame and corrugated iron building for Construction Dept., near Belvedere Gardens.

Calif., Los Angeles — Storage Plant — Mack International Motor Truck Co., 1628 East 7th St., plans 1 and 2 story, 275 x 965 ft. rein.-con., Alameda St. $200,000.

Calif., Los Angeles—Warehouse—Pacific Southwest Warehouse Co., 1600 East 6th St., having plans prepared 2 story, 100 x 400 ft., rein.-con. addition, 6th and Clarence Sts. Private plans.

Calif., Los Angeles—Warehouse—Pioneer Pacific Worsted Co., Hibernian Bldg., plans warehouse, 175,000 sq.ft. floor space, probably fireproof, in Harbor Dist.

Calif., San Francisco—Warehouse—Redlick-Newman Furniture Co., Mission and 17th Sts., having plans prepared by M. I. Schwartz, Nevada Bank Bldg., 3 story and basement, 50 x 160 ft., brick and concrete addition. $45,000.

Calif., Seal Beach—Power Plant—Los Angeles Gas & Electric Corp., 645 South Hill St., Los Angeles, plans 288,000 hp. power plant on 8-acre site, here.

Calif., Tulare—Plant—W. J. Higdon, interested in company which plans powdered milk plant. $75,000.

Ont., Chatham—Plant—Green River Bottling Co., plans new plant here. $65,000.

B. C., Port Coquitlam—Mill—D. M. Hartnell & Co., Port Hammond, having plans prepared new saw mill here. $200,000.

BIDS DESIRED

Pa., Pittsburgh—Factory—Jan. 28, by B. H. Prack, archt., Keystone Bldg., 4 story and basement, 61 x 143 ft. concrete, brick and steel addition to plant, Braddock Ave., for Mine Safety Appliance Co., Braddock Ave. $100,000.

Pa., Pittsburgh — Warehouse — W. E. Snaman, archt., Empire Bldg., will build 4 story and basement, 159 x 291 ft. warehouse, Beaver Ave., for Rosenbaum Co., 6th and Penn Aves. Work will be done by separate contract.

O., Cleveland—Garage—C. E. Tyler, 3172 East 80th St., taking bids 1 story and basement, 40 x 136 ft., brick and steel, East 80th St. $40,000. T. C. Cerny, 4025 East 52nd St., archt.

O., Cleveland—Garage—See "Buildings."

BIDS RECEIVED

Calif., Los Angeles—Warehouse and Loft—Western Wholesales Drug Co., 200 South Los Angeles St., 6 story and basement, 60 x 150 ft., rein.-con., Los Angeles St., from C. L. Peck, H. W. Hellman Bldg., $172,600. Noted Jan. 17.

Calif., Sacramento—Garage—J. Rasmussen, c/o F. A. Foale, archt., Ochsner Bldg., 2 story, rein.-con., I St. near 8th St., from Campbell Constr. Co., Nicolaus Bldg., $47,240.

CONTRACTS AWARDED

Mass., Salem—Plant—Naumkeag Steam Cotton Co., Salem, 1 story, 146 x 375 ft. weave shed and 110 x 320 ft. cloth factory, brick, plain foundation, Washington St., to W. T. Reed Co., 201 Devonshire St., Boston.

R. I., Pawtucket—Boiler House Extension—Blackstone Valley Gas & Electric Co., 48 x 80 ft. addition to boiler house, brick and steel, general contract to Stone & Webster Inc., 147 Milk St., Boston. $350,000.

N. Y., Brooklyn—Foundry—T. A. Digan, Inc., 656 3rd Ave., 2 story, 50 x 100 ft., rein.-con., brick and steel, plain foundation, 3rd Ave., to Caye Constr. Co., 356 Fulton St. Archts. est. $75,000.

N. Y., New York—Repair Shop—G. A. Whalen, comr. Plant & Structures, Municipal Bldg., central motor repair shop, 16th St. and Ave. C, to Willetts Constr. Co., 280 Madison Ave., $2,325,000. Noted Jan. 3.

Pa., Butler—Plant—Butler Packing Co., 1, 2 and 5 story, 31 x 80 ft. addition to plant, to Walker & Curley, Sharpsburg. $40,000.

Pa., Paoli — Sales and Service — W. T. Matthews, West Chester Pike and Lancaster Ave., 2 story, 60 x 115 ft. brick and steel, sales and service station, plain foundation, to A. W. Tupplee, Paoli.

Pa., Zelionople—Plant—Iron City Sanitary Mfg. Co., 1 story, brick and steel plant, to Pittsburgh Bridge & Iron Wks., Rochester, $150,000.

N. C., Balfour—Balfour Mill Co., Asheville, mill buildings incl. warehouse, boiler house, brick, here, to Fiske-Carter Constr. Co., Greenville, S. C.

N. C., Wilmington — Warehouse — Amer. Molasses Co., large warehouse, ½ m.g. steel storage tank, several smaller concrete storage tanks, and rebuilding docks, to W. Clark, Wilmington, $250,000.

Fla., Jacksonville — Assembly Plant — Ford Motor Co., Highland Park (Detroit P. O.), Mich., 1 story, 200 x 500 ft., rein.-con., steel and brick, wood pile foundation, 8th St. and St. Johns River, here, to Irwin & Leighton, 12th and Cherry St., Phila., Pa. Noted Dec. 20.

Fla., Tampa—Plant—Tampa Electric Co., Tampa and Cass Sts., altering and constructing brick and steel addition to generating plant, also equipment, to Stone & Webster, Inc., 147 Milk St., Boston, Mass., $950,000.

La., New Orleans — Warehouse — Louisville & Nashville R.R., 229 St. Charles St., 50 x 935 ft. concrete and steel warehouse, Julia St., to Doullut & Williams Inc., Howard Ave., $500,000. Noted Dec. 27.

Tenn., Knoxville—Garage—Clinch-Locust Garage Co., 2 story, 100 x 250 ft., concrete and steel, Locust Ave., to A. R. McMurry, Knoxville. Archts. est. $75,000. Noted Jan. 10.

O., Dayton—Warehouse—Kroger Grocery & Baking Co., 813 Main St., Cincinnati, 2 story, 150 x 150 ft., rein.-con. and brick, plain foundation, Hopeland St., here, to Frank Hill Smith, Inc., Winters Bldg., $150,000.

O., Lakewood (Cleveland P. O.)—Garage—H. A. Dempsey, 17419 Clifton Blvd., 1 story, 50 x 136 ft., brick and tile, 13300 Madison Ave., to J. M. Daugherty, 1604 Lauderdale Ave. Archts. est. $40,000.

O., Lakewood (Cleveland, P. O.)—Garage, etc.—Marked Motor Corp., 13,316 Madison Ave., 2 story, brick and steel garage, service station and salesroom, Madison and Clarence Aves., to J. M. Daugherty Building & Constr. Co., 1604 Lauderdale Ave. Archts. est. $45,000. Noted Jan. 17.

O., Lorain — Bakery — J. Spang Baking Co., 2701 Barber Ave., 2 story and basement, brick addition, to L. A. Burgett Co., Lorain. Archts. est. $50,000. Noted Dec. 27.

O., Toledo—Bakery—Mills, Rhines, Bellman & Nordhoff, archts., Ohio Bldg., 3 story and basement, 132 x 265 ft., rein.-con. and brick, plain foundation, Summit St., to H. J. Spiker Co., Elm St., for Holland Bread Co. Archts. est. $200,000. Noted Jan. 17.

Ind., Richmond—Plant Addition—Richmond Light, Heat & Power Co., plans additions to gas plant. Work includes in-

Industrial Work (Continued)

stalling an 8-ft. gas set, generator, pumps, etc. $85,000. Work will be done by day labor under supervision of Eng. Dept. $85,000.

Mich., Calumet—Crusher—Calumet & Hecla Co., will build 2 story brick and timber crusher at ore mine, by day labor. Private plans.

Minn., St. Paul—Garage—Piper & Drake Co., 809 1st Natl.-Soo Line Bldg., Minneapolis, 1 story, 175 x 180 ft., brick, tile and steel, Smith Ave. near Chestnut St., here, general contract to M. Schumacher, 39 Dell Pl., Minneapolis. Total $60,000.

Mo., St. Louis—Garage—M. Toder, 5370 Pershing Ave., 1 story, 75 x 280 ft., brick and concrete, Pershing Ave., to J. H. Schroeder, 3845 Louisiana Ave. Archts. est. $45,000.

Tex., Dallas—Cotton Gin—Continental Gin Co., 3315 Elm St., will build cotton gin, brick, 3315 Elm St., by day labor. $40,000. Private plans.

Calif., Emeryville—Factory—Westinghouse Electric Co., 62nd and Powell Sts., 3 story, rein. con. factory, to Dinwiddie Constr. Co., Crocker Bldg., San Francisco, $300,000. Noted Jan. 17.

Calif., Los Angeles—Bottling Plant—Los Angeles Brewing Co., 1920 North Main St., 2 story, rein.-con. and brick, to Darrell-Condley Co., Marsh-Strong Bldg., $45,000. Noted Jan. 3.

Calif., Los Angeles—Creamery—Bothell Creamery Co., 4809 South Vermont St., 1 and 2 story, 50 x 100 ft., brick, 15th St., to May & Grimwood, Inc., Hass Bldg.

Calif., Los Angeles—Factory—Commercial Fixture Co., 914 South Alameda St., 1 story and mezzanine, brick and steel, to Austin Co. of California, Bartlett Bldg., $75,500. Noted Jan. 10.

Calif., Los Angeles—Factory—Republic Brass & Mfg. Co., 1931 Violet St., 1 and 2 story, to contain 69,000 sq.ft. of floor space, brick and corrugated iron, 27th St., to May & Grimwood, Hass Bldg.

Calif., Los Angeles—Garage—Los Angeles Gas & Electric Corp., 645 South Hill St., will build 1 story, 134 x 134 ft., brick and steel, 6th St., by day labor.

Calif., Los Angeles—Garage—M. T. Mancha, 1801 West 43rd St., 1 story, 90 x 150 ft., brick, Washington St., to Mathis Constr. Co., 753 South San Pedro St.

Calif., Los Angeles—Garage—F. H. Randall, 1132 North Vermont St., 1 story, 50 x 150 ft., brick, Vermont Ave., to Hillock & Son, 1107 Harcourt Ave.

Calif., Los Angeles—Ice Plant—Kirker Ice & Cold Storage Co., 5930 South Main St., rein.-con., to J. H. Weller, Bank of Italy Bldg. To exceed $40,000.

Calif., Los Angeles—Shop—Los Angeles Welding & Mfg. Co., 1146 South Los Angeles St., 1 story, 50 x 110 ft., brick, to Alexander Constr. Co., 260 South Pacific Blvd., Huntington Park (Branch of Los Angeles).

Calif., Los Angeles—Warehouse—Western Ave. Storage Co., 4 story, rein.-con., Western Ave., to Richards-Neustadt Constr. Co., Trust & Savings Bldg., $54,000.

Calif., Oakland—Garage and Warehouse—East Bay Water Co., 512 16th St., will build 1 and 2 story, concrete, 21st and Adeline Sts., by day labor. $48,750.

Calif., Pasadena—Garage—C. R. Luton & Co., Western Mutual Bldg., 1 story, 65 x 115 ft., brick, West Colorado St., to V. P. Gilbert, Citizens Natl. Bank Bldg., Los Angeles.

Calif., Point Firmin—Factory—Southern California Cordage Co., brick and corrugated iron, to Austin Co. of California, Bartlett Bldg., Los Angeles, $65,000.

Calif., Sacramento—Garage—J. Rasmussen, 2 story, rein.-con., I St. between 7th and 8th Sts., to Campbell Constr. Co., Nicolaus Bldg., $47,240.

Calif., San Francisco—Garage—B. Getz, Chronicle Bldg., will build 1 story, brick, Geary St., by day labor. $42,000.

Calif., San Mateo—Plant—Peninsula Ice Delivery Co., 1 story, 50 x 150 ft. ice plant, concrete, San Mateo Dr., to S. A. Sidnom, 2nd and A Sts., $52,000.

Calif., Santa Monica—Garage, etc.—F. and H. McMahan, 1 story, 135 x 150 ft. brick, Euclid Ave., to Western States Constr. Co., Marsh-Strong Bldg., Los Angeles, $55,000.

Buildings

PROPOSED WORK

Mass., New Bedford—High School—School Com. having plans prepared by Browne & Poole, 688 Pleasant St., and takes bids early in spring 2 story and basement, 150 x 225 ft. addition. rein.-con. and brick, concrete foundation, Morgan St. To exceed $200,000.

Conn., New London—High School—City plans 3 story, brick and stone, plain foundation. $500,000. D. St. C. Donnelly, Plant Bldg., archt.

Conn., Waterbury—Church—First Lutheran Church Society plans church, Grove St. $150,000. H. C. Freimuth, pastor. Engineer and architect not selected.

Conn., Waterbury—School—School Bd. plans school, Lakeville St. $150,000. Engineer and architect not selected.

Conn., West Hartford (Branch of Hartford)—School—School Bd. plans brick and steel, plain foundation, Seymour Ave. $150,000. M. L. H. Bugbee, supt. Engineer and architect not selected.

N. Y., Albany—Hospital—Albany Hospital, North Scotland Ave., having plans prepared by W. D. Rockefeller, archt. and engr., North Scotland Ave., 3 story, 150 x 200 ft., brick and steel addition, plain foundation. $700,000. Noted Apr. 5.

N. Y., Brooklyn—Apartment—M. Courtland, archt. and engr., 389 5th Ave., New York, preparing plans brick, steel and stone, plain foundation, Ocean Ave., here. $200,000. Owners name withheld.

N. Y., Buffalo—School—Bd. Educ., 1400 Telephone Bldg., rejected bids Dec. 27, P. S. 71, 3 story, 200 x 225 ft., rein.-con. and brick, Lang Ave. Noted Jan. 17.

N. Y., Harrison—School—Bd. Educ. soon takes bids brick, steel and stone. $300,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Sept. 6.

N. Y., Kings Park—Hospital—State Hospital Comn., Albany, soon takes bids memorial hospital, here. $1,000,000. S. W. Jones, state archt.

N. Y., New York—Apartment Hotel—T. C. Du Pont, c/o McKim, Mead & White, archts. and engrs., 101 Park Ave., having plans prepared brick, steel and stone, plain foundation, 5th Ave. and 59th St. $18,000,000.

N. Y., New York—Apartment—Fifty-Six East 86th St. Corp., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., having plans prepared 15 story, brick, steel and stone, plain foundation, 59 East 86th St. $1,500,000.

N. Y., New York—Apartment—J. F. Halligan, c/o Murgatroyd & Ogden, archts. and engrs., 389 Lexington Ave., having plans prepared brick, steel and stone, plain foundation, East 59th St. $5,000,000.

N. Y., New York—Apartment—D. S. Lang, archt. and engr., 110 West 34th St., preparing plans 100 x 100 ft., brick, steel and stone, plain foundation, Faile St. $150,000. Owners name withheld.

N. Y., New York—Apartment—G. G. Miller, archt. and engr., 1482 Bway., preparing plans 5 story, brick, steel and stone, plain foundation, Nelson Ave. $200,000. Owners name withheld.

N. Y. New York—Bank and Office—Harriman Natl. Bank, 527 5th Ave., having plans prepared by J. R. Pope, 15 West 46th St., brick, steel and stone, plain foundation, 531 5th Ave. $3,000,000. Noted June 14.

N. Y., Schenectady—Store and Warehouse—R. C. Reynolds, Inc., 257-259 River St., Troy, having plans prepared by S. Lee, archt. and engr., Proctor Bldg., Troy, 4 story, 80 x 120 ft. addition to sales building, and 3 story, 64 x 110 ft. warehouse addition, brick and steel, plain foundation, here. $200,000.

N. J., Morris Plains—Hospital—State Hospital Comn., Trenton, plans 8 buildings. here. $2,000,000. A. B. Mills, State Office Bldg., Trenton, archt.

N. J., Trenton—Hospital—Dirs. McKinley Hospital, Brunswick Ave., plan addition. $150,000. N. A. K. Bugbee, 231 West State St., chn. Engineer and architect not selected.

Pa., Butler—Bank and Office—Butler Savings & Trust Co. having plans prepared by Mowbray & Uffinger, 221 West 57th St., New York City, 8 story and basement, 60 x 120 ft. brick and steel, Main St. $350,000.

Pa., Camp Hill—Clubhouse—Manufacturers Club, Broad and Walnut Sts., Phila., having plans prepared by Seeburger & Rabenald, Weightman Bldg., Phila., 2½ story and basement, 60 x 130 ft. stone, plain foundation. $150,000.

Pa., Phila.—Apartments—C. H. Wunder, archt., 1520 Locust St., will prepare plans for several apartment houses, 57th St. and City Line. $2,500,000. Owner's name withheld.

Pa., Wilkes-Barre—Clubhouse—Knights of Columbus Council 302, plans clubhouse, South Main St. $150,000. Engineer and architect not selected.

W. Va., Beckley—High School—Bd. Educ. having plans prepared by W. B. Ittner, 911 Locust St., St. Louis, Mo., 2 story and basement, 110 x 200 ft. $200,000.

W. Va., Huntington—Court House—Feb. 20 (extended date), by Cabell Co., 3 story addition. R. S. Douthat, clk.; adv. E. N.-R. Jan. 24.

N. C., Asheville—Church—Central Methodist Church, c/o Chamber of Commerce, plans to expend $700,000 for additions and enlargements to present church, incl. 3 story, 50 x 100 ft. addition, Church St.

N. C., Asheville—Church—Central Methodist Episcopal Church having plans prepared by R. H. Hunt & Co., archts., James Bldg., Chattanooga, Tenn., 3 story, 60 x 100 ft. addition to church also 40 x 60 ft. extension to main auditorium. $200,000.

N. C., Burlington—Hotel—Burlington Hotel Corp. plans hotel. $300,000. Engineer and architect not announced.

N. C., Charlotte—Municipal—City plans large municipal building. $250,000 or more.

N. C., Durham—Church—Trinity Methodist Church plans church. $300,000. W. W. Peele, pastor.

N. C., Gastonia—Bank—Citizens Bank plans new building on site of present bank, 2 story and basement. $150,000. A. G. Myers, pres.

N. C., Hickory—High School—Jan. 29, at office J. W. Balley, city mgr., high school, steel frame, slow burning construction. $225,000.

N. C., Shelby—Office and Bank—Fish Natl. Bank plans 6 or 8 story, La Fayette St. $250,000.

N. C., Wilmington—Court House—Jan. 28, by Comrs. New Hanover Co. 4 story and basement, 64 x 118 ft., steel and rein.-con., Princess St. $160,000. L. N. Boney, Murchison Bldg., archt. Former bids rejected. Noted Dec. 6.

N. C., Wilson—Court House—Comrs. Wilson Co. rejected bids 3 story and basement. court house and jail. Will modify plans and readvertise soon. H. B. Lane, chn. Bd. Comrs.

Fla., Daytona—Bank and Office—R. L. Selden and associates having plans prepared by J. J. Baldwin of Anderson & Gaffney, Daytona, 9 story, brick and concrete. $300,000.

Fla., Lakeland—Home—Brotherhood of Carpenters & Joiners, 222 East Michigan St., Indianapolis, Ind., plans home for aged on 1,700 acre site, here. $5,000,000. Engineer and architect not selected.

Fla., Pensacola—Hotel and Theatre—Pensacola Apartment & Theater Co. c/o W. B. Harbeson, pres., having plans prepared by G. L. Rapp, 190 North State St., Chicago, 6 story, 154 x 196 ft., steel frame. $700,000.

Fla., St. Petersburg—Hotel—Springstead Corp., 434 1st Ave., N., plans 7 story hotel, Beach Dr. and 3rd Ave., N. $500,000. H. S. Chase, 84 State St., Boston, Mass., treas. Engineer and architect not selected.

Fla., Sanford—Hotel—W. R. Griffin and associates plan hotel, Park Ave. and Seminole Blvd. $500,000.

Fla., Titusville—Brevard Co. election Jan. 21, to vote on $42,000 bonds grading and paving with rock, marl or asphalt, 10.5 mi. Courtney, Otsino and Range Line Rds.

Miss., Jackson—Store—W. J. Clancy, Memphis, had plans prepared by R. Spencer, Goodwin Institute, Memphis, brick and terra cotta, Capitol and Gallatin Sts., here. $100,000.

La., Shreveport—Church—First Presbyterian Church plans to build church, Jordan St. $300,000.

Tenn., Jackson—Sanitorium—J. L. Crook having plans prepared by P. A. Heavener, Jackson, 2 story, brick and terra cotta addition. Noted Oct. 2.

O., Cleveland—Apartment—L. Arnoff, 11118 Clifton Blvd., having plans prepared by G. Rudolph, Hunkin-Conkey Bldg., 3 story and basement, 40 x 205 ft., brick, East Overlook Rd. $200,000.

O., Cleveland—Apartment Hotel—Hotel Croyden, c/o A. H. Bramson, Fidelity Mortgage Bldg., plans 4 story, brick addition, 3907 Prospect Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Apartment—Elworthy-Helwick Co., 733 Prospect Ave., having plans prepared by G. A. Ebeling, Hunkin-

Buildings (Continued)

Conkey Bldg., 3 story, brick and timber, Eddy Rd. $175,000.

O., Cleveland—Apartments—M. Lessovitz and L. Fishman, 2673 East 53rd St., having plans prepared by M. Altschuld, 5116 Woodland Ave., two 2 story and basement, 36 x 151 ft., brick, 14225 Coit Rd. $200,000.

O., Cleveland—Bank and Office—Pearl St. Savings & Trust Co., West 25th St. and Clark Ave., plans brick bank and office, on lot 100 x 180 ft., West 25th St. and Clark Ave. $300,000. Engineer and architect not selected.

O., Cleveland — Church — St. Ignatius Roman Catholic Church, 10205 Lorain Ave., plans 1 story, brick, steel and stone, Lorain Ave. and West Blvd. $400,000. T. A. Hanrahan, pastor. Engineer and architect not selected.

O., Cleveland — Restaurant and Office — Clark Restaurant Co., 1730 East 24th St., plans 2 story, brick and steel, Euclid Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Theater and Commercial —A. Greenwald and S. H. Stecher, 535 Society for Savings Bldg., having plans prepared by N. Petti, Williamson Bldg., 2 story and basement, 77 x 200 ft., brick, steel and concrete, West 25th St. and Clark Ave. $200,000.

O., Cincinnati — Clubhouse — Queen City Club, 7th and Elm Sts., having plans prepared by James Gamble Rogers, archt., 367 Lexington Ave., New York City, and H. Lake, associated archt., Telephone Bldg., Cincinnati, brick, steel and stone, plain foundation, 4th and Bway. Sts., $350,000.

O., Cincinnati—Exchange—Cincinnati & Suburban Bell Telephone Co., Telephone Bldg., plans 2 story, rein.-con., plain foundation, Hamilton and Knowlton Sts. $250,000. H. Hake, Telephone Bldg., archt.

O., Columbus — Loan, etc. — Ohio State Saving Assn., 44 East Broad St., having sketches made 42 x 118 ft. and 42 x 130 ft., building and loan structure, brick, stone and concrete, Gay and 3rd Sts. $300,000 or more. Engineer and architect not selected.

O., Ravenna — School — Bd. Educ. soon takes bids 2 story and basement, 93 x 112 ft., brick and concrete. $175,000. Miller & Son, 408 Dollar Bldg., Youngstown, archts.

O., Sandusky—Hotel—Midwest Hotel Co. plans 7 story, 210 room, Columbus Ave. and West Water St. $300,000. J. H. Herman, 423 Hancock St., interested in project.

O., Shaker Heights (Cleveland, P. O.)—Schools—Bd. Educ., Woodland and Woodbury Rds., plans 1 high and 2 grade schools, brick, steel and concrete. $1,000,000. J. W. Main, clk. Engineer and architect not selected.

Ind., Indianapolis — Apartment — Mary Stewart Apartment Co., c/o E. B. Hadley, archt., State Life Bldg., plans 3 story and basement, rein.-con., steel and brick. $150,000.

Ind., Indianapolis — Club — Jan. 29, by Rubush & Hunter, archts., 428 Amer. Central Life Bldg., 12 story and basement, 74 x 131 x 139 x 220 ft., granite limestone, terra cotta, steel, etc. Monument Circle, for Columbia Club. $1,000,000. T. A. Wynne, pres.

Ind., Kokomo — Church — St. Andrews Parish plans church. $150,000. C. E. Bigler, pastor. Engineer and architect not selected.

Ind., Michigan City — Apartment — F. Warren having plans prepared by Ahlgrim & Boonstra, Michigan City, 8 story and basement, 80 x 165 ft., rein.-con., steel and brick, Franklin St.

Ind., Ossian—School—School Trustees of Jefferson Twp., Bluffton, plans bond issue for high and elementary school, here. $150,000. G. W. Todd, Bluffton, trustee. Engineer and architect not selected.

Mich., Detroit—Clubhouse—Book Estate, Book Bldg., having plans prepared by L. Kamper, 3729 Cass Ave., 32 story, 352 ft. high, 50 x 80 ft. rein.-con., brick and steel, caisson foundation, Washington Blvd. $2,000,000.

Mich., Detroit—Office—C. F. Smith Co., 625 West Grand Blvd., having plans prepared by A. Kahn, 1000 Marquette Bldg., 3 story and basement, 70 x 80 ft. rein.-con., brick and stone, plain foundation, West Grand Blvd. $150,000.

Mich., Flint—School—Bd. Educ. having plans prepared by Malcomson & Higginbotham, 1219 Griswold St., Detroit, 3 story, rein.-con., brick and steel, plain foundation, Oak Grove. $750,000.

Ill., Chicago—Apartment—H. H. Goodfriend, c/o Newhouse & Bernham, archts., 4630 Prairie St., plans 3 story, 100 x 114 ft., fireproof, Drexel St. near 47th St. $275,000.

Ill., Chicago—Apartment—S. Vihon, c/o D. S. Klafter, archt., 64 West Randolf St., having plans prepared 3 story, 100 x 150 ft., fireproof, Kinsball and Ainslie Sts. $200,000.

Wis., Elkhart Lake—Sanatorium—Sheboygan Co., c/o G. W. Wisselink, chn., Hingham, having plans prepared by E. A. Stubenrauch, Img Bldg., Sheboygan, 3 story, 103 x 304 ft., brick, rein.-con. and steel, plain foundation, here. $150,000.

Wis., Kimberly—High and Grade School —School Dist. 3 soon takes bids 2 story and basement, brick, tile and concrete, plain foundation. $150,000. M. Kettenhafen, clk. Oppenhamer & Obel, Nicollet Bldg., Green Bay, archts.

Wis., La Crosse—Church—Evangelical Lutheran Church of Holy Trinity, c/o S. Roth, pastor, 1122 Ferry St., had plans prepared by Merman & Skogstad, Linker Bldg., superstructure, 2 story, 50 x 116 ft., brick and tile. $150,000. Noted Nov. 1.

Wis., Madison — Theatre, etc. — E. M. Micholson, 1949 Winnebago St., plans 2 story, theatre, store and office building, brick, rein.-con. and steel, plain foundation, Atwood St. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Apartment—S. Ettenheim & Sons, 209 Grand Ave., having preliminary plans prepared by Lindl, Lesser & Schutte, archts., 82 Wisconsin St., brick and concrete, plain foundation. $300,000.

Wis., Milwaukee—Apartment—W. Lillydahl, Jr., 579 Frederick Ave., plans 3 story and basement, brick and concrete, plain foundation, East Side. $150,000. Engineer and architect not selected.

Wis., Milwaukee — Bank — Natl. Exch. Bank, 367 Bway., plans brick and concrete, plain foundation, East Water St. $200,000-$300,000. Engineer and architect not selected.

Wis., Milwaukee—Church—Saron Evangelical Congregation, c/o H. H. Ebert, pastor, 1116 29th St., plans 2 story, brick and tile, plain foundation, Locust St. $150,000. Engineer and architect not selected.

Wis., Milwaukee — School — Jan. 31, by Leiser & Holst, archts., 105 Wells St., 2 story and basement, 90 x 100 ft., brick, tile and concrete, plain foundation, Fond du Lac Ave., for Zion Lutheran Congregation, c/o W. Matthes, 818 21st St., pastor. $150,000.

Wis., Milwaukee—Store and Apartment—Pentage Realty Co., c/o G. Psimaras, pres., 525 Marshall St., plans 2 story and basement, brick, tile and concrete, plain foundation. $150,000. Engineer and architect not selected.

Wis., Redgranite — City Hall, etc. — A. Berkholtz plans 3 story, 100 x 120 ft., city hall, opera house and store building, rein.-con., steel and brick, plain foundation. Engineer and architect to be selected soon.

Wis., Whitewater—School—Bd. Normal Regents, W. S. Kettle, secy., Madison, having plans prepared by A. Peabody, Capitol, Madison, 3 story, 60 x 140 ft. main building, rein.-con., brick and steel, plain foundation, at State Normal School, here. $210,000.

Wis., Verona—Asylum—Dane Co., c/o M. Sommers, chn., Madison, plans asylum, here. $200,000. A. D. Conover, engr., Tenney Bldg., Madison, taking bids on structural steel, steel sash, window guards, and copper screens for entire superstructure.

Ia., Waterloo—Hotel—Arcade Hotel Corp. having plans prepared by Proudfoot, Bird & Rawson, Hubbell Bldg., Des Moines, 6 story and basement, 150 x 210 ft., rein.-con., brick and terra cotta, plain foundation, 5th and Sycamore Sts., $1,000,000.

Kan., Kansas City—Court House—Wyandotte Co. plans court house. $1,000,000. W. Beggs, clk.

Neb., Columbus—High School—Bd. Educ. having plans prepared by Fiske & Meginnis, 533 Bankers Life Bldg., Lincoln, rein.-con., brick and stone. $300,000.

Neb., Lincoln—Asylum—Nebraska State Hospital having plans prepared by Fiske & Meginnis, 533 Bankers Life Bldg., 3 story, 33 x 211 ft. concrete, brick and stone. $150,000.

Neb., Lincoln—Hospital Fairview Methodist Congregation having plans prepared by Fiske & Meginnis, 533 Bankers Life Bldg., rein.-con. and brick. $400,000.

Neb., Omaha — Clubhouse — Knights of Columbus, 2301 Harney Ave., having preliminary plans prepared by L. A. Daly, 622 Peters Bldg., 6 story and basement, 148 x 152 ft. rein.-con., brick and stone. $500,000.

Mo., Canton—Dormitory—Culver-Stockton College plans 3 story dormitory to replace one recently destroyed by fire. $150,000. Engineer and architect not selected.

Mo., Kansas City—School—Redemptorist Fathers, 325 Hunter St., having revised plans prepared by E. P. Madorie, 1106 Continental Bldg., 3 story and basement, 160 x 168 ft. rein.-con., brick, steel and stone, Hunter Ave. $350,000. Noted Jan. 3.

Mo., St. Louis—Sunday School—Centenary Methodist-Episcopal Church, 16th and Pine Sts., soon takes bids 3 story and basement, brick, concrete and stone, Pine St. $150,000. Mauran, Russell & Crowell, Chemical Bldg., archts.

Ark., Pine Bluff—Temple—Sahara Temple, A.A.O.N.M.S. of A. F. & A. M., c/o C. H. Bohlinger, secy., plans temple to replace one recently destroyed by fire. $200,000. Engineer and architect not selected.

Tex., Dallas — Home — Methodist Sanitarium, c/o J. H. Groseclose, supt., having plans prepared by De Witt & Lemmon, Southwestern Life Bldg., concrete and brick nurses home, Oak Cliff. $150,000.

Tex., San Antonio—Home—Churches of Protestant Orphans Home plan home on Woodlawn Ave. and Hondera Rd. $150,000. $200,000. Engineer and architect to be selected soon.

Tex., San Antonio—Office—San Antonio Builders Exch., 201-207 Bedell Bldg., plans 6-8 story, brick and rein.-con. $150,000.

Okla., Bristow—School—City takes bids about Feb. 1, 3 story, 71 x 150 ft., brick and concrete. $150,000. C. L. Curran, Groom Bldg., archt. Noted Nov. 29.

Okla., Guthrie—Sanitarium and Dormitory—A. F. & A. M. Lodge having plans prepared by Hawk & Parr, Cotton Exch. Bldg., Oklahoma City, 4 story, 90 x 180 ft., brick, plain foundation, Harrison St. $150,000.

Okla., Tulsa—Depot—See "Railways."

Wash., Seattle — Apartment — University Improvement Co., 605 Minor Ave., having plans prepared by E. Beckett, 605 Minor Ave., 4 story and basement, 120 x 134 ft., concrete and steel, 1400-16 Boren Ave. $150,000.

Ore., Portland—Synagogue—Beth Israel Congregation, plans rebuilding synagogue, 12th and Main Sts., recently destroyed by fire. $300,000. M. S. Hirsch, 205 Burnside Ave., pres.

California — Exchanges, etc. — Pacific Telephone & Telegraph Co., 333 Grant Ave., San Francisco, appropriated $40,000,000 for 1924 general construction program, in addition to construction of exchange buildings (and purchasing sites for same), $8,400,000 will be used for central office equipment, $2,500,000 for inter-city communication system and toll line system, etc.

Calif., Hollywood—Hotel—S. B. Birds, archt., Frost Bldg., Los Angeles, preparing plans 4 story and basement, 75 x 175 ft., brick, Santa Monica Blvd., here. Owner's name withheld.

Calif., Livermore—Sanitarium—Del Valle Preventorium, c/o H. H. Meyers, archt., Kohl Bldg., San Francisco, having plans prepared five structures, second unit of tuberculosis sanitarium. $150,000.

Calif., Long Beach—Hotel—Long Beach Hotel Co., c/o Weeks & Day, archts., California Insurance Bldg., San Francisco, having plans prepared 12 story and basement, rein.-con., here. $2,000,000.

Calif., Los Angeles — Apartment — W. Marsh, et al., c/o T. Jewell, archt., Pacific Finance Bldg., having plans prepared 3 story and basement, 115 x 140 ft., frame and stucco, East Bway.

Calif., Los Angeles — Club — Jonathan Club, Pacific Electric Bldg., had plans prepared by Schultze & Weaver, Pacific Mutual Bldg., 12 story, 180 x 195 ft., brick and steel, 6th and Figueroa Sts. $2,000,000. Noted Dec. 6.

Calif., Los Angeles—Hotel—J. Toplitzky, H. W. Hellman Bldg., interested in syndicate which is having plans prepared by Schultze & Weaver, Pacific Mutual Bldg., 13 story, brick and steel, 7th and Bixel Sts. $5,000,000.

Calif., Los Angeles—Hotel, Apartment, Theatre and Office—C. H. Walters et al., 1153 South Norton St., plans 6 story and basement, 100 x 150 ft. hotel, rein.-con., Vermont Ave., to exceed $150,000; 3 story office and theatre, rein.-con., Vermont St., to exceed $300,000; 3 story, 100 x 150 ft. apartment, frame and plaster, Vermont St. $150,000. J. Frauenfelder, Story Bldg., archt.

Buildings (Continued)

Calif., Pasadena—College—Plans election to vote on bonds for junior college buildings.

Calif., Sacramento — Exchange — Pacific Telephone & Telegraph Co., 333 Grant Ave., San Francisco, plans 8 story, concrete and steel. J St. between 14th and 15th Sts., here. $175,000.

Calif., Sacramento—Theater—H. Blumfield, c/o Reid Bros., archts., 105 Montgomery St., having plans prepared fireproof motion picture theater, 33rd St. and Sacramento Blvd. $150,000.

Calif., San Bernardino—High School—San Bernardino Junior High School Dist. having plans prepared by H. E. Jones, Katz Bldg., and D. Mitcham, San Bernardino, 2 story, 225 x 250 ft., fireproof.

Calif., San Francisco—Apartment—W. C. Mahoney, archt., 892 Union St., preparing plans 4 story and basement, rein.-con., Franklin St. $150,000. Owners name withheld.

Calif., San Francisco—Apartment—W. C. Mahoney, archt., 892 Union St., preparing plans 5 story and basement, rein.-con., Leavenworth St. near Union St. $150,000. Owners name withheld.

Calif., San Francisco—Office—San Francisco Chamber of Commerce, Merchants Exch. Bldg., plans fireproof. To exceed $150,000.

Calif., San Francisco—Store and Office—Kiernan-O'Brien Realty Co., Alexander Bldg., having plans prepared by A. H. Knoll, Hearst Bldg., remodeling and reconstructing 3 story store and office, and erect adjoining 1 story, 75 x 150 ft. market, Mission and 22nd Sts. $200,000.

Calif., San Mateo—Theatre and Store—E. Arkbush et al., c/o Weeks & Day, archts., California Insurance Bldg., San Francisco, having preliminary plans prepared rein.-con., here. $200,000.

Calif., San Pedro—Hotel—B. O. McCormick Co. having preliminary plans prepared by M. R. Lawson, San Pedro. 4 story, fireproof, 11th St. and Pacific Ave. To exceed $175,000.

Calif., Woodland—High School—Woodland Union High School Dist. having preliminary plans prepared by W. H. Weeks, 369 Pine St., San Francisco, brick and concrete, to replace one recently destroyed by fire. To exceed $150,000.

Que., Montreal—High School—Protestant Bd. School Comrs., Belmont St., soon takes bids 1 story addition to high school, assembly hall and swimming pool, University St. $180,000. K. G. Rea, 285 Beaver Hall Hill, archt.

BIDS DESIRED

Mass., Middleboro — High School — Jan. 25, by School Com., 3 story and basement, 100 x 150 ft., brick, plain foundation. $225,000. E. I. Wilson, 109 State St., Boston, archt. Noted June 14.

N. Y., Amsterdam—Schools—Feb. 6, by Bd. Educ. Junior High School, H. F. Daly, 15 East Main St., archt.; also 2 grade schools, L. H. Niles, 5 Grove St., archt. G. L. Lockhart, Inc., 1353 University Ave., St. Paul, Minn., associated archt. Noted Sept. 6.

N. Y., Bellaire (Jamaica P. O.)—School—Feb. 7, by Bd. Educ., 500 Park Ave., P. S. 109, brick, steel and stone, plain foundation, 92nd Ave. and 213th St., here. Former bids rejected. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. Noted Jan. 17.

N. Y., Brooklyn—School—Feb. 7, by Bd. Educ., 500 Park Ave., New York, P. S. 201, brick, steel and stone, plain foundation, 22nd Ave. and 80th St., here. Former bids rejected. W. H. Gompert, Flatbush Ave. extension and Concord St., archt. Noted Jan. 17.

N. Y., Marcy—House—Feb. 6, by State Hospital Comn., Albany, house for assistant superintendent, at Utica State Hospital, Marcy Div., here. S. W. Jones, state archt.; adv. E. N.-R. Jan. 24.

N. J., Bordentown—Dormitory—Feb. 1, by Bd. Educ., State House, Trenton, 3 story, 55 x 175 ft., for Manual Training & Industrial School for Colored Youths, here. $187,000. Guilbert & Bettelle, Commerce Bldg., Newark, archts. Noted Jan. 10.

N. J., Cedargrove—Hospital—Feb. 8, by G. C. Bergen, purch. agt. Essex Co., Court House, Newark, 3 story and basement, 50 x 450 ft. reception building, and 2 story and basement, 80 x 450 ft. convalescent building, brick, plain foundation, at Overbrook Hospital, here. $1,000,000. F. S. Sutton, 402 Broad St., Newark, archt. Runyon & Carey, 845 Broad St., Newark, engrs.

N. J., Irvington—High School—Feb. 20, by Bd. Educ., brick, steel and stone, plain foundation, to contain 2,000,000 cu.ft., Clinton Ave. W. A. Sherman, secy. Noted Oct. 25.

Pa., East Washington—High School—Jan. 28, by Bd. Educ., 1 story and basement, 85 x 167 ft. $150,000. G. H. Schwan, Peoples Bank Bldg., Pittsburgh, archt. Noted Jan. 10.

Pa., Johnstown—Hospital—Bd. Trustees Cambria Co. taking bids and opens same about last week in February, 3 story and basement, 80 x 320 ft. hospital with 1 story wings, on suburban tract. $250,000. W. R. Myton, 1204 First Natl. Bank Bldg., archt.

Pa., Phila. — Apartment — Jan. 25, by Hoffman-Henon Co., archts., Finance Bldg., three 4 story and basement, 46 x 104 ft. brick and steel, plain foundation. City Line and Bryn Mawr. Owners name withheld. Noted Dec. 20.

Del., Claymont—School, etc.—Feb. 11, by Bd. Educ., 60 x 197 ft. main building for elementary and high school, also 61 x 66 ft. auditorium and gymnasium. $250,000. W. G. Robelen, pres.

Md., Baltimore—Apartment—Feb. 1, by C. H. Hebrank, archt., Strathmore Ave., 4 story, brick, plain foundation, 39th St. and University Parkway, for Stony Run Apartments, c/o architect. $175,000.

Md., Baltimore — Church, Community Building and Parsonage—Feb. 5, by F. J. Heldrich, archt., 1156 Longwood St., 1 and 2 story, 71 x 175 ft., stone, Reistertown Rd. and Elgin Ave., for St. Johns Concordia Evangelical Lutheran Church. $150,000.

N. C., Fayetteville—Office—Jan. 28, by Directors Natl. Bank of Fayetteville, 10 story and basement. $300,000. Noted Nov. 1.

O., Akron—High School—Feb. 19, by Bd. Educ. constructing Garfield High School, Firestone Park. $800,000. M. M. Konarski, 102 South Union St., archt.

O., Akron—Municipal—Mar. 1, by Bd. Control, 8 story, South High St. $900,000. Council authorized sale of $600,000 bonds this week. Good & Wagner, 209½ Water St., archts. Noted Nov. 22.

O., Cleveland — Apartment — L. Pulin, 10725 Bryant Ave., taking bids 3 story and basement, 38 x 160 ft., brick, East 88th St. $175,000. Braverman & Havermaet, Ulmer Bldg., archts.

O., Cleveland—Commercial and Garage—J. Babin, Williamson Bldg., taking bids and opens same about Feb. 2, 3 story and basement, 55 x 160 ft., brick and steel, 3602 Euclid Ave. $150,000. N. Petti, Williamson Bldg., archt. Noted Nov. 29.

O., Cleveland — Hospitals — Crowell & Little Constr. Co. (advisors to owners) 3715 Prospect Ave., taking bids and open same about Feb. 15, for superstructure of two 7 story, 71 x 157 ft. and 142 x 148 ft., brick and rein.-con., 11020-50 Euclid Ave., for Babies & Childrens Hospital, c/o A. Garfield, archt., Natl. City Bldg. $3,300,000.

Mich., Mt. Pleasant—Infirmary—Jan. 29, by P. Thompson, clk. Isabella Co., 2 story and basement, rein.-con., brick and steel, plain foundation. $160,000. Fisher Bros., 24 West Huron St., Pontiac, archts.

Mich., St. Johns—High School—Feb. 4, by C. A. Putt, secy. Bd. Educ., 2 story and basement, rein.-con., brick and steel, plain foundation. $175,000. S. D. Butterworth, 909 Pruden Bldg., Lansing, archt.

Ill., Chicago—Apartment—J. H. Klafter, archt., 127 North Dearborn St., taking bids 3 story, 75 x 125 ft., fireproof, Lincoln and Aubert Sts., for S. Dulkin, c/o architect. $150,000.

Ill., Chicago—Apartment—W. M. Samuels, 38 North Dearborn St., taking bids 3 story, fireproof, Leland and Talman Sts. $150,000. P. F. Olsen, 720 Cass St., archt.

Ill., Chicago — Apartment — W. Story, 1261-77 West Washington St., taking bids 3 story, 60 x 120 ft., fireproof, Greenview and Thorndale Sts. $150,000. R. C. Ostergren, 155 North Clark St., archt.

Ill., River Forest — Church and Parish House—Feb. 1, by Holmes & Flinn, archts., 8 South Dearborn St., Chicago, 1 and 2 story, 61 x 112 ft. and 85 x 95 ft., brick, stone and concrete, Quick St., for 2nd Presbyterian Church. $200,000. Noted Jan. 10.

Ill., Waukegan—Business—Feb. 15, by J. Blumberg, 112 South Genesse St., 5 story, 90 x 134 ft., brick and concrete, plain foundation. $200,000. A. Epstein, 2001 West Pershing Rd., Chicago, archt. and engr.

Wis., Chippewa Falls—School—Bd. Educ. taking bids 2 story, 20 room, brick, steel and concrete. $150,000. P. T. Cahill, 4502 Prospect Ave., Cleveland, O., archt.

Kan., Coffeyville — Hotel — Feb. 5, by Shepard & Weiser, archts., R. A. Long Bldg., Kansas City, Mo., 6 story and basement, 100 rooms, rein.-con. and brick, for Coffeyville Building and Improvement Co. $175,000.

Minn., Northfield — Home — Feb. 8 (extended date), by I.O.O.F. of Minnesota, A. L. Bolton, 604 Pittsburgh Bldg., St. Paul, secy., superstructure for 3 story, 93 x 146 ft., rein.-con., brick and tile, here. Total $150,000. W. L. Alban, 347 Endicott Bldg., St. Paul, archt. Noted Jan. 17.

Minn., St. Paul—High School—Jan. 29, by H. W. Austin, city purch., 3 story and basement, 150 x 250 ft. with 2 story, 48 x 90 ft. wing, rein.-con., brick and tile, Blair and Lefond Sts. $400,000. F. X. Tewsem, City Hall, archt. Noted Feb. 8.

Tex., Brownwood—Hotel—A. Moore taking bids 6 story, 80 x 140 ft., brick, stone and rein.-con., plain foundation. $160,000. H. S. Green, Alamo Bank Bldg., San Antonio, archt.

Calif., Livingston—High School—Trustees Merced Union High School Dist. receiving bids 1 story, rein.-con. school with auditorium. $200,000. W. H. Weeks, 369 Pine St., San Francisco, archt.

Calif., Long Beach—Bank and Office—Curlett & Beelman, archts., Union Bank Bldg., taking bids on steel for 13 story, 75 x 150 ft. rein.-con., brick and steel, Pine Ave. and 1st St., for Security Trust & Savings Bank, 502 South Spring St., Los Angeles.

Calif., Los Angeles — Church — H. L. Pearce, archt., Wright-Callendar Bldg., receiving bids frame and plaster, West Hollywood Dist., for Crescent Heights Methodist Episcopal Church. $200,000.

Calif., Los Angeles—Hall—Feb. 4, by Supervs., Los Angeles Co., furnishing and erecting granite for Hall of Justice. To exceed $150,000. Noted Apr. 12.

Calif., Santa Ana—Jail—Jan. 29, by Supervs. Orange Co., jail. $175,000. F. Benchly, Fullerton, archt.

Calif., Santa Barbara — Temple — C. Werner, archt., Santa Fe Bldg., San Francisco, receiving bids 3 story and basement, rein.-con., for Santa Barbara Masonic Temple Assn., c/o architect. $200,000. Noted Dec. 6.

BIDS RECEIVED

O., Willoughby—High School—Bd. Educ., 2 story, 73 x 93 ft., brick, concrete and metal lumber, from Payne & Beymar, Painesville, $115,067. Noted Nov. 1.

Mich., Ironwood—School—Bd. Educ., Jan. 15, 3 story and basement, rein.-con., brick and tile, from Bartleson & Ness, Minot, N. D. $755,000.

Calif., Los Angeles — Los Angeles Co., furnishing 3,000 tons structural steel and iron work for first 3 story unit of Museum, Art and Science, Exposition Park, from Llewllyn Iron Wks., Redondo and Main Sts., $193,750. Noted Jan. 3.

Calif., San Rafael—Dormitories, etc.—J. J. Foley, archt., 770 5th Ave., San Francisco, five 2 story, rein.-con. dormitories, gymnasium and chapel, here, from J. A. Bryant, 185 Stevenson St., San Francisco, for Roman Catholic Archbishop of San Francisco, 1100 Franklin St., San Francisco. To exceed $150,000. Noted Jan. 17.

CONTRACTS AWARDED

N. Y., Albany—Sales Terminal and Motor—E. B. Stratton Motor Corp., 25 Washington Ave., 4 story, 66 x 75 ft., and 4 story, 66 x 226 ft., brick and steel, Washington Ave. and Elks St., to J. N. Finn & Son, Albany. Noted Dec. 6.

N. Y., Buffalo—County—Erie Co., county building, Eagle St., to C. H. Everitt, 295 Auburn Ave., $279,165. Noted Dec. 6.

N. Y., New York—Apartment—Consolidated Constr. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, 100 x 100 ft., brick, steel and stone, plain foundation, Morris Ave., by day labor. $250,000.

N. Y., New York—Loft—Bricken Constr. Corp., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 18 story, 100 x 150 ft., brick, steel and stone, plain foundation, 247 West 37th St., by day labor. $900,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., P. S. 80, brick, steel and stone, plain foundation, East Mosholu Parkway, to Niewenhouse Co., Inc., 316 East 161st St., $779,000 deduct $12,000. Noted Jan. 17.

Buildings (Continued)

N. Y., St. George—School—Bd. Educ., 500 Park Ave., New York, P. S. 16, brick, steel and stone, plain foundation, Daniel Low Terrace through to Monroe Ave., here, to Staten Island Constr. Co., Inc., 206 Bay St., Tompkinsville, $275,256. Noted Jan. 10.

N. J., Lawrenceville—Dormitory—Lawrenceville Preparatory School, 2½ story, 87 x 294 ft., brick and stone, to Matthews Constr. Co., Alexander St., Princeton, $226,000.

N. J., Montclair—Bank—Montclair Savings Bank, 441 Bloomfield Ave., brick, steel and stone, plain foundation, Bloomfield Ave., to J. S. and L. Carlson, Walnut St. Archts. est. $250,000. Noted Nov. 1.

N. J., Paterson—High School—Bd. Educ., 3 story, 250 x 300 ft., brick, steel and stone, plain foundation, Park Ave. and Market St., to McGee Constr. Co., 142 1st St., Newark. Archts. est. $1,000,000. Noted Oct. 18.

N. J., Summit—Church—St. Theresas Roman Catholic Church, 306 Morris Ave., brick, cast stone and limestone, plain foundation, Morris Ave., to G. D. McCarthy, 15 East 40th St., New York City. Archts. est. $250,000.

Pa., Homestead—Exchange—Bell Telephone Co., 416 7th Ave., Pittsburgh, 2 story and basement, 50 x 79 ft. Hazel Way and 9th Ave., to Conley & DeMey, 127 North Hiland Ave., Pittsburgh. Archts. est. $150,000.

Pa., Phila.—Bank—Stearns & Woodnutt, archts., St. Girard Bldg., 1 story, 70 x 114 ft. rein.-con., brick, steel and stone, plain foundation, 4344 Frankford Ave., for Frankford Trust Co., to F. V. Warren Constr. Co., 1913 Arch St. Noted Dec. 20.

Pa., Pittsburgh — Court House — Comrs. Allegheny Co., Court House, altering and remodeling court house, Grant St., to A. & S. Wilson Co., 541 3rd Ave. Archts. est. $150,000.

Md., Baltimore — School — Pub. Impvt. Com., 3 story and basement, 111 x 211 ft., brick and concrete, plain foundation, Jackson Sq., Fairmont Ave. and Fayette St., to P. C. Streett Eng. Co., 406 St. Paul St., heating and ventilating in general contract. Noted Jan. 17.

Md., Baltimore—Store—Hutzler Bros., Howard and Saratoga Sts., 5 additional stories, 74 x 102 ft. and 96 x 118 ft., to B. F. Bennett Building Co., 123 South Howard St., $500,000. Archts. est. $550,000. Noted Jan. 3.

Md., Baltimore — Store — Trustees Mercantile Trust and Deposit Co., Calvert and Redwood Sts., 4 story, 40 x 70 ft., Franklin and Charles Sts., to D. M. Andrew Co., Mt. Vernon Ave. and 26th St., $150,000. Noted Jan. 3.

N. C., Greensboro—Store—Meyers Department Store, 4 story and basement, 65 x 157 ft., granite, terra, cotta and brick, Elm and Sycamore Sts., to Angle & Moser, Greensboro.

O., Cleveland—Apartment—B. Benjamin, 9917 Parkgate Ave., 3 story and basement, brick, 2036 East 100th St., to Winuker Bros., 9305 Pierpont Ave. Archts. est. $325,000. Noted Nov. 29.

O., Cleveland—Apartment—S. Rosen, 608 St. Clair Ave., N.W., 3 story and basement, 37 x 112 ft., brick. 10206 Wilbur Ave., to M. Berkoff, 3346 East 135th St. Archts. est. $150 000.

Mich., Ann Arbor—Nurses Home—A. Kahn, archt., 1000 Marquette Bldg., Detroit, 4 story and basement, 250 rooms, rein.-con., brick and steel, plain foundation, Ann St., for University Hospital, to H. G. Christman Co., 315 Stevens Bldg., Detroit, $1,000,000. Noted Dec. 13.

Mich., Detroit—Nurses Home—Ford Hospital, West Grand Blvd., 5 and 6 story and basement, 152 x 260 ft. rein.-con., brick and steel, plain foundation, Byron Ave., to O. Misch & Co., 159 East Columbia Ave., $1,500,000.

Mich., Detroit—Nurses Home—Ford Hospital, West Grand Blvd., rein.-con., brick and steel, plain foundation, Hamilton Blvd., to O. Misch Co., 159 East Columbia St., $150,000.

Mich., Detroit—Office—Buhl and Co., Buhl Bldg., 26 story and basement, 120 x 187 ft. rein.-con., brick, steel and stone, Griswold St., to Davis & McGonigle Co., 1860 Penobscot Bldg., $5,000,000. Noted Dec. 6.

Mich., Flint—High School—Bd. Educ., 2 story and basement, rein.-con., brick and steel, plain foundation, to O. F. Miller Co., Kalamazoo, $515,000.

Ill., Chicago — Apartment — E. Wiltgen, 2356 Kenilworth St., 3 story, 91 x 169 ft., fireproof, 2346-54 Kenilworth St., to N. S. Constr. Co., 4431 North Kedgie St. Archts. est. $150,000.

Wis., La Crosse — Convent — Franciscon Sisters, 709 South 9th St., 4 story, 50 x 173 ft. and 21 x 33 ft., brick and concrete, plain foundation, to P. Nelson & Son, Newburg Bldg. Archts. est. $150,000.

Kan., Arkansas City — Theater — G. P. Burford, et al. 2 story and basement, rein.-con., brick and stone, 1,200 capacity, general contract to G. Gasman, Arkansas City. Est. cost $150,000.

Kan., St. Francis—Court House—Cheyenne Co., 3 story, 60 x 110 ft., concrete, brick and stone, plain foundation, on Square, general contract to T. Howard, Hutchinson. Archts. est. $150,000. Noted Oct. 4.

Mo., Kansas City—School—Bd. Educ., general contract 2 story and basement, 60 x 110 ft. addition to Bristol School, to G. Fuller Green Constr. Co., 424 Rialto Bldg., $190,000. Noted Nov. 29.

Ark., Morrillton — Office — First Natl. Bank, 5 story and basement, brick, stone and concrete, to J. P. Jones, Morrillton, $175,000.

Okla., Tulsa—Church—Immanuel Baptist Church, 1502 East Burn St., 2 story, brick and stone, 2nd and Zanthus Sts., to O. Robinett, Tulsa. Archts. est. $150,000.

Colo., Denver—High School—Bd. Educ. general contract 2 and 3 story, brick and rein.-con., Humboldt and Franklin Sts. between 31st and 32nd Aves., from P. J. Sullivan, Barth Blk., $624,400 deduct $27,200 for terra cotta instead of Bedford stone; A. Danielson & Son, McMann Blk., $626,000 deduct $19,500 for terra cotta instead of Bedford stone.

Wash., Seattle — Medical — Metropolitan Bldg. Co., Henry Bldg., 7 story, rein.-con., 4th and University Sts., to Grant-Smith & Co., Henry Bldg., on cost plus basis. Archts. est. $750,000. Noted Oct. 4.

Calif., Long Beach — Church — Second Church of Christ Scientists, Markwell Bldg., rein.-con., 7th and Cedar Sts., to Trewhitt-Shields Co., Western Mutual Bank Bldg., Los Angeles, $150,000. Noted Nov. 8.

Calif., Los Angeles—Office—Cahn-McCabe Co., 716 South Spring St., 13 story and basement, 60 x 140 ft., brick and steel, 7th and Spring Sts., to Edwards, Wildey & Dixon, Black Bldg.

Calif., Oakland—Hospital Administration—Alameda Co., 4 story, rein.-con., to Clinton Constr. Co., 923 Folsom St., San Francisco, $483,800. Noted Dec. 6.

Calif., San Francisco—Apartment—A. Johnson, 47 Belvedere St., will build three 3 story and basement, frame and stucco, Van Ness Ave., by day labor. $50,000 each. Noted Jan. 17.

Calif., Santa Rosa—Exchange—Pacific Telephone & Telegraph Co., 333 Grant Ave., San Francisco, 3 story and basement, rein.-con. and steel, 2nd and B Sts., here, to Monson Bros., 251 Kearny St., San Francisco, $150,000.

Federal Government Work

PROPOSED WORK

Va., Hampton Roads—Breakwater Pier—Spec. 4944—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to north breakwater pier at Naval Base, here.

Ky., Louisville—Boilers—U. S. Engineer, P. O. Box 72, soon in market for 7 boilers, Scotch marine "wet back" type, for derrick boats.

Ky., Louisville—Crib Timbers—U. S. Engineer, P. O. Box 72, plans to purchase 410 pieces yellow crib timbers, 10 x 12 in. x 20 ft., about 82,000 ft.

Ky., Louisville—Swinging Engines—U. S. Engineer, P. O. Box 72, soon takes bids 5 swinging engines, double cylinder 7 x 10, for derrick boats.

Calif., Mare Island—Dike—Spec. 4941—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans additional riprapping longitudinal dike, here.

H. T., Pearl Harbor—Hospital—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans hospital here.

P. I., Cavite—Fire Protection—Spec. 4942—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans fire protection for Canacao Hospital, here.

BIDS DESIRED

Md., Baltimore—Roof—Feb. 12, by Treasury Dept., Superv. Architects Office, Wash., D. C., new roof over Call Room at U. S. Custom House, here; adv. E. N.-R. Jan. 24.

D. C., Wash.—Steel Piles—Feb. 5, by U. S. Engineer, War Dept., Wash., D. C., furnishing 3,155,000 lb. steel sheet piles 20, 30 and 35 ft. long for Dams 45 and 26, Ohio River.

Fla., Jacksonville—Jetty—Feb. 6, by U. S. Engineer, Jacksonville, repairing jetty at entrance to St. Johns River; adv. E. N.-R. Jan. 24.

Ala., Florence—Cranes—Feb. 5, by U. S. Engineer, Florence, furnishing, and erecting electric traveling cranes, 150 tons, in power house at Wilson Dam, Tennessee River; adv. E. N.-R. Jan. 24.

Miss., Gulfport—Breakwater—Feb. 14, by U. S. Engineer, Mobile, Ala., pile and stone breakwater in Mississippi Sound, here; adv. E. N.-R. Jan. 24.

Ky., Louisville—Boiler Tubes—U. S. Engineer, P. O. Box 72, in market for 100 boiler tubes, 3 in. x 15 ft., No. 10 gage, lapwelded, charcoal iron.

Ky., Louisville—Pump—U. S. Engineer, P. O. Box 72, in market for one 12 in. dredging pump.

Ky., Owensboro — Hard Wood Piles — Jan. 29, by U. S. Engineer, P. O. Box 72, Louisville, furnishing 1,200 hard wood round piles 25 and 30 ft. long, for Dam 46.

Wis., Milwaukee—Cement—Feb. 20, at U. S. Engineer Office, Milwaukee, furnishing cement; adv. E. N.-R. Jan. 24.

Wis., Milwaukee—Steel Bars—Feb. 20, by U. S. Engineer, furnishing steel reinforcing bars; adv. E. N.-R Jan. 24.

Wash., American Lake—Laundry—Feb. 25, by U. S. Veterans Bureau, Room 791, Arlington Bldg., Wash., D. C., laundry building, here F. T. Hines, dir.; adv. E. N.-R. Jan. 24.

Ore., Portland—Sand Pumps—Feb. 4, by U. S. Engineer, 2 sand pumps.

Calif., Humboldt Bay—Stone—Mar. 10 by U. S. Engineer, War Dept., furnishing 180,000 tons more or less of stone for north jetty here.

BIDS RECEIVED

D. C., Wash.—Filtration Plant, etc.—U. S. Engineer, 250 Old Land Office Bldg., Wash., D. C., filtration plant and pumping station substructures, etc. for Dist. of Columbia Water supply system, from C. H. Tompkins, 1612 Park Rd., (1) $0.83 (2) $3 (3) $0.30 (4) $50 (5) $18.60 (6) $12.90 (7) $10 (8) $0.054 (9) $0.11 (10) $0.13 (11) $35 (12) $35 (13) $400. Noted Dec. 20.

Ind., Leavenworth—Lumber—U. S. Engineer, P. O. Box 78, Louisville, Ky., 53,000 ft. white oak for Dam 44, Ohio River, from W. H. Dawkins Lumber Co., Parkersburg, W. Va., $135 per M. Noted Jan. 10.

Wis., Milwaukee—Scow and Barge—U. S. Engineer, Federal Bldg., 2 steel dump scows and one steel barge from Sturgeon Bay Dry Dock Co., Sturgeon Bay, $47,500. Noted Dec. 20.

CONTRACTS AWARDED

D. C., Wash.—Underpinning Foundations—Spec. 4934—Bureau Yards & Docks, Navy Dept., Wash., D. C., underpinning foundations at Navy Building here, to Underpinning Foundation Co., 342 Madison Ave., New York City, $23,075. Noted Jan. 17.

Ga., Savannah—Dredging—U. S. Engineer, dredging in Savannah Harbor, to Seaboard Dredging Co., Durkee Bldg., Jacksonville, Fla., $119,074. Noted Dec. 6.

Calif., Mare Island—Fuel Oil Storage—Spec. 4717—Bureau Yards & Docks, Navy Dept., Wash., D. C., fuel oil storage at Navy Yard, to Butte Electric Equipment Co., 530 Folsom St., San Francisco, (6) $126,701. Noted Dec. 6.

Porto Rico—San Juan—Quarters—Spec. 4909—Bureau Yards & Docks, Navy Dept., Wash., D. C., quarters and auxiliary buildings at Naval Radio Sta., here, to M. Benitez Rexach, P. O. Box 905, $11,500. Noted Jan. 10.

Unclassified

PROPOSED WORK

Golf Course and Swimming Pool—West Hartford (Branch of Hartford), Conn—Wampanoag Country Club, B. N. Carvalho, member, Bloomfield Ave., plans 36 hole golf course, $500,000; also swimming pool $150,000. Engineer and architect not selected.

Station Widening — Brooklyn, N. Y—Transit Comn., 49 Lafayette St., New York, soon takes bids widening DeKalb Ave. subway station of B.-M. T. and providing platforms for express tracks. $140,000.

Jetty, etc.—Belmar, N. J.—Plans 500 ft. stone jetty at inlet, and 150 x 200 ft. swimming pool. C. Cook, Asbury Park Trust Bldg., Asbury Park, engr.

Unclassified (Continued)

Golf Course — Opelika, Ala. — Opelika Country Club plans golf course on 100 acre site. $25,000.

Swimming Pool — New Orleans, La. — Audubon Park Comn., Audubon Park, plans to build swimming pool, 385 ft. long, 200 ft. wide, also indoor pool, 100 ft. long, 40 ft. wide. $110,000. H. J. Neale, supt. and landscape archt.

Wharf—New Orleans, La.—Eng. Dept. of Dock Bd., 1 Canal St., preparing plans and takes bids about Mar. 1, raising timber wharf 900 ft. long, and 260 ft. wide, and ratproofing rear platforms of wharf at foot of Erato St., work involved is 260 ft. wide and 900 ft. long $450,000.

Fire Alarm System—South Bend, Ind.—City plans new fire and police signal alarm system. $110,000.

Park—South Bend, Ind.—City plans to expend $30,000 for improvements to Erskine Park, includes regrading playgrounds, etc.

Steam Heating Plant—Randon Lake, Wis.—St. Marys Catholic Congregation, c/o F. Hillenbrandt, pastor, having plans prepared for steam heating plant for church and school building. $25,000. J. E. Hinnen, Fond lu Lac, engr.

Subway—Wichita, Kan.—City completing plans subway under Terminal tracks, two 20 ft. roadways, two 6 ft. sidewalks. $150,000. R. L. Brockway, City Bldg., engr.

Voltage Line, etc.—St. Joseph, Mo.—St. Joseph Ry. Light, Heat & Power Co., 6th and Francis Sts., plans high voltage line 10 mi. through industrial district $50,000; 6 mi. distribution lines in residential section $65,000; coal handling crane, motor generator, boiler room signal system, coal crusher and other power plant improvements $200,000.

Levee—Lake Village, Ark.—See "Excavation, Drainage, Irrigation."

Park—Dallas, Tex.—J. C. Riner, Simpson Bldg., having plans prepared park, incl. concrete swimming pool, walks, drives, dance hall, etc. $100,000. Work will probably be done by day labor. G. Tuebner, 721 Ash Ave., Fairmont, Mo., engr.

Levee—Ferris, Tex.—Ellis Co. Levee Impvt. Dist. 5, Waxahachie, plans election soon to vote on $65,000 bonds for levee improvements, near here. C. T. Forest, Waxahachie, engr.

Retaining Wall—Highland Park, (Dallas P. O.) **Tex.**—Having plans prepared concrete retaining wall on Turtle Creek. $25,000. G. D. Fairtrace, city engr.

Street Lights — Lockhart, Tex. — See "Waterworks."

Stills—Port Arthur, Tex.—Texas Co. plans 4 new stills. $75,000.

Ventilation System—San Antonio, Tex.—Maverick Estate having plans prepared ventilation system for Maverick office building. Houston and Presa Sts. $25,000-$33,000. L. Harrington & Co., Houston Bldg., engrs.

Telephone Lines—California—See Buildings.

Fire Alarm System, etc.—Fresno, Calif.—Plans election to vote on bonds for installing 250 fire alarm boxes and extending police telegraph and flashlight systems. $25,000 or more. T. A. Stranahan, city engr.

Tennis Courts, Pavilion, etc.—Los Angeles, Calif.—Westward-Ho Club, c/o M. Hunt, Hibernian Bldg., having plans prepared tennis courts, dance pavilion, club house, landscape work, etc., Venice Blvd. To exceed $150,000.

Street Lighting System—Oroville, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, appropriated $40,000, new poles and rewiring practically entire system, here.

Rock Crushing Plant—San Francisco, Calif.—Amer. River Bldg. Materials Co., 719 Crocker Bldg., J. E. Cook, interested, plans to build and equip rock crushing plant, bunkers, etc., on site bordering on American River. $50,000 or more.

Gas Mains—San Leandro (Branch of Oakland), **Calif.**—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, appropriated $32,500 for 20,000 ft. of 6½ in. high pressure gas line, here.

Ice Rink — Stratford, Ont. — Stratford Arena Co. plans steel and cement structure, will install artificial ice plant. $150,000.

BIDS DESIRED

Tower—New Orleans, La.—Feb. 14, by Bd. Port Comrs., Suite 200, New Orleans Court Bldg., unloading tower on wharf at coal handling plant; adv. E. N.-R. Jan. 24.

BIDS RECEIVED

Roadway Columns—New York, N. Y.—Transit Comn., 49 Lafayette St., Jan. 18, from Gotham Constr. Co., 220 Bway., removing roadway columns and reconstructing structure of Manhattan-Bronx Rapid Transit R.R. at East 177th St. (Tremont Ave.) and Boston Rd., Bronx Boro, Agreement "CV," 170 cu.yd. earth excav. $9 per cu.yd., 50 cu.yd. concrete $29,100 tons new steel $129, lump sum bid for rest of work $12,863, total $28,743. Noted Jan. 10.

CONTRACTS AWARDED

Gas Holder—New London, Conn.—Connecticut Power Co., gas holder, 1,000,000 cu.ft. capacity, steel plate on concrete foundation, to Stone & Webster Inc., 47 Milk St., Boston, $300,000.

Sprinkler System—Syracuse, N. Y.—C. E. Crouse, chn. State School for Mental Defectives, sprinkler system, to W. A. Alexander, 23 Charlotte St., Rochester, $18,999.

Shed—Baltimore, Md.—Baltimore & Ohio R.R., B & O Bldg., 1 story, 23 x 78 ft., timber, Fort Ave., to Frainie Bros. and Haigley, 19 West Franklin St. Archts. est. $80,000.

Rebuilding Dock, etc.—Wilmington, N. C.—See "Industrial Works."

Electrification—Dallas, Tex.—Texas Interurban R.R. Co., Interurban Bldg., electrification of 30 mi. Missouri, Kansas & Texas R.R. (under lease) from Dallas to Denton, $80,000, also 2 substations, $40,000 each, to R. Meriwether, c/o owner.

Gas Tank—Tacoma, Wash.—Tacoma Gas & Fuel Co., 250,000 cu.ft. gas tank, to Western Pipe & Steel Co., Oakland, Calif., $53,000.

Lighting System—Los Angeles, Calif.—Ornamental lighting system, to C. W. Sparks, Henne Bldg., $41,632. Noted Jan. 10.

Transit Shed—Los Angeles, Calif—City, steel transit shed, on Pier 1, to Lynch Constr. Co., 1117 Central Bldg., Los Angeles, $64,300. Noted Dec. 20.

Deck on Wharf — Sacramento, Calif. — City will build concrete deck on wharf, by day labor under supervision of A. Givan, city engr. $40,000.

Wharf — Pembroke, Ont. — Dept. Pub. Wks., Parliament Bldg., Ottawa, constructing new wharf here, to W. Bermingham, Kingston, $116,000. Noted Dec. 27.

Materials and Equipment

PROPOSED WORK

Stone — Newark, N. J. — G. C. Bergen, purch. agt. Essex Co., Court House, soon takes bids various sizes crushed stone for highway maintenance. $25,000. W. A. Stickel, Court House, engr.

Sweeper—Eau Claire, Wis.—Soon takes bids pickup street sweeper (power). O. E. Oien, city clk.

Road Roller—Milwaukee, Wis.—Milwaukee Electric Ry. & Light Co., Pub. Serv. Bldg., soon takes bids one 5 ton tandem gas road roller. P. H. Pinkley, c/o owner, engr.

Telephone Equipment — California — See Buildings.

Road Equipment—Beverly Hills, Calif.—City plans to purchase tractors, scarifiers, road rollers, rooters, graders, sweepers, asphalt kettles, etc. $25,000. J. C. Albers, city engr.

Street Sweeper — Fresno, Calif. — City plans to purchase auto street sweeper. $5,000 to $8,000. W. Stranahan, city engr.

Pipe—Glendale, Calif.—City plans to purchase 115 tons 4- to 12-in. Class B c.i. pipe.

BIDS DESIRED

Asphaltic Cement, etc.—Long Island City, N. Y.—Jan. 30, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 950 tons asphaltic cement in tight containers; 600,000 gal. road oil (cold application); 100,000 gal. asphaltic road oil (hot application); 150,000 gal. asphaltic macadam binder; 25,000 gal. asphalt for patching (cold application); 45,000 gal. fuel oil.

Steam Roller—Long Island City, N. Y.—Jan. 28, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 1 gasoline steam roller.

Tractor, etc.—Schenectady, N. Y.—Common Council in market for 5 ton tractor and snow plow.

Concrete Mixer, etc.—Cape May, N. J.—Jan. 31, by City Comrs., concrete mixer, tandem roller, scarifier, tractor and steel road forms; adv. E. N.-R. Jan. 24.

Crushed Stone, Gravel, etc.—Baltimore, Md. — Jan. 30, by Bd. Awards, furnishing and delivering during 1924 crushed stone and gravel, vitr. paving blocks, creosoted wood blocks, vitr. sewer pipe and cinders to Highway Eng. Dept. B. L. Crozier, City Hall, highway engineer.

Motor Flushers—Baltimore, Md.—Jan. 23, at office of City Register, furnishing one or more 1,500 gal. motor flushers. S. Purcell, ch. engr.

Tanks—Tampa, Fla.—Imperial Petroleum Corp. plans two 35,000 bbl. gasoline, one 20,000 bbl. gas, one 12,000 kerosene and two 35,000 bbl. fuel oil tanks, also many smaller tanks for lubricating oil. $350,000.

Rock Asphalt — Pass Christian, Miss. — Feb. 5, by Mayor and Alderman, c/o M. Farrell, city clk., City Hall, rock asphalt for street paving delivered f.o.b. Pass Christian in 250, 500 and 1,000 ton lots.

Gravel—Muncie, Ind.—C. A. Nottingham, P. O. 314, taking bids stripping, excavating, washing, grading and binning 50,000 cu.yd. gravel, 150 cu.yd. minimum daily output; adv. E. N.-R. Jan. 17 and 24.

Lumber—Milwaukee, Wis.—Jan. 28, by Central Bd. Purchases, City Hall, furnishing 113,000 ft. yellow pine lumber and 65,000 ft. oak lumber for Bureau Bridges and Buildings. $5,000.

Steam Roller, etc.—Oshkosh, Wis.—City c/o B. C. Meyer, comptroller, taking bids 12- to 15-ton steam roller with scarifying attachment. Private plans.

Pipe—Pierre, S. D.—Feb. 13, by State Hy. Comn., furnishing 75,000 lin.ft. concrete pipe, various sizes.

Shell—Houston, Tex.—Jan. 28, by Comrs. Harris Co., 10,000 tons shell. Howe & Wise, co. engrs.

Crane—Fresno, Calif.—Service Co., Valley Bank Bldg., in market for 20 ton locomotive crane.

Cranes—San Francisco, Calif.—Clover Valley Lumber Co., Alexander Bldg., in market for two 10 ton traveling cranes.

Crane—San Francisco, Calif.—Pacific Portland Cement Co., Pacific Bldg., in market for one 15 ton, 5 yd. bucket traveling crane.

Concrete—Pembroke, Ont.—See "Bridges."

BIDS RECEIVED

Valves and Connections—San Francisco, Calif.—City and San Francisco Co., 3 butterfly valves, 104 in. inside diam., one c.i. blind flange for one side of valve, 1 steel platform extending over valves, all operating mechanism for valves, bypass valves and connections, bolts and gaskets for joints, foundation and platform, Hetch Hetchy Moccasin Creek Power Plant, from J. Hendy Iron Wks., 75 Fremont St., $26,728. Noted Dec. 20.

CONTRACTS AWARDED

Asphaltic Cement, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., 600,000 gal. asphaltic cement to Warner Quinlan Co., 79 Wall St., $32,520; 2,500 cu.yd. sand grit to Colgan & Colgan, $5,275; 20,000 cu.yd. asphalt sand and 20,000 bags Portland cement, to W. F. Cunningham, $13,500 each; 500,000 wood paving blocks, to Southern Wood Preserving Co., 10 East 43rd St., $21,800; 120,000 gal. gasoline in tanks, to Standard Oil Co., 26 Bway., $15,136. Noted Jan. 17.

Road Oil—Madison, Wis.—Dane Co. Bd., c/o J. R. Caldwell, comr., 200,000 or more gal. road oil, to Amer. Tar Products Co., 208 South La Salle St., Chicago. Noted Dec. 20.

Portland Cement—Minneapolis, Minn.—F. S. Gram, city purch. agt., 125,000 bbl. portland cement as follows: Landers-Morrison-Christensen Co., 800 Builders Exch., 40,000 bbl.; P. B. Speakes Co., 2845 2nd Ave. S., 30,000 bbl.; Minneapolis Builders Supply Co., 721 Lumber Exch., 25,000 bbl.; L. W. Northfield Co., 2532 Central Ave., 15,000 bbl.; Hydraulic Press Brick Co., 1250 Builders Exch., 15,000 bbl. All foregoing at $2.50 per bbl. f.o.b. Minneapolis. Noted Jan. 17.

Transmission Towers — San Francisco, Calif. — City and Co. of San Francisco, transmission towers for Moccasin Creek power plant, to Pacific Coast Steel Co., Rialto Bldg., $274,224. Noted Dec. 20.

Fittings — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., to Canada Iron & Foundries Co., Three Rivers, furnishing 75 tons fittings, bell and spigot and flayed, faced and drilled $47.98 per ton, 228 tons 4 in. c.i. pipe $47.98, 90 tons 6 in. c.i. pipe $44,845, 2,464 tons 20 in. Class B c.i. pipe $44.845.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Mar. 3.

Robert Street Bridge at St. Paul, Minnesota, for Ramsey County

St. Paul, Minn.

Sealed proposals will be received by the Board of County Commissioners of Ramsey County, Minnesota, at their offices in the Court House, in the City of St. Paul, until ten o'clock a.m., March 3, 1924, at which place and time the proposals will be publicly opened and read aloud.

The work to be done includes the bridge complete, together with street paving, curbs and sidewalks from 3rd Street to Fillmore Street, and miscellaneous building and sewer changes. The bridge will consist of 8 arch spans ranging in length from about 72 feet to 244 feet and having an aggregate length of about 1,086 feet; and approaches having a combined length of some 449 feet. The street improvements at both ends add a total length of about 403 feet. A number of retaining and supporting walls are included, especially in the portion between the end of the south approach proper and Fillmore Street. The bridge and approaches provide for a 56 foot roadway and two sidewalks.

Proposals shall be made in the form of the Proposal Blank prepared for this work. Each proposal shall be accompanied by a certified check or Bidder's Bond made payable to the Treasurer of Ramsey County, for an amount equal to ten per cent (10%) of the bid to be forfeited to the County as liquidated damages (not penalty) by any bidder who is awarded a contract and who fails to execute the contract and bond promptly. Certified checks will be returned to bidders upon execution of contract and bond or sooner upon action of the Board of County Commissioners. Proposals shall be placed in a sealed envelope with a statement thereon showing the work covered by the proposal and addressed and delivered to the County Auditor on or before the said date.

Plans, specifications and proposal blanks are on file at the office of the County Auditor and in the offices of Toltz, King and Day, Inc., Engineers and Architects, St. Paul, Minnesota. Copies of the plans, specifications and proposal blanks will be furnished upon payment to Toltz, King and Day, Inc., of $50.00 for each complete set, &25.00 of which will be refunded upon the return of plans and specifications in good condition within two (2) weeks after bids are received.

A bond satisfactory to the Board of County Commissioners for the full amount of the Contract price will be required.

This work will be paid for in cash. Monthly estimates equal to 85 per cent of the work done, and approved materials for construction delivered on the job during the month, will be paid to the contractor within fifteen (15) days after the allowing of same and a final estimate on the completed work will be paid within thirty (30) days after the same is accepted and approved by the Engineers and the Board.

Work is to begin within thirty (30) days after the signing of the contract, and must be completed by April 1st, 1926.

The Board reserves the right to reject any and all bids and to waive any informalities.

By Order of the County Board:
Dated at St. Paul, Minnesota.
January 14, 1924.

GEORGE J. RIES,
County Auditor of Ramsey County.

OFFICIAL PROPOSALS

Bids: Feb. 11.

Filtration Plant Addition—New Pump Plant Stand Pipe—Pipe Lines, Etc.

McKeesport, Pa., January 17th, 1924.

Sealed proposals will be received by the McKeesport City Council up to 12:00 Noon, Eastern Standard Time, February 11th, 1924, at the office of the City Clerk, for the building of the following items:

ITEM NO. 1—STRUCTURAL WORK BELOW OPERATING FLOOR.
(Includes all concrete below top surface of operating floor, reinforcing steel, excavation, backfill, and resurfacing for 4—1 m.g.d. filter units and pump room.)

ITEM NO. 2—SUPERSTRUCTURES.
(Superstructures above filter units and Pump Pit—not including lighting or heating.)

ITEM NO. 3—ALL MECHANICAL FILTER EQUIPMENT.
All mechanical filter equipment for 4—1 m.g.d. units as specified completely installed and tested.

ITEM NO. 4—PUMPS AND MOTORS.
2—3 m.g.d. motor driven centrifugal pumps with one equipped with a 2 m.g.d. rotor and 2—7.5 m.g.d. pumps, the one equipped with a 6 m.g.d. rotor, as per specifications under this item.

ITEM NO. 5—ELECTRICAL WORK.
All electrical wiring, switchboard and other equipment not including motors, exciters and starters.

ITEM NO. 6—INTERIOR PIPING.
All piping within pump plant and within two feet outside pump plant as completely detailed.

ITEM NO. 7—OUTSIDE PIPING.
All outside piping and supply line.

ITEM NO. 8—STANDPIPE AND STANDPIPE FOUNDATION.

Any intending Bidder will be required to indicate to the satisfaction of the Engineers, or upon appeal to the satisfaction of the City Council, that they have had experience in building work of this class, and to show their financial ability and give references as to past experience. Any Contractors inexperienced in the building of mechanical filtration plants or the structural work incidental thereto need not apply.

The work will be advertised under eight items, but the Contract may be let as one Contract, or divided among the eight parts, depending upon the bids received.

Each Bidder will be required to furnish a Banker's Certificate in the amount of ten per cent (10%) of the total amount of the bid, guaranteeing that he will enter into the Contract precisely as originally prepared, provided said Contract is awarded him.

The Contractor to whom the Contract will be awarded will be required to furnish a satisfactory Bond on a satisfactory Bonding Company, in the amount of one hundred per cent (100%) of the total bid, said Bond to guarantee the faithful performance of the Contract in all respects and the completion of said Contract within the time specified or any extension which might be granted thereto.

Plans, Specifications and Bidding Blanks may be received from the Engineers, Hudson & Myron, 808 Wabash Building, Pittsburgh, Pa., upon proper application, and a deposit of 20.00 may be required of any Bidder, subject to the presentation and return of said Plans, Specifications, etc.

OFFICIAL PROPOSALS

In case a Contractor receiving Plans does not offer a bid and returns the Plans in good condition, then $10.00 of the $20.00 will be refunded to him, the other $10.00 being retained to cover the cost of excessive sets of Plans. In case any Contractor, however, receiving Plans and data submitting a bid, and in case all data, with Plans, is returned to the office in good condition, then said Contract will be refunded the entire amount of $20.00. In case any Contractor receiving Plans and data and not returning the same within two (2) weeks' time after the opening of bids, then said Contractor will forfeit the entire amount of the deposit of $20.00.

The City Council reserves the right to reject any part of the total parts of any or all bids received.

GEORGE H. LYSLE, Mayor.
A. J. RICHARDS,
Supt. Dep't. Public Safety.
HUDSON & MYRON, Engineers,
808 Wabash Building,
Pittsburgh, Pa.

Bids: Jan. 28.

Furnishing Cast-Iron and Terra Cotta Pipe

WASHINGTON SUBURBAN
SANITARY DISTRICT
CONTRACTS 39-W, 40-W, 41-S

Washington, D. C.

Sealed proposals for the contracts named below will be received at the office of the Washington Suburban Sanitary Commission, Evans Bldg., New York Ave., Washington, D. C., until 3 p.m., Monday, January 28, 1924, at which time and place they will be publicly opened and read.

Contract 39-W—Furnishing 89,000', 6" to 12" C.N. pipe.
Contract 40-W—Furnishing 14,000', 16" and 24" C.I. pipe and 100 tons special castings.
Contract 41-S—Furnishing 82,000', 6" to 24" T.C. pipe.

Specifications obtainable from Robert E. Morse, Chief Engineer of District, Hyattsville, Md.

T. HOWARD DUCKETT,
EMORY H. BOGLEY,
J. BOND SMITH,
Commissioners.

Bids: Feb. 14.

Unloading-Tower on Wharf

New Orleans, La.

Sealed proposals will be received by the Board of Commissioners of the Port of New Orleans, at their office, Suite 200, New Orleans Court Building, until Thursday, February 14, 1924, at 3:00 p.m., and then publicly opened for an unloading tower on the wharf of the Board's Coal Handling Plant.

A deposit of $1000 in cash or certified check is required with each proposal.

A bond to the amount of 50% of the sum bid is required with notarial contract.

Specifications and proposal forms are on file in the office of the Supervisor of Purchases at No. 1 Canal Street, New Orleans, Louisiana. Complete sets will be furnished to prospective bidders on deposit of $10, which will be refunded to depositors who submit proposals or return sets in good condition.

The right is reserved to reject any or all bids and to waive informalities.

J. H. WALSH, General Manager.

CONSTRUCTION NEWS

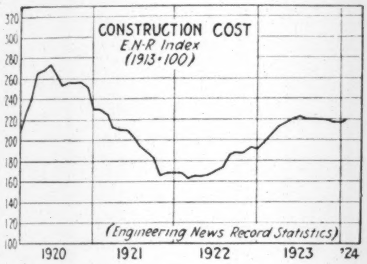
Engineering News-Record, January 31, 1924

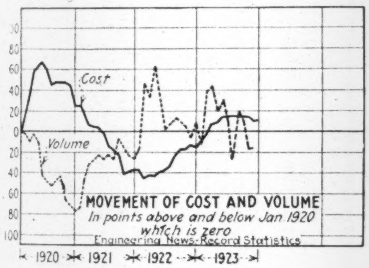
The Construction Barometer

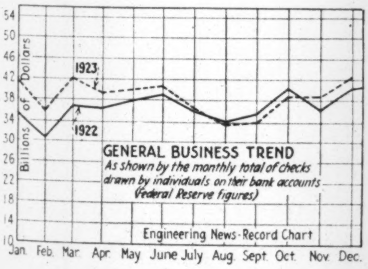
Gain In Volume Of Construction Despite Higher Cost—Cement And Pine Lumber Firmer —Increased Iron And Steel Demand

DESPITE the recent sharp upward turn in cost, there has been a corresponding increase in the volume of construction, particularly public work, during the last month. Cement and pine timbers have both shown higher price tendencies in this week's market, while iron and steel are gradually growing firmer with the increase in demand. Mill stocks of materials are adequate to meet any demand which may arise next month, following which, greatly increased production schedules will be necessary to cope with the expected rush of orders in the spring.

The actual physical volume of contracts let Dec. 27 to Jan. 24 was nearly 2 per cent heavier than for the whole month of December, 1923. In this same period costs rose 0.8 per cent.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Jan. 10	13,625,000	23,761,000	37,386,000
Jan. 17	9,074,000	28,657,000	37,731,000
Jan. 24	12,455,000	13,457,000	25,912,000
3 weeks	$35,154,000	$65,875,000	$101,029,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

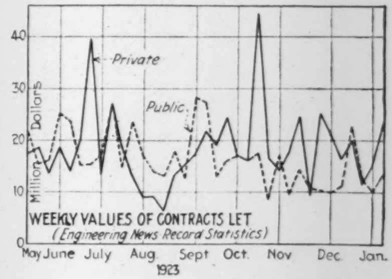
Week Ended	No.	Public Work	No.	Private Work
Jan. 10	12	3,219,000	42	18,138,000
Jan. 17	9	2,551,000	38	20,232,000
Jan. 24	12	5,710,000	26	6,476,000
3 weeks	33	$11,480,000	106	$44,846,000

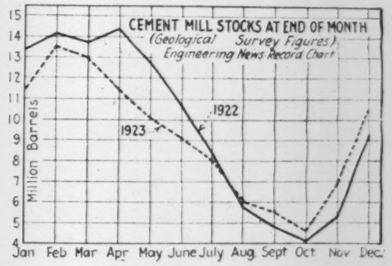
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

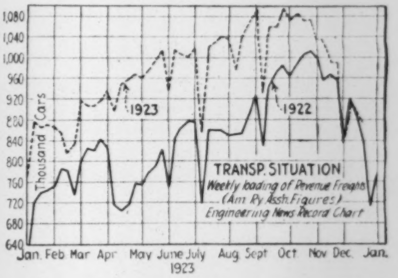
Week Ended	Private	Public			
		All	Streets and Roads	Water-works and Sewers	All Buildings
Jan. 10	28	149	33	32	30
Jan. 17	40	155	37	30	49
Jan. 24	39	205	55	31	66

PINE AND CEMENT FIRMER—STEEL DEMAND INCREASING—DROP IN FIR CUTTING ORDERS IN WEST

	Quoted on Jan. 31, at	Price Was	On
Structurals, Pittsburgh, 100 lb	$2.50	$2.50 @2.60	June 21
Cement, Chi., net bbl	2.20	2.10	Jan. 24
Pine, N. Y., M. ft.	61.00	60.00	Jan. 24
Fir, San Fran., M. ft	36.00	38.00	Jan. 24
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb. 4	Denver, Colo.	Jan. 17
Feb. 5	Ft. Wayne, Ind.	Jan. 24
Feb. 5	Gibsland, La.	Jan. 31
Feb. 5	Grosse Pointe (Detroit P. O.), Mich.	Jan. 31
Feb. 5	Neenah, Wis.	Jan. 31
Feb. 5	New York, N. Y.	Jan. 31
Feb. 7	Dannebrog, Neb.	Jan. 31
Feb. 8	Goderich, Mich.	Jan. 24
Feb. 11	Fairmont, Okla.	Jan. 17
Feb. 11	McKeesport, Pa.	Jan. 17
Feb. 11	Armory (Springfield P. O.), Mass. Adv. Jan. 31.	Jan. 31
Feb. 12	Greensboro, N. C.	Jan. 31
Feb. 18	Bedford, Ind.	Jan. 31
Feb. 19	Bloomington, Ind. Adv. Jan. 24 and 31.	Jan. 24
Feb. 19	Corsicana, Tex. Adv. Jan. 24 and 31.	Jan. 24
Feb. 20	San Francisco, Calif. Adv. Jan. 24 and 31.	Jan. 24
Feb. 20	Goldsboro, N. C.	Jan. 31
Feb. 20	Phillip, Wis.	Jan. 31
Feb. 20	Hammond, Ind. Adv. Jan. 31.	Jan. 31
Feb. 22	Smithfield, N. C.	Jan. 31
Mar. 4	Gloversville, N. Y. Adv. Jan. 31.	Jan. 31

SEWERS

Bids Close		See Eng. News-Record
Feb. 1	Trenton, N. J.	Jan. 24
Feb. 5	Baton Rouge, La.	Jan. 3
Feb. 5	Gallatin, Tenn	Jan. 17
Feb. 5	St. Louis, Mo.	Jan. 10
Feb. 6	Oelwein, Ia.	Jan. 17
Feb. 11	Pleasantville, N. Y. Adv. Jan. 10 to 31.	Jan. 17
Feb. 11	Carthage, Mo.	Jan. 31
Feb. 12	Big Springs, Tex.	Jan. 24
Feb. 12	University (St. Louis P. O.), Mo.	Jan. 24
Feb. 12	Elizabethtown, Ky.	Jan. 17
Feb. 12	Greensboro, N. C.	Jan. 31
Feb. 19	Lyndonville, N. Y. Adv. Jan. 31.	Jan. 31

BRIDGES

Bids Close		See Eng. News-Record
Feb. 5	Yankton, S. D.	Jan. 17
Feb. 5	Duluth, Minn.	Jan. 24
Feb. 5	Wyoming	Jan. 31
Feb. 6	Abbeville, S. C.	Jan. 31
Feb. 8	Tennessee	Jan. 24
Feb. 11	Pembroke, Ont.	Jan. 24
Feb. 11	Houston, Tex.	Jan. 31
Feb. 13	Phila., Pa. Adv. Jan. 17 to 31.	Jan. 17
Feb. 14	Mendota, Minn. Adv. Jan. 31.	Jan. 24
Feb. 20	New York Adv. Jan. 17 to 31.	Jan. 17

Bids Close		See Eng. News-Record
Mar. 3	St. Paul, Minn. Adv. Jan. 24 and 31.	Jan. 24
Mar. 10	St. Anne de Bellevue, Que.	Jan. 31
May 1	**Tientsen, North China**	**Oct. 11**

DAMS

Bids Close		See Eng. News-Record
Feb. 7	Kingston, N. C.	Dec. 27
Feb. 14	Phila., Pa.	Jan. 31

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	**New Zealand**	**Sept. 20**
Apr. 1	Indiana	Jan. 24

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Feb. 4	Minneapolis, Minn.	Jan. 10
Feb. 9	La Feria, Tex.	Jan. 31
Feb. 15	Morehead City, N. C. Adv. Jan. 17 to 31.	Jan. 24
Feb. 15	North Carolina	Jan. 31
Feb. 18	Tampa, Fla. Adv. Jan. 24 and 31.	Jan. 24

STREETS AND ROADS

Bids Close		See Eng. News-Record
Feb. 2	Buffalo, N. Y.	Jan. 31
Feb. 4	Newport, Ind.	Jan. 17
Feb. 4	Shoals, Ind.	Jan. 17
Feb. 5	Leland, Miss.	Jan. 17
Feb. 5	New York Adv. Jan. 17 to 31.	Jan. 17
Feb. 5	Kosciusko, Ind.	Jan. 17
Feb. 5	Kendallville, Ind.	Jan. 24
Feb. 5	Toledo, O.	Jan. 24
Feb. 5	Wabash, Ind.	Jan. 24
Feb. 5	Indiana	Jan. 24
Feb. 5	Wyoming	Jan. 31
Feb. 6	Oklahoma	Jan. 31
Feb. 6	Salina, Kan.	Jan. 24
Feb. 6	Nevada, Ia.	Jan. 31
Feb. 6	Brooklyn, N. Y.	Jan. 31
Feb. 7	Charleston, S. C.	Jan. 31
Feb. 7	Colorado	Jan. 31
Feb. 8	Ellensburg, Wash.	Jan. 31
Feb. 8	Boonville, Ind.	Jan. 24
Feb. 8	Nashville, Tenn.	Jan. 17
Feb. 8	Tennessee	Jan. 24
Feb. 8	Newark, N. J.	Jan. 31
Feb. 9	Colorado	Jan. 31
Feb. 11	Scottsburg, Ind.	Jan. 17
Feb. 11	Dallas, Tex.	Jan. 31
Feb. 11	Houston, Tex.	Jan. 31
Feb. 11	Los Angeles, Calif.	Jan. 31
Feb. 11	Bakersfield, Calif.	Jan. 31
Feb. 12	Salem, N. J. Adv. Jan. 31.	Jan. 31
Feb. 14	Jasper, Ind.	Jan. 17
Feb. 15	Illinois	Jan. 31
Feb. 15	Anniston, Ala.	Jan. 24
Feb. 15	Alpine, Tex.	Jan. 31
Feb. 15	Ohio	Jan. 31
Feb. 15	Oklahoma City, Okla.	Jan. 31
Feb. 18	New Philadelphia, O.	Jan. 24
Feb. 19	St. Louis, Mo.	Jan. 24
Feb. 26	Plymouth, Wis.	Jan. 31
Feb. 28	Kenosha, Wis.	Jan. 17
Mar. 1	Tuscaloosa, Ala.	Jan. 31
Mar. 11	Washington	Jan. 10

INDUSTRIAL WORK

Bids Close		See Eng. News-Record
Feb. 5	Darby, Pa.	Jan. 31
Feb. 7	Knoxville, Tenn.	Jan. 31
Feb. 11	Green Bay, Wis.	Jan. 31
May 21	**Wellington, New Zealand**	**Jan. 10**

BUILDINGS

Bids Close		See Eng. News-Record
Feb. 2	Bristol, Conn.	Jan. 31
Feb. 4	**Columbus, O.**	**Dec. 27**
Feb. 4	Wash., D. C.	Jan. 17
Feb. 4	St. Johns, Mich.	Jan. 24
Feb. 4	Shreveport, La.	Jan. 31
Feb. 4	Phila., Pa.	Jan. 31
Feb. 4	Kenosha, Wis.	Jan. 31
Feb. 5	Baltimore, Md.	Jan. 24
Feb. 5	Coffeyville, Kan.	Jan. 24
Feb. 5	Phila., Pa.	Jan. 31
Feb. 6	Huntington, W. Va.	Jan. 17
Feb. 6	Marcy, N. Y.	Jan. 24
Feb. 6	Amsterdam, N. Y.	Jan. 24
Feb. 6	Boston, Mass.	Jan. 31
Feb. 6	Baltimore, Md.	Jan. 31
Feb. 7	Bellaire (Jamaica P. O.), N. Y.	Jan. 24
Feb. 7	Brooklyn, N. Y.	Jan. 24
Feb. 7	Lancaster, Pa.	Jan. 31
Feb. 7	Florence, N. J.	Jan. 31
Feb. 7	Phila., Pa.	Jan. 31
Feb. 7	Detroit, Mich.	Jan. 31
Feb. 8	Celina, O.	Jan. 31
Feb. 8	Phila., Pa.	Jan. 17
Feb. 8	Northfield, Minn.	Jan. 24
Feb. 8	Cedargrove, N. J.	Jan. 24
Feb. 8	Ft. Wayne, Ind.	Jan. 31
Feb. 10	Trenton, N. J.	Jan. 10
Feb. 11	Claymont, Ill.	Jan. 24
Feb. 11	Urbana, Ill.	Jan. 31
Feb. 11	Hamburg, N. Y.	Jan. 31
Feb. 11	Portsmouth, O.	Jan. 31
Feb. 12	Falls City, Neb.	Jan. 31
Feb. 13	Industry, N. Y.	Jan. 17
Feb. 14	Phoenixville, Pa.	Jan. 31
Feb. 14	Youngstown, O.	Jan. 31
Feb. 15	Wausau, Wis.	Jan. 31
Feb. 15	Waukegan, Ill.	Jan. 24
Feb. 15	Bellaire, O.	Jan. 31
Feb. 15	Tiffin, O.	Jan. 31
Feb. 15	Ypsilanti, Mich.	Jan. 31
Feb. 15	Minneapolis, Minn.	Jan. 31
Feb. 16	Baltimore, Md.	Jan. 31
Feb. 18	Wheaton, Ill.	Jan. 31
Feb. 19	Appleton, Wis.	Jan. 31
Feb. 19	Milwaukee, Wis.	Jan. 31
Feb. 20	Irvington (branch of Newark), N. J.	Jan. 24
Feb. 20	Huntington, W. Va. Adv. Jan. 24 and 31.	Jan. 24
Feb. 25	Rome, N. Y. Adv. Jan. 31.	Jan. 31
Feb. 28	Phila., Pa.	Jan. 31
Mar. 1	Akron, O.	Jan. 24
Mar. 1	Chattanooga, Tenn.	Jan. 31
Mar. 3	Rhinelander, Wis.	Jan. 31

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Feb. 4	Lumber — Leavenworth, Ind.	Jan. 31
Feb. 5	Steel Piling — Louisville, Ky.	Jan. 10
Feb. 5	Steel Piles—Wash., D. C.	Jan. 24
Feb. 5	Cranes—Florence, Ala. Adv. Jan. 24 and 31.	Jan. 24
Feb. 6	**Storehouse—Pearl Harbor, H. T.**	**Dec. 20**
Feb. 6	Jetty—Jacksonville, Fla. Adv. Jan. 24 and 31.	Jan. 24
Feb. 6	Piles—Wash., D. C.	Jan. 31
Feb. 7	Steel Roof Trusses—Florence, Ala. Adv. Jan. 17 to 31.	Jan. 17
Feb. 8	Steel and Bolts—Owensboro, Ky.	Jan. 10
Feb. 11	Sub-Post Office—Memphis, Tenn.	Jan. 10
Feb. 11	Laundry — Northampton, Mass. Adv. Jan. 17 to 31.	Jan. 17
Feb. 11	Steel Castings, etc.—Louisville, Ky. Adv. Jan. 17 to 31.	Jan. 17
Feb. 11	Artesian Wells—Vicksburg, Miss.	Jan. 31
Feb. 12	Lumber—Mare Island, Calif.	Jan. 31
Feb. 12	Gasoline Hoist, etc.—Ketchikan, Alaska	Jan. 10
Feb. 12	Roof—Baltimore, Md.	Jan. 24
Feb. 13	Laundry Equipment—New York, N. Y. Adv. Jan. 31.	Jan. 31
Feb. 13	Mooring Mast—Ft. Worth, Tex.	Jan. 31
Feb. 14	Stone—Portland, Ore. Adv. Jan. 17 to 31.	Jan. 17
Feb. 14	Breakwater — Gulfport, Miss. Adv. Jan. 24 and 31.	Jan. 24
Feb. 15	Kitchen and Mess Hall — Prescott, Ariz. Adv. Jan. 17 to 31.	Jan. 17
Feb. 15	Steel Forging, etc.—Owensboro, Ky.	Jan. 17
Feb. 20	Cement—Milwaukee, Wis. Adv. Jan. 24 and 31.	Jan. 24
Feb. 20	Steel Bars—Milwaukee, Wis. Adv. Jan. 24 and 31.	Jan. 24
Feb. 25	Laundry—American Lake, Wash. Adv. Jan. 24 and 31.	Jan. 24
Feb. 25	Dredging—Plymouth, Mass. Adv. Jan. 31.	Jan. 31
Feb. 26	Water Piping, etc.—Phila., Pa Adv. Jan. 31.	Jan. 31
Feb. 27	Barrack — Puget Sound, Wash.	Jan. 31
Feb. 28	Steel Boat Hull—Huntington, W. Va. Adv. Jan. 31.	Jan. 31
Feb. 28	Dump Scow—Duluth, Minn. Adv. Jan. 31.	Jan. 31
Mar. 1	Turbines—Florence, Ala. Adv. Jan. 17 to 31.	Jan. 17
Mar. 10	Stone—Humboldt Bay, Calif.	Jan. 24

UNCLASSIFIED

Bids Close		See Eng. News-Record
Feb. 4	Heating and Ventilating Apparatus—Brooklyn, N. Y.	Jan. 31
Feb. 4	Heating and Ventilating Apparatus—New York, N. Y.	Jan. 31
Feb. 7	Grandstand, etc. — Detroit, Mich.	Jan. 31
Feb. 11	**Transformers and Spares—Melbourne, Australia**	**Jan. 3**
Feb. 12	Grade Separation—Springwells, Mich. Adv. Jan. 31.	Jan. 31
Feb. 12	Levee—Jonesboro, Ark.	Jan. 31
Feb. 14	Tower—New Orleans, La.	Jan. 24
Feb. 19	**Parking Court—San Francisco, Calif.**	**Jan. 31**
Feb. 25	Sea Wall, Dock and Sewer—New Haven, Conn. Adv. Jan. 31.	Jan. 31
Mar. 31	**Hopper Dredge — Brisbane, Queensland, Australia**	**Nov. 1**
Apr. 30	**Headworks—Wellington, New Zealand**	**Dec. 13**

MATERIALS AND EQUIPMENT

Bids Close		See Eng. News-Record
Feb. 2	Culvert Pipe—South Carolina	Jan. 31
Feb. 4	Road Grader—Columbus, Ind.	Jan. 31
Feb. 4	Lumber—Tipton, Ia.	Jan. 31
Feb. 5	Portland Cement, Crane, Piles, etc.—St. Paul, Minn.	Jan. 31
Feb. 5	Rock Asphalt—Pass Christian, Miss.	Jan. 24
Feb. 5	Lumber, Steel, etc.—Iowa City, Ia.	Jan. 31
Feb. 7	Culvert Pipe, Posts, etc.—Knoxville, Tenn.	Jan. 31
Feb. 8	Crushed Stone—Oshkosh, Wis.	Jan. 31
Feb. 8	Asphaltic Cement, etc.—Trenton, N. J.	Jan. 31
Feb. 8	Stone—Newark, N. J.	Jan. 31
Feb. 11	Coal Tar Pitch Filler, etc. — Cincinnati, O.	Jan. 31
Feb. 13	Pipe—Pierre, S. D.	Jan. 24

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Saratoga—J. P. Wells, engr., Cutler Bldg., Rochester, presented plans to City Council, here, for new reservoir fed by Kayaderoseras Creek, and S. J. Mott, city engr., submitted plans improving present water supply from Longberry Lake. Decision will be made in about 2 weeks in favor of one or the other. $125,000.

N. C., Dunn—Plans new water system, will get water from Cape Fear River 4½ mi. away, involving new reservoir and other additions to present plant. $250,000.

Pa., Phila.—Plans 48 in. steel water main to connect West Phila. water system with main city system, in Girard Ave. from 31st to 40th Sts., and across Schuylkill River on new steel trusses, $250,000, also extending high pressure fire system west of Broad St., in Market and Sansom Sts. between Broad and 23rd Sts. $250,000. Private plans.

N. C., Oxford—Having surveys and plans prepared new water supply. W. C. Olsen, Raleigh, engr.

Fla., Sanford—Voted $375,000 for waterworks plant. F. T. Williams, Sanford, engr. Noted Dec. 27.

O., Columbus—See "Streets and Roads."

Ill., Christopher — Plans addition to waterworks. To exceed $15,000. Mallams & Co., Herrin, engrs.

Wis., Plymouth—Water and Light Comn. making plans new centrifugal pump, 1,000 g.p.m., and one 2 stage air compressor for waterworks. Cahill & Douglas, 217 West Water St., Milwaukee, engrs.

Wis., Viroqua—E. J. Older, city clk., soon takes bids 6 in. mains in Center and Lincoln Aves., Terhune, East Decker, De Frees and East Court Sts. $15,000-$20,000.

Neb., Fairbury—Plans election to vote on $150,000 bonds for waterworks and electric light plant and distribution system. Hollister Eng. Co., Bankers Life Bldg., Lincoln, engrs.

Mo., Piedmont—Defeated $40,000 bonds waterworks and distribution system. W. A. Fuller Co., Ry. Exch. Bldg., St. Louis, engrs. Noted Jan. 3.

Ark., Altheimer — Having preliminary plans prepared waterworks and distribution system. $25,000. F. Bennett, 1421 Laurel St., Pine Bluff, engr.

Ark., Atkins—Having preliminary plans prepared water works and distribution system, also sanitary and storm sewers. $110,000. Ford & MacCrea, Gazette Bldg., Little Rock, engrs.

Tex., Bridgeport—Defeated $50,000 bonds for waterworks and $18,000 bonds for sewers. New election to be called. Elrod Eng. Co., 3124 Elm St., Dallas, engrs. Noted Jan. 10.

Tex., Cotulla—See "Excavation Drainage Irrigation."

Tex., Mart — Voted $150,000 bonds new lake incl. dam, mains, pumps, etc. Koch & Fowler, Central Bank Bldg., Dallas, engrs. Noted Dec. 20.

Tex., Port Arthur—Having plans prepared extending mains, $119,500; new

Waterworks (Continued)

water pumping units, $91,500. Nagle, Witt & Rollins, c/o C. N. Bates, Deutser Bldg., Port Arthur, engrs. Noted Dec. 13 under "Streets and Roads."

Okla., Clinton—City having surveys made mains, stand pipe, pumping equipment, motor driven centrifugal pumps. $30,000. Engineer not selected.

Okla., Shidler — City plans waterworks system, incl. wells, pumping equipment, elevated tank, 8,600 ft. 4- to 8-in. c.i. pipe. $80,000. Gant Baker Co., 1st Natl. Bldg., Oklahoma City, engr.

Wash., Tukwila—Election in May to vote on $30,000 bonds water system, incl. 1.4 mi. pipe line and large reservoir.

Wash., Vancouver—City plans water supply system, using waters of South Fork of Lewis River. Plans include 30 mi. pipe line. $450,000.

Calif., Riverside—Gage Canal Co. plans 1,300 ft. of 62 in. steel water pipe across Tequesquite Canyon.

BIDS DESIRED

Mass., Armory (Springfield P. O.)—Feb. 11, by Bd. Water Comrs., Municipal Bldg., Springfield, c.i. pipe, etc., f.o.b. Armory. H. M. King, supt.; adv. E. N.-R Jan 31

Mass., Armory (Springfield P. O.)—Feb. 11, by Bd. Water Comrs., Municipal Bldg., Springfield, brass goods, incl. corporations, inverted key curb cocks, etc. H. M. King, supt.; adv. E. N.-R. Jan. 31.

N. Y., New York—Feb. 5, by E. W. Buckley, comr. Purch., Municipal Bldg., pipe and castings to Dept. Water Supply, Gas & Electricity.

Pa., Phila.—Jan. 29, by Dept. Pub. Wks., Bureau of Water, Room 216, City Hall, furnishing c.i. pipe and specials Contr. 662, laying pipe Contr. 663. G. H. Biles, dir.

N. Y., Gloversville—Mar. 4, at office of Bd. Water Comrs., 19 West Fulton St., open distribution reservoir on Ayers Hill. Metcalf & Eddy, 14 Beacon St., Boston, Mass., consult. engrs.; adv. E. N.-R. Jan. 31.

N. Y., Lyndonville—See "Sewers."

N. C., Goldsboro — Feb. 20, by Mayor, rein.-con. sedimentation basin to serve as filter plant 2½ m.g.d., 2 rein.-con. filter tubs, extension of filter plant, filter equipment, 50,000 gal. steel tank, etc. W. C. Olsen, Raleigh, engr.

N. C., Greensboro—Feb. 12, for 28 mi. sewer pipe and 18 mi. c.i. water pipe. $350,000. P. C. Painter, city mgr.

N. C., Smithfield — Feb. 22, by Mayor, rein.-con. sedimentation basin, chemical tanks with agitators, chemical laboratory and furnishing equipment for same, 25,000 gal. steel tank, reconditioning 2 filter units, etc. W. C. Olsen, Raleigh, engr.

La., Melville—Jan. 29, by Mayor and Bd. Aldermen, 125,000 gal. concrete reservoir, c.i. pipes, 50,000 gal. tank on tower, 500 g.p.m. fire pump, 2 crude oil engines, etc. Swanson-McGraw Inc., United Fruit Bldg., New Orleans, engrs.

La., Gibsland — Feb. 5, by City Clerk, 6,090 ft. 6 in., 13,410 ft. 4 in. and 3,100 ft. 2 in. c.i .pipe, 11,250 lb. specials, one 50,000 gal. tank on 75 ft. tower, one 125 and one 250 g.p.m. centrifugal pumps, one 50,000 gal. concrete reservoir, etc. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

O., Cleveland—Amer. Steel & Wire Co., c/o F. Williams, 8101 Bway., taking bids water softener system, steel tanks on concrete foundations, Jones Rd. $40,000. Private plans.

Ind., Bedford—Feb. 18, for 25,000 lin.ft. c.i. pipe, also valves, hydrants and fittings. J. W. Malott, supt. waterworks.

Ind., Hammond — Feb. 20, at office Bd. Pub. Wks., c.i. or steel pipe. E. W. Miles, clk. Water Dept.; adv. E. N.-R. Jan. 31.

Neb., Dannebrog—Feb. 7, by Henningson Eng. Co., Natl. Bldg., Omaha, one 50,000 gal. tank on 100 ft. tower, one 8 in. tubular well, 65 ft. deep, c.i. pipe, hydrants, etc. $21,750.

Tex., Dallas — City Com. taking bids motor driven pump for Oak Cliff waterworks, 1,250,000 gal. capacity. E. A. Kingsley, city engr. Noted Jan. 10.

Tex., Eastland—See "Street and Roads."

Tex., Georgetown—City Clerk taking bids water softening machine for Water Dept.; water pump for Water & Light Plant. R. E. Ward, mgr.

Calif., Santa Monica—F. J. Townsend, city clk., receiving bids water pipe for new distributing system. $350,000 to $650,000.

BIDS RECEIVED

Mich., Grosse Pointe Park (Detroit P. O.)—Feb. 5, by Village Clerk, 4,000 ft. 6, 12 and 16 in. c.i. pipe in Essex Blvd., Mack and Kercheval Aves. $15,000. C. H. Marden, 502 Whitney Office Bldg., Detroit, engrs.

Wis., Milwaukee—For 2,500 tons water pipe, from U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, 6 and 8 in. $56.50 per ton, 12 and 16 in. $54.50; special castings 150 tons, from Amer. Cast Iron Pipe & Fdry. Co., 38 South Dearborn St., Chicago, $98 per ton. Noted Jan. 17.

Wis., Neenah—Feb. 5, by Water Comn., H. S. Zemlock, secy., waterworks equipment incl. one 200 hp. 2 cycle oil driven engine with 170 kva. generators and belted exciter; one 700-750 cu.ft. 2 stage air compressor, belt driven; one 42 x 120 in. receiver tank; one 15,000 gal. oil storage tank; one air lift pump, one switchboard.

Wis., Phillips—Feb. 20 (extended date), by C. F. Scheel, clk., one 300 g.p.m. against 175 ft. head and one 1,250 g.p.m. against 275 ft. head centrifugal pumps, motor driven, one 150 hp. oil engine, one 100,000 gal. elevated tank, riser pipe. F. Henry, c/o Courthouse, engr. Noted Jan. 10.

Minn., Minneapolis — F. S. Gram, city purch. agt., Jan. 21, furnishing five thousand ⅝-in. corporation cocks, and four thousand ¾-in. curb cocks, etc., for Water Dept., from Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur, Ill., $0.72 and $1.86 each respectively. Noted Jan. 17.

CONTRACTS AWARDED

O., Dayton—See "Sewers."

Wis., Green Bay—Northern Paper Mills, H. Benton, secy., foot Day St., will build 1 and 2 story, 50 x 185 ft. and 30 x 98 ft., filtering plant, brick and concrete, plain foundation, by day labor. $75,000. Private plans.

Wis., Milwaukee—Water Dept. will lay 30 mi. c.i. mains by day labor. J. Schwada, city engr.

Wis., New Holstein—See "Sewers."

Minn., St. Paul — H. W. Austin, city purch. agt., 8,000 lin.ft. 60-in. outside diameter steel pipe, etc., to J. McNeil & Bro. Co., 29th St., Pittsburgh, Pa., $128,900. Noted Jan. 3.

Minn., St. Paul — H. W. Austin, city purch. agt., 35,579 lb. structural steel and 4,023 lb. miscellaneous steel and iron castings, to St. Paul Fdry. Co., Como Ave. and Mackubin St., $2,287; hub-end-nut-operated L. B. gate valves as follows: twenty 4-in., two hundred and six 6-in., thirty 8-in. and forty 12-in., to South Park Fdry. & Machine Co., 23 East 6th St., $12, $19.50, $31.50 and $65 each respectively; thirty 16-in., five 20-in. and four 24-in. to Chapman Valve Mfg. Co., Indian Orchard, Mass., $140, $275 and $415 each respectively. Noted Jan. 17.

Mo., Cameron—For two 300 hp. and one 20 hp. oil engines and generators, two 24,000 gal. storage tanks, 2 switchboard panels, cooling system and pumps, also brick building to house equipment, to W. S. Barnes Agency, Kansas City, $62,000. Noted Oct. 11.

Mont., Kalispell—City, material for water main renewal in Railroad St. between 4th Ave. E. and 8th Ave. W., to United States Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, 545 tons cast iron pipe $70.15 per ton, 10 tons fittings $133.15, total about $40,000.

Wash., Kelso—Pumping and water purification plant, 1 m.g. p.d. capacity, to J. D. Hanley, Kelso, $21,830. Engrs. est. $25,000. Noted Jan. 17.

Calif., Oakland—Had plans prepared improving B St., 69,545 sq.ft. grading, 4,353 lin.ft. concrete curb, 8,706 sq.ft. concrete gutter, 60,478 sq.ft. bituminous concrete pavement; A St., 84,479 sq.ft. grading, 5,408 lin.ft. concrete curb, 10,423 sq.ft. concrete gutter, 73,621 sq.ft. bituminous concrete pavement; 92nd Ave., 90,316 sq. ft. grading, 5,231 sq.ft. concrete curb, 10,193 sq.ft. concrete gutter, 79,690 sq.ft. bituminous concrete pavement; 9th Ave., 52,970 sq.ft. grading, 3,114 lin.ft. concrete curb, 5,875 sq.ft. concrete gutter, 46,877 sq.ft. bituminous concrete pavement; crossings of 22nd Ave. at East 38th and East 29th Aves., 6,180 sq.ft. grading 5,066 sq. ft. oil macadam pavement; portions 105th Ave. and Quince St., 7,230 sq.ft. grading, 436 sq.ft. asphalt concrete pavement, 900 sq.ft. cement walks. W. M. Harmon, city engr.

Calif., Sacramento—City, 57,000 lin.ft. c.i. pipe, to United States Cast Iron Pipe & Fdry. Co., Monadnock Bldg., San Francisco, 2,000 ft. of 12 in. $2.22, 1,000 ft. 10 in. $1.72, 5,000 ft. 8 in. $1.29, 15,000 ft. 6 in. $0.90, for delivery as soon as possible; 10,000 ft. 6 in. $0.90, 2,000 ft. 8 in. $1.29, for delivery about June 1. 10,000 ft. 6 in. $0.90, 3,000 ft. 8 in. $1.29, for delivery about Sept. 1; 2,000 ft. 12 in. $2.22, 2,000 ft. 10 in. $1.72, 5,000 ft. 6 in. $0.90 for delivery Dec. 1. Noted Jan. 24.

Sewers

PROPOSED WORK

N. C., Greensboro—See "Waterworks."

O., Columbus—See "Streets and Roads."

O., Wadsworth—Voted $100,000 bonds disposal plant. Noted Dec. 13.

Ind., South Bend—Plans lateral sewers in Prospect Dr., Indiana, Wenger, Gernhart and Mishawaka Aves., Studebaker, Mason and State Sts. $25,000. J. de Lorenzi, clk.

Ill., Belleville—Having preliminary plans prepared sanitary sewers to drain 1½ mi. Bornman Heights and South 9th St. $25,000. C. A. Heinzelman, City Hall, engr.

Ill., Broadview — Plans sanitary and trunk sewers. $150,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Pontiac—Having preliminary plans prepared sanitary sewers in North Aurora and West Reynolds Sts. $25,000. G. D. Butzer, City Hall, engr.

Ill., Staunton—Having preliminary plans prepared storm and sanitary sewers, ranging from 10-in. to 60-in. To exceed $100,000. E. F. Harper, c/o Missouri Athletic Club, St. Louis, Mo., engr.

Minn., St. Paul—Plans 10 mi. main sewers, Belt Line System, $1,000,000, and 7 or 8 mi. main sewers, Trout Brook system, $1,000,000, both concrete, up to maximum width of 9 ft. G. H. Shepard, city engr.

Mo., Sikeston—Election about Feb. 15, to vote on $80,000-$90,000 bonds 48-72 in. trunk sewers and disposal plant. Also plans 10- to 36-in. lateral sewers, $100,000-$120,000. W. A. Fuller Co., 1917 Ry. Exch. Bldg., St. Louis, engrs.

Mo., Versailles — E. T. Archer & Co., engrs. 609 New England Bank Bldg., Kansas City, rejected bids Jan. 15, lateral sewers, here. $30,000. Noted Jan. 3.

Ark., Atkins—See "Waterworks."

Tex., Bridgeport—See "Waterworks."

Tex., Houston—Having plans prepared two disposal plants one at Harris Gully other Leeland Ave. $40,000. J. C. McVea, city engr.

Tex., Port Arthur — Having plans prepared extending sewerage system. $132,500. Nagle Witt & Rollins, c/o C. N. Bates, Deutser Bldg., engrs. Noted Dec. 13 under "Streets and Roads."

Tex., Winters — Plans made complete sewerage system and disposal plant. $35,000. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Okla., Tulsa—City having plans prepared and takes bids in April, 12- to 24-in. storm sewers. $800,000. C. Schultz, city engr. Noted Dec. 6.

Colo., Denver—Plans sanitary sewer in South Side Special Sanitary Sewer Dist. 9, 8- to 12-in. vitr. pipe, 180 manholes, etc. $74,969. A. K. Vickery, City Hall, engr.

Calif., San Jose—City having preliminary plans prepared sewer improvements, to exceed $25,000. Burns & McDonnell Eng. Co., 415 Marsh-Strong Bldg., Los Angeles, engrs. Noted Nov. 8.

Calif., Santa Barbara — Making plans drainage system and sewers for eastern section of city. To exceed $25,000. G. D. Morrison, city mgr.

BIDS DESIRED

Conn., New Haven—See "Unclassified."

N. Y., Lyndonville—Feb. 19, by Bd. Village Trustees, sewerage system and disposal works, also 5½ mi. mains, etc. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. E. N.-R. Jan. 31. Noted Mar. 15.

N. C., Greensboro — Feb. 12, by O. C. Painter, city mgr., 28 mi. 6, 8, 10, 12, 15, 21 and 24 in. sewer lines.

O., Cleveland—Jan. 30, by Cuyahoga Co., 17,000 ft. 8- to 27-in. vitr. or rein.-con., and 8,000 lin.ft. 30- to 60-in. brick or concrete sewer in Impvt. 10 of Co. Sewer Dist. To exceed $50,000. R. F. MacDowell, Court House, engr.

Ia., Nevada—See "Streets and Roads."

Mo., Carthage—Feb. 11, for 693 lin.ft. 18 in. c.i. and 6,227 lin.ft. 18 and 24 in. clay or concrete sewers, 6,920 lin.ft. 0-18 ft. excav. and 934 cu.yd. rock excav. in intercepting and outfall sewers; pumping station, Imhoff tank, trickling filter, sludge drying bed, 4,050 cu.yd. earth, 5,000 cu. yd., borrow and 276 cu.yd. rock excav., 250 cu.yd. plain concrete and 788 cu.yd. rein.-con., etc., in sewage treatment plant

Sewers (Continued)

$108,000. C. A. Haskins, 517 Finance Bldg., Kansas City engr. Noted Nov. 15.

BIDS RECEIVED

Calif., El Monte — See "Streets and Roads."

CONTRACTS AWARDED

Md., Baltimore—City Register, 400,000 lb. manhole, a sewer inlet and similar iron castings, to Amer. Brake & Shoe Fdry Co., Fulton Station, $0.0335 per lb. Noted Jan. 24.

O., Dayton—For 1,100 ft. of 24 in. vitr. storm sewer in Abbey Ave., also 800 ft. 16 in. c.i. high pressure main across Mad River, to F. Hall, 55 Bank St., $19,813 and $11,982 respectively. Engrs. est. $20,000 and $13,000 respectively.

O., Toledo—Homeville Company, 18,720 cu.yd. excav., 1,762 ft. 7 ft. 6 in. rein.-con. box culvert, and 350 ft. 42 in. segmental block pipe in Ditch 561, to C. W. Hanneman, Monroe, Mich., $57,243. Engrs. est. $70,000.

Wis., New Holstein—Sewerage and water systems, to Ribbens Bros., Mayville, $89,707; c.i. pipe and fittings, to Natl. Cast Iron Pipe Co., 122 South Michigan St., Chicago, $28,022; elevated steel tank, to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, $6,275. Noted Jan. 3.

Minn., St. Paul—Outlet sewer in Portland Ave. from Mississippi River to point 990 ft. east, to DeGraff Wolff, 985 Schetter St., $25,780; Davern-West 7th St. system No. 1, 500 lin.ft. 5 x 8 ft. concrete sewer, 5,753 ft. sandrock tunnel, 1,284 ft. 4 ft. x 6 in. sewer, 1,135 ft. 3 ft. x 6 in. sewer, 3,683 ft. 12- to 30-in. sewer, manholes, etc., to Thornton Bros Co., 318 Endicott Bldg., $206,587. Noted Jan. 17.

Tex., Dallas—Concrete and vitr. mains and laterals in Frederica, Henderson and Lewis Sts., to T. S. Miller, Jr., 800 North Crawford St., $50,174; storm sewers in East Grand Ave., to Municipal Excav. Co., 800 North Crawford St., $31,970.

Okla., Stroud — Main sanitary sewers, disposal plant, and lateral sewers, to H. L. Cannady Co., Tulsa, $94,622. Noted Dec. 10.

Calif., Long Beach—City, Golden Gate Ave. storm drain to United Concrete Pipe Co., P. O. Box 6, Ventura, $165,000, incl. 1,474 lin.ft. of 8 in. corrugated iron pipe, 16 gage, 16,065 lin.ft. 8- to 16-in. cement pipe, 9,480 lin.ft. 18- to 42-in. reinforced cement pipe, 134 standard catch-basins, 105 ft. cement concrete bulk head, etc.

Calif., Los Angeles—City, furnishing 55,000 vitr. clay sewer lining blocks, Model C for Sect. 9 of North Outfall Sewer, to Pacific Clay Products, Inc., Amer. Bank Bldg., $184 per M. Noted Jan. 3.

Calif., Newport Beach—City Council, Balboa Island sewerage system, to Gibbons-Reed, 905 South Olive St., Los Angeles, $133,655. Noted Jan. 17.

Calif., Orange—Constructing 2 sections outfall sewer, to C. E. Green, Western Mutual Bldg., Los Angeles, $41,982 and $19,944. Noted Jan. 24.

Bridges

PROPOSED WORK

New Jersey—State Hy. Dept., Trenton, received no bids Jan. 28, repairs on 395 ft. draw span, 59 ft. wide, over Passaic River, in municipalities of Newark and Kearny, Essex and Hudson Counties. Will readvertise. J. L. Vogel, 772 Broad St., Newark, engr. Noted Jan. 10.

N. J., Newark—Essex Co. plans 1 span 14 ft. rein.-con. bridge, Brooklawn Rd., in Montclair, $10,000; also 1 span 28 ft. rein.-con. bridge, Linden St. in Verona, $16,000. W. A. Stickel, Court House, engr.

Miss., Grenada—See "Streets and Roads."

Kentucky—State Hy. Dept., Frankfort, plans 430 ft. steel superstructure, two 150 ft. and one 130 ft. spans, concrete substructure, over Big Sandy River on State Project 6, Pike Co. J. S. Boggs, state highway engr.

Ky., Hickman—See "Streets and Roads."

O., Cincinnati—Plans temporary timber bridge, 8th St. $130,000. F. Krug, City Hall, engr.

O., Massillon — Had preliminary plans prepared 3 track concrete and steel bridge, West Main St. To exceed $25,000. Wendell P. Brown Co., Finance Bldg., Cleveland, engrs.

Wis., Reedsburg — Plans rein.-con. and steel bridge over Baraboo River. $30,000. A. F. Niebuhr, city clk. Engineer not selected.

Ill., Kankakee—Kankakee Co. plans steel truss highway bridge over Kankakee River. To exceed $25,000.

Minn., Minneapolis—Northfield & Southern Ry. Co., 209 Lincoln Bank Bldg., plans bridge over Mississippi River. $400,000. M. J. Dooley, genl. mgr.

Kan., Hutchinson—Reno Co. soon lets contract, 3 Federal aid bridges, ten 45 ft. concrete deck girder spans over Arkansas River, $45,000; one 100 ft. concrete span over Ninnescah River, $10,000; one 90 ft. steel span, three 20 ft. concrete aprpoach spans over Silver Creek, $16,000. W. A. Stacey, co. engr. Noted Nov. 1.

Tex., Cameron—See "Streets and Roads."

Tex., Fairfield—See "Streets and Roads."

Wash., Seattle—Making plans 182 ft. double leaf, trunnion bascule with rein.-con. gothic towers, 68 ft. approaches 40 ft. roadway, two 12-ft. walks, over Lake Washington known as Montlake Bridge. J. D. Blackwell, city engr.

Calif., Bakersfield—Kern Co. plans 200 ft. rein.-con. bridge over Cottonwood Creek on Kern River Canyon Rd. F. E. Smith, clk.

California—Southern Pacific R.R. Co., 65 Market St., San Francisco, having plans prepared steel railway viaduct over Calaveras River, San Joaquin Co., near Stockton. To exceed $75,000. G. W. Boschke, ch. engr.

BIDS DESIRED

S. C., Abbeville—Feb. 6 by Abbeville Co. Hy. Comn., bridges on Federal Aid Project 221, State Route 7, one rein.-con. bridge with three 22 ft. and one 43 ft. spans; rein.-con. bridge four 30 ft. and one 52 ft. spans; rein.-con., steel and creosoted timber bridge of one 100 ft. steel and seventeen 14 ft. creosoted timber spans; creosoted timber bridge eight 14 ft. spans; creosoted timber bridge two 14 ft. spans and one 6 x 6 rein.-con. culvert.

Illinois—See "Streets and Roads."

Wyoming—Feb. 5, by State Hy. Comrs., Cheyenne, 21 small timber trestle bridges, Kemmerer-Marbleton Rd., Lincoln and Sublette Counties, 170,000 ft. treated bridge timber in place. $60,000. Timber furnished by State, cost and overhead included in estimate. J. F. Seiler, Cheyenne, engr. Noted Nov. 15.

Tex., Houston—See "Streets and Roads."

Tex., Houston—Feb. 11, by Comrs. Harris Co., concrete bridges on Houston Ave. extension and Clinton Rd. $25,000. Howe & Wise, co. engrs.

Calif., San Diego — See "Streets and Roads."

Que., St. Anne de Bellevue—Mar. 10, by A. Galipeault, minister Dept. Pub. Wks., Quebec, constructing Taschereau Bridge connecting Perrot Island with St. Anne de Bellevue. $500,000. Noted Dec. 27.

BIDS RECEIVED

Calif., Weitchpec—Humboldt Co., (Eureka), reconstructing cable suspension bridge over Klamath River, here, incl. steel truss span, 385 ft. long, steel towers, from Padgett & Kelly, Eureka, $24,379. Noted Jan. 17.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, rein.-con. bridge to carry Gravois Ave. over River Des Peres, from H. A. Henske, 1504 St. Louis Ave., $104,756. Engrs. est. $105,588. Noted Dec. 27.

Tex., Halletsville—Lavaca Co., one 258 ft., one 156 ft., one 188 ft. and one 446 ft. steel and concrete spans, on State Highway 3-B, and 22 concrete piers, abutments and piling, from L. E. Sanders, San Antonio, $124,964.

CONTRACTS AWARDED

W. Va., Parkersburg—Baltimore & Ohio R.R. Co., Baltimore and Charles Sts., Baltimore, Md., 300 ft. truss span, three 80 ft. girder spans, 1,031 ft. of steel viaduct over Little Kanawha River, to Fort Pitt Bridge Co., Oliver Bldg., Pittsburgh, Pa.

Kentucky — State Hy. Dept., Frankfort, steel bridges over Cumberland River, one 240 ft. and two 150 ft. spans, superstructures, to F. K. Kelter, 7344 Yates Ave., Chicago, $44,377; concrete substructure (2 abutments each), to Blanchard Crocker Co., Lexington, $24,359. Noted Jan. 17.

Minn., St. Paul — Great Northern R.R., 4th and Jackson Sts., 3 through plate girder spans and 1 deck plate girder, involving 158 tons structural steel, to Amer. Bridge Co., Ambridge, Pa. Engrs. est. in excess of $25,000.

Mo., Kansas City—Bd. Pub. Wks., steel and rein.-con. bridge, to M. E. Gillioz, Monett, $126,080.

Mo., Mt. Washington—Bd. Pub. Wks. rein.-con. and steel bridge, 60 ft. wide, over Blue River on Independence Rd., to M. E. Gillioz, Monett, $126,080.

Oklahoma—State Hy. Dept., Oklahoma City, four 120 ft. steel trusses on concrete piers and abutments, over North Fork of Canadian River, Federal Aid Project 113, Oklahoma Co., to Kansas City Bridge Co., Orear-Leslie Bldg., Kansas City, Mo., $75,834; four 96 ft. trusses and one 20 ft. one beam bridge on concrete piers and abutments over Salt Fork Arkansas River, Federal Aid Project 123, Oklahoma Co., to Pioneer Constr. Co., New York Life Bldg., Kansas City, Mo., $52,840. Noted Jan. 10.

Okla., Cleveland—Cléveland and Osage Counties, 1,776 ft. bridge, 7 through steel truss spans, over Arkansas River, here, to General Constr. Co., Baltimore Bldg., Kansas City, Mo., $220,100.

Dams

PROPOSED WORK

Mo., Bagnell—W. Cravens, et al. plans 100 ft. dam on Osage River about 8 mi. above here, with water fall developing 50,000 hp.

Wash., Everett—See "Industrial Works."

Calif., Wheatland — See "Excavation, Drainage, Irrigation."

BIDS DESIRED

Pa., Phila.—Feb. 14, by Director Pub. Wks., Room 216 City Hall, overflow dam, 1,200 ft. long, maximum height 35 ft., in southern portion of Fairmount Park across Schuylkill River, 12,000 cu.yd. earth and 8,000 cu.yd. rock excav., 35,000 bbl cement, etc. $700,000.

Railways

PROPOSED WORK

North Carolina — Snow Hill R.R. Co., Snow Hill, plans 6 mi. road between Snow Hill and Hookerton. Applied to Interstate Commerce Comn., Wash., D. C., for necessary authorization. $500,000.

Indiana—Southern Indiana Gas & Electric Co., 124 South 2nd St., Evansville, plans removing and relocating its tracks in Garden City, north of Evansville. Work includes moving tracks 327 ft. west of present location, for about 1 mile. F. Haas, vice-pres. and genl. mgr.

Minnesota — Northfield & Southern Ry. Co., 209 Lincoln Bank Bldg., Minneapolis, plans constructing 8½ mi. single track from Oxboro Heath to Ford plant. $1,350,000. M. J. Dooley, genl. mgr.

Missouri—Missouri Kansas & Texas R.R., Railway Exch., St. Louis, plans new rails, 90 lb. type to replace old rail, etc. $430,000; ballasting roadbeds with chat and macadam $250,000; round house work at various points $48,000. Private plans.

Texas—Dallas Ry. Co., Interurban Bldg., Dallas, had plans prepared improvements to State St. car line in connection with paving. Work includes new steel rails and paving on Trinidad St. $25,000. B. R. Brown, Interurban Bldg., Dallas, engr.

Oklahoma—Commerce Mining & Realty Co. making preliminary plans 65 mi. electric railway from Miami to Pawhuska. A. Robinson, pres.

Oregon—Southern Pacific R.R., 65 Market St., San Francisco, soon lets contract grading 11 mi. section of Natron Cut-Off from Summit to Oakridge, Ore. Work includes heavy grading and several tunnels.

CONTRACTS AWARDED

Missouri—M. Raming, city purch. agt., Kansas City, grading for railroad siding ¾ mi. long, relocating electric railroad and highway about ¾ mi. long, 300,000 cu.yd. earth and rock excav., north of Kansas City, to Spitcaufsky Bros., 3229 Victor St., Kansas City, $343,845. Noted Jan. 3.

Oregon—Southern Pacific R.R. Co., 65 Market St., San Francisco, clearing 11 mi. Natron Cut-Off from Summit to Oakridge, here, to Tully & Sullivan, Seattle, Wash.

Excavation, Drainage, Irrigation

PROPOSED WORK

Washington—Skyhomish Recl. Co. plans to reclaim 9,000 acres of land in Padilla Bay Dist, in Skagit and Whatcom Counties. Work includes dyke 8 mi. long, 5-20 ft. high and 335 ft. wide at base, around Padilla Bay. $1,300,000. F. Waldron, Seattle, genl. mgr. F. C. Brown, Lyon Bldg., Seattle, attorney.

Tex., Cotulla—International Great Northern Ry., Palestine, and private investors, having surveys made irrigation reservoir-dam, in Nueces Valley, 5 mi. from here. U. S. Geological Surveyors co-operating with State Bd. Water Engineers and are making surveys. $600,000 first unit.

Calif., Dixon—Dixon Recl. Dist. plans to reclaim and irrigate 30,000 acres. Will install pumping plants and construct 17 mi. main canal and 40 mi. laterals. To exceed $950,000. F. C. Herman, Merchants Exch. Bldg., San Francisco, consult. engr.

Tex., Port Arthur — City having plans prepared Shreveport canal conduit. $69,500. Nagle Witt & Rollins, c/o C. N. Bates, Deutser Bldg., engrs. Noted Dec. 13 under "Streets and Roads."

Calif., Stacy—Irrigation Dist. having preliminary plans prepared irrigation works, incl. concrete diversion dam, 5 ft. high, 50 ft. long, 8 ft. wide at bottom; storage dam, 32,350 acre ft. capacity, concrete or earth construction, etc. To exceed $250,000. C. R. Caudle, Stacy, consult. engr.

Calif., Wheatland—Camp Far West Irrigation Dist. having preliminary plans prepared 2 mi. main canal and system of distributing laterals, concrete dam 55 ft. high, 230 ft. long on top. $125,000. J. A. Shields, Auburn, engr.

BIDS DESIRED

Tex., La Feria — Feb. 9, by La Feria Water Impvt. Dist. 3 dredging from Military Rd. to River Pump in main canal, Cameron Co. $25,000. A. P. Taliaferro, La Feria, engr.

CONTRACTS AWARDED

La., Lake Charles—Police Jury Calcasieu Parish, Court House, constructing Sect. 3 Navigation Channel, from Sta. 714 to 580, 2.54 mi., 2,020,000 cu.yd. excav., to Atlantic Gulf & Pacific Co., 13 Park Row, New York City, $212,100; Sect. 5 of Navigation Channel from Sta. 58 to 322, 5 mi., 3,480,000 cu.yd. excav., to Hampton Reynolds Guarantee Title Bldg., New Orleans, $394,980. Noted Dec. 27.

Streets and Roads

PROPOSED WORK

Connecticut—State Hy. Dept., Hartford, plans paving 2.5 mi. New Britain-Hartford Turnpike, concrete. $100,000. J. A. MacDonald, state highway comr.

N. Y., Albany—Takes bids in February paving 1,185 ft. Grand St., 46 ft., bitulithic on granite blocks. J. G. Brennan, City Hall, engr.

Pa., Cresson—Plans 1 mi. brick paving on Park, Laurel, Ashcroft, Keystone, Powell and Cathedral Aves. $40,000. D. W. Dillman, Altoona Trust Bldg., Altoona, engr.

Pa., Mercer—Mercer Co. plans slag and ash roads: 6,000 ft. in Pine Twp. and 8,000 ft. in Findlay Twp. $25,000. F. P. Graham, Grove City, co. engr.

W. Va., Grantsville—Calhoun Co. voted $100,000 bonds 9.5 mi. roads. State will appropriate toward cost. Noted Jan. 10.

N. C., Ahoskie—Plans paving Main St., type not decided. $25,000 or more.

N. C., Bryson City—Swain Co. having plans prepared road from here to Noland. $65,000. S. E. Varner, chn. Bd. Comrs. State Hy. Comn., Raleigh, engrs.

Ga., Macon—Plans resurfacing 5th St. $28,500.

Miss., Grenada—Grenada Co. will take new bids soon improving Federal Aid Project 147-A, incl. 23,656 cu.yd. common and 56,124 cu.yd. borrow excav., 31,974 lb. reinforcing steel in culverts, 327.72 cu.yd. concrete in culverts, bridges over 20 ft. span incl. 485.83 cu.yd. concrete, 52,690 lb. reinforcing steel, 14,261 units gravel ½ mi. overhaul, etc. $108,000. No award made Dec. 17, on account of injunction filed by objectors. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr. Noted Nov. 29.

Tennessee — Dept. Hy. & Pub. Wks. having surveys made grading 11 mi. road from Milan to Madison Co. line, 18 ft., Gibson Co. J. G. Creveling, comr.

Tennessee — Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading, bridges, etc., 4.5 mi. road from Haywood Co. line to Fayette Co. line, 18 ft., Tipton Co. J. G. Creveling, comr. Noted Aug. 30.

Tennessee — Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading and cement concrete surfacing 11 mi. road from Athens to Monroe Co. line, 18 ft., McMinn Co. J. Creveling, comr. Noted Oct. 18.

Tennessee — Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading 8 mi. road from Clinton to Knox Co. line, 18 ft., Anderson Co. $100,000. J. G. Creveling, comr. Noted Oct. 4.

Tenn., Chattanooga—City plans grading and surfacing 6th, 10th, Chestnut, King, Newly, Pine, Lindsay, Dodds and Cherry Sts. $240,000. Grading will probably be done by day labor. E. Bass, comr.

Tenn., Dandridge — Jefferson Co. plans grading and surfacing New Market Rd. $75,000.

Tenn., Jackson—Madison Co. authorized expenditure of $500,000 for roads.

Tenn., Tiptonville — Sold $51,000 bonds half of which is for construction of streets.

Kentucky—State Hy. Dept., Frankfort, plans constructing and surfacing with concrete or macadam, 10.5 mi. road from Grant Co. line to Sta. 556, 18 ft., Federal Aid Project 115, Scott Co. J. S. Boggs, state highway engr.

Ky., Fulton—Fulton Co. election Feb. 5, to vote on $450,000 bond issue for roads.

Ky., Hickman—Fulton Co. election Feb. 5, to vote on $450,000 bonds for roads and bridges.

O., Barberton—Plans paving High St., probably asphalt. To exceed $25,000. M. Witner, mayor. Engineers name withheld.

O., Canton—Plans paving ½ mi. Hazlette Ave. N. W., 40 ft. $30,000. W. E. Sarver, City Hall, engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 4,887 ft. Cole St. and Livingston Ave., brick $89,829 or asphalt $73,359; 816 ft. alley north of Thurman Ave. (Redbud Alley), concrete $4,523 or brick $5,167. R. H. Simpson, city engr.

O., Columbus—Plans widening and asphalt paving 1,908 ft. Grant Ave., from 32 to 44 ft. $36,494. R. H. Simpson, city engr.

O., Dayton — City and Montgomery Co. plan paving about 5,500 sq.yd. Wilmington Pike, concrete, brick or Kentucky rock asphalt. $25,000. City to pay ⅔ and county ⅓ of cost. J. F. Hale, city engr.

O., Dayton — Montgomery Co. making plans paving 3.25 mi. North View, Marie, Emerson, Brookside and Hudson Aves., brick, concrete or asphalt. Sold $119,000 bonds for project. W. O. Pease, surv.

O., Marietta—Plans widening and rein.-con. paving Greene St. $92,376. C. Stone, Marietta, engr.

O., New Philadelphia — Tuscarawas Co. plans rebuilding 2 sections New Philadelphia-Uhrichsville Rd., 2.5 mi. long, 18 ft. wide. $50,000-$75,000. C. E. Stingel, Court House, engr.

Ind., Columbia City—Plans paving Elm St. part 26 ft. wide, balance 16 ft.; Chicago St., 26 ft. wide, brick is specified, but other materials will be considered. $30,000-$35,000. Dept. Pub. Wks., engrs.

Ind., Evansville—Plans paving Hart Ave., various materials to be considered. $25,000. J. D. Saunders, city engr.

Ind., Ft. Wayne—Bd. Pub. Wks. plans paving South Wayne Ave., to exceed $25,000, and Pontiac St., to exceed $25,000, various materials will be considered, but will probably use asphalt. Engineering Div., engrs.

Ind., Ft. Wayne—Plans paving Clayton St., various materials $25,000. H. Strodel, street comr.

Ind., Kokomo—Plans paving East Markland Ave. and East Vaille St., brick or asphalt. To exceed $25,000. B. C. Moon, mayor.

Ind., Muncie—Delaware Co. plans cement paving and curbing 1.25 mi. Hackley St., 30 ft., Center Twp. $38,000. J. P. Draggoo, aud.

Ind., South Bend—Plans to grade, curb, gutter and lay cement sidewalks on 10 streets. $25,000. J. de Lorenzi, clk.

Ill., Dwight—Having preliminary plans prepared grading, concrete curbing, guttering and paving 1,600 ft. Pollard and North Sts. $150,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Waukegan—Plans paving Mott Ave., North Victory, Clayton, 9th, Wadsworth, Adams, Prescott and Victory Sts., various types incl. concrete and brick. To exceed $25,000. M. J. Douthilt, City Hall, engr.

Wis., Kaukauna—Making plans paving 8 blocks Wisconsin Ave., 30 ft., bids on 3 types incl. concrete. F. M. Charlesworth, c/o City Hall, engr.

Ia., Moulton—City making plans paving 20 blocks. $80,000. Henningson Eng. Co., Natl. Bank Bldg., Omaha, Neb., engrs.

Ia., Stanton — Plans paving 10 blocks Dist. No. 1, Nebraska and Pacific Aves. $40,000. W. C. Cook, clk.

Minn., Preston — Comrs. Fillmore Co. voted to issue $150,000 bonds for highways. F. J. Ibach, aud.

Neb., Inperial—Chase Co. had plans prepared and soon takes bids graveling 7.634 mi. Federal Aid Project 206, Chase Co., 37,700 cu.yd. earth excav., 98,600 yd. gravel, etc. R. L. Cochrane, Lincoln, engr.

Neb., Schuyler—Colfax Co. had plans prepared and soon takes bids graveling 8.23 mi. Federal Aid Project 213, Colfax Co., 19,000 cu.yd. excav., 96,270 yd. gravel. R. L. Cochrane, Lincoln, engr.

South Dakota—State Hy. Dept., Pierre, plans to gravel surface 159.8 mi. roads in Sanborn, Brule, Aurora, Hutchinson, Lincoln, Douglas, Bon Homme, Deuel, Butte, McPherson, Turner, Minnehaha, Lake, Law-Meade and Union Counties. F. D. Hudgins, state engr.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc., 5 mi. State Project Route 3, Greene Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc. 5 mi. State Project Route 19, Dent Co., also 5 mi. State Project Route 16, Wright Co., both 30 ft. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 5 mi. State Project Route 15, Sect. 71, 30 ft. Camden Co. B. H. Piepmeier, state highway engr.

Missouri—State Ry. Dept., Jefferson City, plans grading, etc. 4.5 mi. State Project Route 10, 30 ft., Randolph Co. B. H. Piepmier, state highway engr.

Tex., Bay City—Matagorda Co. had plans prepared and soon takes bids grading and shell surfacing, etc. 8.25 mi. State Highway 60, 15 ft. $72,235. E. N. Gustafson, Angleton, engr.

Tex., Cameron—Milam Co. election March 5, to vote on $125,000 bonds for improving Rd. Dist. 6, construction and maintenance of roads centering around Thorndale. A. F. Mitchell, co. engr.

Tex., Carrizo Springs—Dimmit Co. making plans grading and surfacing highway. $234,000. J. G. Lott, co. engr.

Tex., Cuero—De Witt Co. election Mar. 8, to vote on $135,000 bonds grading and surfacing Cuero-San Antonio Highway. Noted Nov. 29.

Tex., Dallas—See "Railways."

Tex., Del Rio—Election soon to vote on $100,000 bonds permanent paving principal streets. Address Mayor.

Tex., Eagle Pass—Maverick Co. having plans prepared bituminous macadam paving 25 mi. Eagle Pass-Carrizzo Springs Rd., 16 ft. $425,000. J. W. Ardle, Eagle Pass, engr. Noted Jan. 17.

Tex., Electra—Having plans prepared brick and bituminous paving 40 blocks. $90,000. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Tex., Fairfield — Freestone Co. having plans prepared grading, hard surfacing and bridging highways, 16-18 ft. $1,000,000. J. E. Johnson, Orange, engr. Noted Jan. 3.

Tex., Gonzales — Gonzales Co. election Feb. 23 to vote on $150,000 bonds grading and gravel surfacing 15 mi. Nixon-Smiley Sample Sect. of Glacier to Gulf Highway, 18 ft. J. G. Irby, co. engr. Noted Jan. 10.

Tex., Hillsboro—Hill Co. election Feb. 29, to vote on $150,000 bonds for Malone Rd. Dist. and $200,000 for Penlope Rd. Dist. G. Johnson, co. engr.

Tex., Nacogdoches—Had plans prepared paving, curbing and guttering 7,500 sq.yd. West Pilar, West Main, Irion and Hill Sts., probably brick. $25,000. O. L. Forsgard, city engr.

Streets and Roads (Continued)

Tex., Pecos—Reeves Co. had plans prepared grading and caliche surfacing 3.78 mi. State Highway 3, 16 ft. $36,500. A. J. Adcock, Balmorhea, co. engr.

Tex., Port Arthur—Having plans prepared permanent paving various streets, asphalt, $289,600; gravel and shell paving various streets, $170,000. Nagle Witt & Rollins, c/o C. N. Bates, Deutser Bldg., engrs. Noted Dec. 13.

Tex., San Antonio—Plans authorized by City Comrs. widening 6 blocks South Flores St., 10 ft. on each side. $75,000. I. Ewig, city engr.

Tex., San Antonio—Bexar Co. preparing plans permanent paving 1.25 mi. Rigsby Ave., 40 ft., 8 in. macadam. $64,168. I. Ewig, City Hall, engr.

Tex., Sulphur Springs—Hopkins Co. having plans prepared grading and surfacing with macadam base and inverted penetration bituminous top 7.8 mi. State Highway 1, 18 ft. $195,400; 24.9 mi. Jefferson Rd., 18 ft., $545,600. J. B. Rieman, co. engr.

Tex., Venus—Making plans permanent paving various streets. $25,000 bonds voted, property owners to pay $50,000. H. N. Roberts, 4227 Irving St., Dallas, engr.

Okla., El Reno—Plans grading and paving 7 blocks Hoff, Hays and Woodson Sts., 7,100 sq.yd. asphalt, 2,950 lin.ft. curbing and 2,600 cu.yd. excav. $32,000. H. G. Olmsted, 2230 West 18th St., Oklahoma City, engr.

Okla., Oklahoma City — Plans grading and paving 15th, 45th, 19th, Western ana Madison Sts., 7,900 sq.yd. asphalt, 4,150 lin.ft. curbing, 2,400 cu.yd. excav. $38,000. B. M. Hart, City Hall, engr.

Colo., Denver—Plans asphaltic paving, concrete curbing where necessary on 12 blocks in West Denver Paving Dist. 5 $49,125, 12 blocks Capitol Hill Paving Dist. 8 $49,091, 12 blocks West Denver Paving Dist. 4 $55,652, 12 blocks South Capitol Hill Paving Dist. 1 $46,057; asphaltic paving 12 blocks South Capitol Hill Paving Dist. 3 $43,223, 12 blocks Capitol Hill Paving Dist. 12 $41,757, 12 blocks Washington Park Paving Dist. 3 $29,409; grading, surfacing, concrete curbing and guttering 12 blocks West Denver Impvt. Dist. 3 $38,823. A. K. Vickery, City Hall, engr.

Nevada—State Hy. Comn., Carson City, had plans prepared 3.2 mi. concrete and gravel road, in Las Vegas and gravel surfacing 13 mi. road from Yerington to east county line, Lyon Co. G. W. Borden, state highway engr.

Wash., Chehalis—Comrs. Lewis Co. take bids about Feb. 5, concrete paving 1 mi. Lewis County Rd. to north county line. $35,000. R. L. Greene, Chehalis, engr.

Wash., Mt. Vernon—Comrs. Skagit Co. take bids about Feb. 20, concrete paving 8 mi. Wickersham Rd. to Whatcom Co. line. $250,000 bonds sold. F. Gilkey, Mt. Vernon, engr.

Wash., Tacoma—Pierce Co. making plans paving 4.98 mi. roads, $118,084, grading and graveling 30.35 mi., $61,013 C. H. Votaw, co. engr.

California—State Hy. Comn., Sacramento, having plans prepared grading and rock surfacing 13 mi. highway from terminus of Plank Rd. to Yuma, Imperial Co., incl. 94,000 cu.yd. excav., unclassified. R. M. Morton, state highway engr.

Calif., Azusa—Plans to vote on $50,000 bonds paving various streets.

Calif., Bakersfield — City and Kern Co. plan paving Baker St. and California Ave. $120,000.

Calif., Fresno—Fresno Co. having plans prepared for 5 in. asphaltic concrete paving, concrete curbs and walks and installing electrolier lighting system in Rd. Impvt. Dist. 5. To exceed $25,000. C. P. Jensen, co. surv.

Calif., Gilroy—Plans improving various streets, Warrenite pavement. To exceed $350,000. C. E. Sloan & Co., Santa Fe Bldg., San Francisco, consult. engrs.

Calif., Glendale—Had plans prepared paving Kenilworth, Vine and Riverside Sts., 43,720 sq.ft. grading, 26,374 sq.ft. 5-in. macadam, 1,503 ft. curb, 7,770 sq.ft. walks; Justin, 10th and Kenneth Sts., etc., 88,945 sq.ft. grading, 59,965 sq.ft. 3-in. macadam, 2,578 ft. curb, 13,085 sq.ft. walks, 4,535 sq.ft. gutter. B. F. Dupuy, city engr.

Calif., Palo Alto—Plans improving various streets, 700,000 sq.ft. 6 and 7 in. concrete. To exceed $125,000. J. F. Bxybee, Jr., city engr.

Calif., Redwood City — San Mateo Co. having surveys made improving roads between El Camino Real and Skyline Blvd. To exceed $25,000. G. A. Kneese, surv.

Calif., Santa Paula—Had plans prepared improving River St., et al., 250,000 sq.ft. asphaltic concrete pavement. H. E. Reddick, city engr.

Calif., Santa Ana—Plans paving various streets. To exceed $400,000. W. G. Knox, city engr.

Calif., Stockton—San Joaquin Co. having plans prepared grading and paving Chicester Rd., with oil macadam. $25,650. F. E. Quail, co. surv.

Calif., Ventura—State Hy. Comn., Sacramento, having plans prepared causeway, here, incl. removing present wooden causeway and constructing concrete seawall, sand fill behind, 20 ft. pavement on top. To exceed $250,000. R. M. Morton, Sacramento, state highway engr.

Ont., Chatham—Suburban Area Comn. plans cement highways in section of Harwich, Chatham and Dover Twps. $300,000. Prices wanted on materials. W. G. McGeorge, 153 Queen St., engr.

BIDS DESIRED

N. Y., Brooklyn—Feb. 6, by E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging Lenox Rd., Ave. M, 2nd Ave., East 7th, East 18th, East 34th, East 37th, Montgomery, West 3rd, West 8th, West 13th, 57th, 70th, 76th and 82nd Sts.; paving Jerome Ave., 2nd hand granite, paving Bay 28th and 38th Sts., Blake, Highland, Homecrest, Lefferts, and 12th Aves., East 7th, East 34th, Maple, Union, West 8th, 40th, 57th, 70th and 81st Sts., all foregoing permanent sheet asphalt on 6 in. concrete; curbing and asphalt paving Elmore Pl., Ave. I and West 7th St.; curbing and laying sidewalks on Liberty Ave.; grading, curbing, flagging and laying sidewalks on Ave. S; laying sidewalks on 70th St.

N. Y., Buffalo—Feb. 2, by J. F. Burke, 577 Ellicott Sq. Bldg., improving sub-division streets north of Kensington Ave., 8,900 lin.ft. To exceed $40,000. G. C. Diehl, 577 Ellicott Sq. Bldg., engr.

N. J., Newark—Feb. 8, by G. C. Bergen, purch. agt. Essex Co., grading and paving 0.5 mi Bay Ave. in Bloomfield and Glen Ridge, 30-36 ft., granite block and sheet asphalt on 6 in. concrete. $50,000. W. A. Stickel, Court House, engr. Noted May 3.

N. J., Salem—Feb. 12, by Road Com. of Bd. Freeholders Salem Co., reconstructing Sect. 1 Carlls Corner Rd., concrete. H. B. Keasbey, co. engr.; adv. E. N.-R. Jan. 31.

S. C., Charleston—Feb. 7, by Sanitary Drainage Comn., 39 Broad St., constructing 6.6 mi. cement clay, gravel road, incl., 43,500 cu.yd. excav., 25,000 tons cement clay gravel, etc.

Ala., Tuscaloosa—Mar. 1, by Judge Finnell of Tuscaloosa Co., constructing 7 mi. road from University of Alabama to Castle Hill and from Warrior River bridge to Newport, 27,589 sq.yd. concrete.

Ohio—Feb. 15, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 46.079 mi. roads in Adams, Columbiana, Cuyahoga, Delaware, Geauga, Mahoning, Medina, Paulding, Perry, Pickaway, Stark, Summit and Washington Counties; grading, etc., 3.073 mi. roads in Gallia and Vinton Counties; concrete widening 1.648 mi. road in Richland Co. A. V. Donaheys, dir. highways.

Illinois—Feb. 15, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 151.5 mi. road, grading one section and building 7 bridges. C. H. Older, ch. highway engr.

Wis., Plymouth—Feb. 26, by H. A. Luedtke, city clk., 40,000 sq.yd. pavement, rein.-con., vibrolithic concrete, sheet asphalt on concrete or bitulithic on concrete, 21,000 lin.ft. concrete curbing, 13,000 cu.yd. excav., on Forest Ave., Elizabeth, Smith, Stafford, Mill, Division, Eastman, Appleton, Cold Storage, North and Main Sts. J. Donohue Eng. Co., North 8th St., Sheboygan, engrs.

Ia., Nevada—Feb. 6, by City Clerk, paving, sewers, etc. 32 blocks, 40,300 sq.yd. concrete, 21,600 lin.ft. integral curb, 33,650 sq.yd. asphaltic concrete, 21,600 lin.ft. curb and gutter, 4,330 lin. ft. 8-in. and 16-in. storm drain, 910 lin.ft. 8-in. and 12-in. sewers, 26 manholes, 15 sanitary flush tanks, 52 inlet castings, etc. J. G. Dean, city engr.

Ark., Little Rock—Taking bids improving West 10th St. Dist. 353, 21,000 sq.yd. asphalt resurfacing on old concrete and brick base, 1,500 sq.yd. concrete base renewal, 2,100 tons binder, 1,000 ft. concrete curb, etc. $43,000. Ford & McCrea, Gazette Bldg., engrs.

Wyoming—Feb. 4, by State Hy. Comrs., Cheyenne, improving Cody-Yellowstone Park Rd., Federal Aid Project 129, 46,000 cu.yd. earth and 5,000 cu.yd. rock excav. State furnishes pipe. $190,000. R. L. Silver, Basin, engr.

Tex., Alpine—Feb. 15, by M. S. Burke, judge Brewster Co., grading and gravel surfacing 15.15 mi. State Highway 3, Federal Aid Project 378-C, 18 ft. $86,879. A. L. White, co. engr.

Tex., Ballinger—Runnels Co. taking bids grading and bridging 3.36 mi. State Highway 30, 16 ft., Federal Aid Project 410, $56,000. J. E. Pirie, Ballinger, engr.

Tex., Dallas—Feb. 11, by Comrs. Dallas Co. surfacing, etc., Belt Line 1 and North end of Denton Rd. in Dist. 1. $25,000. Nagle Witt & Rollins, Court House, co. engrs.

Tex., Dallas—See "Contracts Awarded."

Tex., Dallas—Feb. 11, by City Com. paving 225,000 sq.yd. Lamar, Poydras, Dundee, Wycliff, Hereshell, McKinney, Bowser, Gertrude, Flora, Gilbert, Hawthorne, Hartford, Bryan, Oak, Allen, Goodwin, Annex, Prospect, East Side, Tremont, McMillan, Garland, Llano, Preston, Lewis, Greenville, Washington, Pearl, Prairie, Holly, Terry, Forney, Grand, Pennsylvania, Park, Henry, Wendelkin, Canton, Dawson, Yarmouth, Ballard, Elsbeth, Kings Highway, Winnetka, Woodlawn, Neches, Page and 7th Sts., various types of bituminous, Willite asphalt concrete, bitulithic (Warrenite), rock asphalt, 2 in. on 5 and 6 in. base, Dundee St probably brick on concrete. $1,000,000. E. A. Kingsley, city engr.

Tex., Eastland—Taking new bids improving Moss St., incl. 8,613 yd. paving 3 in. brick on macadam or concrete, 4,709 ft. curb and gutter, etc., $30,000. Former bid rejected. C. L. Garrett, Eastland, engr. Noted Dec. 6.

Tex., Houston — City Com. taking bids graveling 30 ft. and grading 100 ft. White Oak Bayou Dr. from Houston Ave. to Stude Park. $50,000. J. C. McVea, city engr.

Tex., Houston—Feb. 11, by Harris Co., repairs to Harrison Blvd., asphaltic concrete, also bridge on Richmond Rd., to exceed $25,000. Howe & Wise, co. engrs.

Tex., Houston—Feb. 11, by Comrs. Harris Co., paving various streets, 50,000 gal. asphalt. Howe & Wise, co. engrs.

Oklahoma—Feb. 6, by W. C. Burnham, state engr., Oklahoma City, grading and paving 1.2992 mi. Federal Aid Project 115, Sect. A, Cleveland Co., 2,866 cu.yd. excav., 2,969 cu.yd. overhaul, 11,550 cu.yd. borrow excav., 13,720 sq.yd. Bates type concrete pavement.

Colorado—Feb. 7, by State Hy. Dept., Denver, concrete paving 1.799 mi. Federal Aid Project 256 B, Atwood-Merino Rd., Logan Co., 18 ft., alternate bids for bituminous or concrete. $57,094. L. D. Blauvelt, state highway engr.

Colorado — Feb. 9, by State Hy. Dept., Denver, gravel surfacing 6.508 mi. Federal Aid Project 253-A, Steamboat Springs-Hayden Rd., Routt Co., 18 ft. $136,319. L. D. Blauvelt, state highway engr.

Wash., Ellensburg—Feb. 8, by Comrs. Kittitas Co., grading and graveling 2.1 mi. Permanent Highway 11, and constructing two 50-ft. steel pony truss bridges thereon. W. T. Bowman, Ellensburg, engr.

Calif., Bakersfield—Feb. 11, by Supervs. Kern Co., improving portions Rd. 283, 18 ft. wide, 4 in. bituminous base, 2 in. Willite surface. To exceed $25,000. J. R. Thornton, surv.

Calif., Los Angeles—Feb. 11, by Bd. Pub. Wks., improving Ave. 52 between Coringa St. and point 1,160 ft. north, incl. 29,898 sq.ft. oil and roll, 2,300 lin.ft. light curb, 11,500 sq.ft. walks, 4,600 sq.ft. gutter, etc.; Larchmont Blvd. between Melrose and Beverly Blvd., 76,664 sq.ft. Warrenite bituminous pavement; Peralta Ave. between Fletcher and Tyburn Sts., 74,163 sq. ft. oil and roll, 5,348 ft. curb, 27,102 sq.ft. walks, 10,364 sq.ft. gutter; Raymond Ave. between 59th Pl. and 64th St., 286,357 sq.ft. oil and roll, 2,429 sq.ft. walks, 7,632 sq.ft. gutter; Wall St. between Santa Barbara and 42nd Sts., 36,206 sq.ft. asphalt pavement, 3,675 sq.ft. gutter, etc.

Calif., San Bernardino — Supervs. San Bernardino Co. receiving new bids improving 5 mi. Big Bear Blvd., Rd. Impvt. Dist. 25, 40 ft. wide, 8 in. macadam pavement, corrugated iron culverts. E. T. Ham, co. surv. Noted June 7.

Streets and Roads (Continued)

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Jan. 28, sheet asphalt paving (1) Hallett St. (2) Hayes Ave. (3) 41st St. (4) 103rd Ave., grading, curbing, laying sidewalks, etc., on (5) 41st St. (6) 103rd (Kimball) Ave., from Cleveland Trinidad Paving Co., Flushing, (1) $29,575; W. P. McDonald Constr. Co., 17 West 42nd St., New York, (2) $81,270; Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, (3) $24,736 (4) $22,958; R. A. Hess, Inc., 14 Queens St., Astoria, (5) $7,527; H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, (6) $7,904. Noted Jan. 24.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Jan. 28, granite block repaving (1) Lexington Ave. (2) 1st Ave. (3) 2nd Ave. (4) Nassau Lane (5) Washington St., grading, regrading, curbing, recurbing, flagging, reflagging, etc. (6) easterly portion of Riverside Dr. from 500 ft. north of West 191st St. to point 800 ft. north of West 181st St., from J. Meehan & Son, 74 Cortlandt St., (1) $45,976 (4) $11,860; Casper Helbock, Inc., Harlem River and 150th St., (2) $39,526; Burnside Contg. Co., 270 Burnside Ave. (3) $72,323; P. J. Kearns Contg. Co., 2306 Creston Ave., (5) $42,509; M. Del Balso, 660 East 221st St., (6) $27,666. Noted Jan. 24.

New Jersey—State Hy. Dept., Trenton, Jan. 28, concrete paving 62,452 sq.yd. Route 5, Sect. 11, Delaware-Belvidere Rd., Warren Co., from Salmon Bros., Main St., Netcong, 90.1% engrs. est. $392,252. Noted Jan. 10.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, Jan. 22, 130,000 sq.yd. rein.-con. paving at Training School for Feeble Minded, from J. E. Perkinson, 3239 Carter Ave., $39,355. Engrs. est. $43,000. Noted Dec. 27.

Tex., Houston — Harris Co. grading, gravel, shell and crushed rock base with bituminous topping on 1.56 mi. State Highway 19, Federal Aid Project 393, incl., 163 cu.yd. concrete, 12,064 cu.yd. roadway and 7,314 cu.yd. borrow excav., 11,050 110,507 gal. asphaltic oil, 337 cu.yd. trap rock, 190 cu.yd. limestone, 12,217 lb. reinforcing, 3,539 cu.yd. gravel; grading, base and drainage structures from B. S. Davidson, Box 1097, $27,504; bituminous top, from Haden & Austin, 727 Kress Bldg., $6,248.

Calif., El Monte — Improving various streets, 6,910 sq.yd. of 6 in. and 18,323 sq. yd. of 5 in. concrete, 9,967 lin.ft. Class A and 3,302 lin.ft. Class B cement concrete curb, 46,558 sq.ft. walks, 1,442 lin.ft. 10 in. and 7,888 lin.ft. 6 in. sewer pipe, etc., from Hall-Johnson Co., Lynwood (Compton P. O.), $79,067.

Calif., Oakland—Improving 5th St. from Jefferson to Cypress St., (1) 202,627 sq.ft. grading (2) 707 ft. concrete curb with steel guard (3) 6,299 ft. concrete curb without guard (4) 7,873 sq.ft. concrete gutter (5) 194,754 sq.ft. 6 in. concrete base, 2 in. Warrenite surface (6) 866 lin.ft. of 10 in. pipe conduit, from Hutchinson Co., Hutchinson Bldg., (1) $0.045 (2) $0.99 (3) $0.74 (4) $0.32 (5) $0.30 (6) $2.00; Bates & Borland, Bank of Savings Bldg., (1) $0.05 (2) $1 (3) $0.75 (4) $0.30 (5) $0.30 (6) $3; Warren Constr. Co., Bacon Bldg., (1) $0.05 (2) $1.30 (3) $0.75 (4) $0.32 (5) $0.305 (6) $2.50; Oakland Paving Co., 5000 Bway., (1) $0.02 (2) $1 (3) $0.75 (4) $0.28 (5) $0.30 (6) $1.50. Noted Jan. 24.

Calif., Oakland—Improving 12th St. from Kirkham to Wood Sts., from Bates & Borland, Bank of Savings Bldg., 92,176 sq.ft. grading $0.05, 452 ft. curb with steel guard $1, 4,362 ft. concrete curb without guard $0.75, 96,855 sq.ft. concrete base, 2 in. Warrenite surface $0.30, 5,321 sq.ft. concrete gutter $0.30, etc. Noted Jan. 17.

Calif., Santa Rosa—Sonoma Co. improving Mendocino-Jenner Hy., incl. 240,000 cu.yd. excav., 5,000 lin.ft. of 12 in., 3,500 lin.ft. 15 in., 1,200 lin.ft. 18 in. and 900 lin. ft. 24 in. corrugated iron pipe (county will furnish pipe), etc. from F. H. Richardson, Stewarts Point, $160,265. Noted Jan. 3.

CONTRACTS AWARDED

Maryland—State Rds. Comn., Baltimore, paving 1.61 mi. Park Heights Ave., 44,500 sq.yd. concrete base, 44,000 sq.yd. bituminous macadam, 15,200 cu.yd. earth excav., 17,400 lin.ft. curbing, Contr. Bc-41, to P. Flanigan & Sons, Harford Rd. and 25th St., $160,711. Noted Jan. 24.

N. C., Asheville—Grading new thoroughfare between South Market St. and Coxe Ave., to Howerton Eng. Co., Asheville, $82,651. Noted Dec. 6.

Ala., Eufaula — City paving 5 blocks Broad St., asphalt on concrete, to Slattery & Henry, Mills Bldg., Greenville, S. C., $61,000; concrete paving 15 blocks 3 ft. sidewalks Broad and other streets, to Barlow & Gordy, Columbus, Ga., $25,000.

Ala., Florala — Grading and bitulithic paving 7 blocks, to Dietz Constr. Co., 900 North 13th St., Birmingham, $63,793.

Ala., Talladega—Paving 6 blocks South and East Sts., 27,000 yd. 2 in. asphaltic concrete on 5 in. concrete, to Southern Roads Co., Amer. Trust Bldg., Birmingham, $55,548. Noted Jan. 10.

Wis., Genoa Junction—Paving, etc., various streets, to R. R. Birdsall Constr. Co., 1025 12th St., Racine, 8,531 sq.yd. concrete pavement $2.72, 7,757 lin.ft. concrete curb and gutter $1.15. Noted Jan. 10.

Ia., Shenandoah—Paving, curbing, etc. city streets, 35,800 lin.ft. curbing and guttering, to Riley Nelson, Council Bluffs, $0.80 per lin.ft.; 51,000 sq.yd. 6 in. vibrolithic pavement to J. B. Corey, Shenandoah, $2.47 per sq.yd., resurfacing 23,600 sq.yd. old brick, to J. S. McLaughlin & Son, Mankato, Minn., $1.15 per sq.yd.

Ia., Shenandoah — Paving, curbing and guttering various streets, 51,000 sq.yd. paving, 27,400 lin.ft. concrete curbing and guttering, to J. F. McLaughlin & Sons, Red Oak, $159,465; 23,600 sq.yd. brick block relaid, to F. B. Corey, Shenandoah, $27,140. Noted Dec. 13.

Kan., Ft. Scott—Paving 19 blocks, brick on macadam with asphalt filler, to H. Tidd, Hutchinson, $52,129.

Mo., Kansas City—See "Railways under Missouri."

Tex., Cameron—Milam Co., grading and bridging 11.38 mi. Federal Aid Project 43, State Highway 43, 18 ft., to J. E. Thomas, Rogers, $73,822. Noted Jan. 24.

Tex., Dallas—Paving Jefferson Ave. from Polk to McDonough Sts., to Fuller Constr. Co., Southland Life Bldg., Dallas, $58,348. Bids on 2 sections of Young St. will be readvertised at once, due to error in bids. Noted Jan. 17.

Tex., Denton—Denton Co., grading and gravel surfacing 5.59 mi. Denton East Highway, from Little Elm to Collin Co., to Purvis & Lowery, Waggoner Bldg., Ft. Worth, $22,629, concrete structures on same, to Denton Constr. Co., Denton, $14,947. Gravel to be furnished by county $3,000. Noted Jan. 3.

Tex., Franklin—Robertson Co. grading and gravel surfacing 9.74 mi. State Highway 43 A, 16 ft., to Thomas & Ratcliff, Rogers, $36,536. County to furnish 18,822 cu.yd. gravel $26,500. Engrs. est. $77,261. Noted Jan. 24.

Tex., San Angelo—Tom Green Co. grading, gravel surfacing and asphalt topping 9.73 mi. State Highway 9, Federal Aid Project 412, 1,135 cu.yd. concrete, 51,242 cu.yd. roadway, 12,798 cu.yd. borrow, 1,230 cu.yd. loose and 1,032 cu.yd. solid rock excav., 63,965 gal. asphalt, 2,920 cu.yd. cover material, 108,128 lb. reinforcing, 30,242 cu.yd. gravel, to Metcalfe & Thompson, San Angelo, $90,500. Engrs. est. $106,500.

Tex., Wichita Falls—Wichita Co., grading and gravel surfacing 3 mi. Iowa Park Jonesdale Rd., to Graham Constr. Co., Iowa Park, $26,301; Burnett-Clara Rd., to J. E. Ward Co., Linz Bldg., Dallas, $41,867; Iowa Park-Clara Rd., to G. G. Burgess, Iowa Park, $17,922.

Nevada—State Hy. Comn., Carson City, improving 17.59 mi. from Mormon Mesa to Nevada-Arizona state line, Route 6, Sect. H., Clark Co., 222,000 cu.yd excav., 11,200 cu.yd. loading and screening, 29,400 yd. mi. hauling and 11,200 cu.yd. spreading gravel, 190 cu.yd. Class A and 220 cu.yd. Class B concrete, etc., to Dodge Bros. & Dudley, Fallon, $217,536. Noted Jan. 24.

Wash., Seattle—Bd. Pub. Wks., grading and concrete walks 26th Ave. N. E., to Paduano & Chrisman, 1546 12th St. S., 6,700 lin.ft. concrete sidewalk $1.35, 18,500 cu.yd. earth excav. $0.42 per cu.yd., total $30,593. Engrs. est. $33,585. Noted Jan. 17.

Calif., Auburn—Grading and paving Lincoln Way, Nevada and Sacramento Sts., to J. A. Costello, Jr., 1083 Shotwell St., San Francisco, $70,500. Noted Jan. 17.

Calif., Hanford — Improving various streets, regrading, repaving with 2 in. Warrenite bituminous surface, concrete and corrugated iron culverts, to California Constr. Co., 58 2nd St., San Francisco, $48,868.

Calif., Los Angeles—Improving Lucretia Ave. between Avalon and Echo Sts., to G. J. Bock, 1250 South Gramercy Pl., grading (total) $13,650, 639 sq.ft. concrete pavement $0.35, 31,818 sq.ft. oil and roll $0.07, 23,706 sq.ft. walks $0.23, 5,060 sq. ft. gutters $0.35.

Calif., San Diego—Common Council improving Front and Dickinson Sts., to G. R. Daley, 4430 Boundary St., $25,358. Noted Jan. 17.

Industrial Works

PROPOSED WORK

Vt., Wells River—Plant—Adams Paper Co. plans 2 story, brick and steel addition. $60,000. Private plans.

Mass., Brighton (Boston P. O.)—Service, etc.—International Harvester Co., 608 South Michigan Ave., Chicago, plans 2, 3 and 4 story, brick and concrete, North Beacon St., here. $50,000. Private plans.

Mass., Marlboro—Garage—H. H. Hazelton, 41 Chatham St., Worcester, having plans prepared by J. Rice, 306 Main St., Worcester, 1 story, 60 x 192 ft., brick and steel, plain foundation, Main St., here. $40,000.

Mass., Worcester—Factory—Royal Bed Spring Co., 7 Summer St., plans 3 story, brick and timber, Summer St. $40,000. Engineer and architect not selected.

Conn., Griswold—Power Plant—Eastern Connecticut Power Co., 362 Main St., Norwich, plans 1 story, brick and steel, here. $40,000. Private plans.

N. Y., Bowmansville—Plans—Brown Oil Co., Box 12, plans rein.-con., brick and steel plant. To exceed $50,000.

N. Y., Binghamton — Plant — Titchener Iron Wks., Frederick St., soon lets contract 1 story, Griswald St. $50,000. Private plans.

N. Y., Brooklyn—Warehouse—St. Mark Holding Co., c/o C. Meyers, archt., 31 Union Sq., New York City, having plans prepared 6 story, 100 x 100 ft., rein.-con. and brick, plain foundation, Eastern Parkway and Bedford Ave., here. $500,000. C. J. Jeppesen, 49 West 45th St., New York City, engr.

N. Y., New York—Garage—J. M. Felson, archt. and engr., 1133 Bway., preparing plans 2 story, rein.-con., brick and steel, plain foundation, St. Nicholas Ave. $65,000. Owner's name withheld.

N. J., Trenton—Plant, etc.—T. Maddocks Sons Co., Ewing and Perry Sts., plans 1 story, 450 x 1,600 ft. plant, 40 x 150 ft. power plant, and 2 story, 50 x 125 ft. office building, steel and concrete, on 150 acre site north of Trenton shops. $1,000,000. W. E. S. Dyer, Land Title Bldg., Phila., mill engr. and archt.

Pa., Latrobe — Plant — Anchor Drawn Steel Co. having plans prepared 1 story, 80 x 290 ft. and 50 x 120 ft. steel plant. Private plans.

Md., Baltimore — Storage — Monumental Storage & Carpet Cleaning Co., 1110 Park Ave., plans storage warehouse in 2 units each 80 x 150 ft., 3 and 6 story, brick, Payson St. and Windsor Ave. $200,000. Engineer and architect not selected.

W. Va, Beckley—Shop—Daniel Boone Mining Machine Co. preparing plans 3 story and basement, 60 x 80 ft. $50,000. Private plans.

W. Va., Martinsburg — Plant — Eastern Sewer Pipe and Brick Co., Dean Bldg., plans power plant at factory. $50,000.

W. Va., Weston—Plant—Danser Mfg. & Supply Co. plans addition. $50,000.

N. C., Rocky Mount—Bd. Aldermen plans to build new light and power plant. Will issue $350,000 bonds to cover cost.

Fla., Jacksonville—Plant and Warehouse—Cheek-Neal Coffee Co., Cummins Sta., Nashville, Tenn., plans 5 story, 100 x 150 ft. concrete and steel, here. $150,000. L. T. Cheek, vice-pres.

Fla., Sanford — Electric Light and Gas Plants—City voted $310,000 bonds for electric light plant and $160,000 for gas plant. W. B. Williams, city engr. Noted Dec. 27 under "Waterworks."

Tenn., Cleveland—Mill—Cleveland Woolen Mills Co. having plans prepared by W. H. Sears, James Bldg., Chattanooga, several additions to plant. $70,000.

Tenn., Dickson — Factory — Dickson Development Co. soon takes bids 2 story and basement, 60 x 140 ft., brick. $40,000. American Cigar Co., lessee.

Tenn., Knoxville—Plant—Burdett Oxygen Co., 410 Market St., Chattanooga, plans plant, incl. power house, here. $40.000.

Industrial Works (Continued)

Ky., Louisville—Garage—Consolidated Realty Co., 229 South 5th St., plans 1 story brick, 1036 South 8th St. $40,000.

O., Cleveland—Dry Kilns—Baker R. & L. Co., 2180 West 25th St., plans 1 story, brick, West 80th St. $100,000. E. J. Stahl, vice pres. Private plans.

O., Cleveland—Factory—Cleveland Heater Co., 1900 West 112th St., having plans prepared by G. S. Rider & Co., Century Bldg., 1 story, 100 x 250 ft., brick and steel addition. $200,000.

O., Cleveland—Factory—J. Roemer Heating Co., 1808 East 22nd St., having preliminary plans prepared by W. S. Ferguson Co., Euclid Ave., 1 story, 80 x 132 ft., brick addition. $40,000.

O., Galion—Foundry—Galion Iron & Mfg. Co. had revised plans prepared 1 story, 50 x 160 ft. addition. $65,000. Althous & Jones, Market Bldg., Mansfield, engrs. Noted Oct. 4.

O., Sharonville—Roundhouse—Cleveland, Cincinnati, Chicago & St. Louis R.R., 511 West 3rd St., Cincinnati, plans brick roundhouse addition, here. $100,000, mechanical equipment $65,000. C. A. Paquette, ch. engr.

Ind., LaPorte—Garage—Motor Oil Garage plans garage and service station to replace one recently destroyed by fire. $60,000. Engineer and architect not selected.

Ind., Mishawaka—Factory—Mishawaka Monument Wks., East 1st St., plans 1 story, 30 x 100 ft., concrete, brick and steel, Cedar St. $50,000. D. A. Van De Walle, proprietor. Engineer and architect not announced.

Ind., Muncie—Factory—Union Equipment Outfit Co. plans factory, to exceed $50,000. Engineer and architect not selected.

Ill., Abingdon—Factory—Amer. Sanitary Mfg. Co. having preliminary plans prepared by Lockwood, Greene & Co., 38 South Dearborn St., Chicago, 1 story, 90 x 200 ft. addition to plant.

Ill., Mt. Vernon—Mill and Power Plant—Mt. Vernon Car Mfg. Co. plans wood mill and power plant. $150,000. Awarded contract to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa., for 700 tons structural steel, about $50,000.

Ill., Peoria—Factory—Cutler Proctor Stove Co., 201 North Water St., plans 4 story, 150 x 200 ft., to replace one recently destroyed by fire. $150,000.

Ill., Plymouth—F. M. Connelly, 259 North Kellogg, Galesburg, plans stone crushing works, incl. power house, here. $100,000.

Wis., Evansville—Mill—Evansville Grain & Feed Co. plans to rebuild 2 story, brick and timber, plain foundation, recently destroyed by fire. $40,000. Engineer and architect not selected.

Wis., Milwaukee—Factory—S. F. Kadow, archt., 208 Howell Ave., preparing plans 1 story, 120 x 182 ft., brick and timber, plain foundation. $6,000. Owners name withheld.

Wis., Ojibwa—Factory—Co-operative Cheese Factory, c/o G. Squires and A. Kraft, plans 2 story, 40 x 64 ft., brick and tile, plain foundation. $40,000. Engineer and architect not selected.

Ia., Dubuque—Warehouse—Carr, Ryder & Adams Co., 10th and Adams Sts., completed plans 5 story, L-shaped, 120 x 200 ft. and 30 x 100 ft., rein.-con. and brick, 10th and Jackson Sts. $150,000. Private plans.

Kan., Eureka—Garage—Leader Garage & Motor Co. plans rein.-con. and brick. $100,000.

Missouri—Round Houses—See "Railways."

Tex., Beaumont—Warehouse—C. L. Berley, c/o Wilson Hardware Co., having plans prepared brick and tile. $50,000. Engineer and architect not announced.

Tex., Cross Plains—Oil Refinery—Crabb, McNeal & Bryant having plans prepared oil refinery. First unit $50,000. Larger plant later. Engineer and architect not announced.

Tex., Dennison—Shop—Missouri Kansas & Texas R.R., Railway Exch., St. Louis, Mo., plans 1 story, freight car repair shop, brick and concrete, with storage tracks. $180,000. Private plans.

Tex., Ft. Worth—Oil Refinery—Magnolia Petroleum Co., 405 Commerce St., plans additions to refinery at Hodge Sta. $500,000. Private plans.

Tex., Ft. Worth—Warehouse—Southwestern Storage Co., Dan Waggoner Bldg., having plans prepared by B. C. Hill, Interurban Bldg., Dallas, 4 story, 50 x 96 ft., concrete. $135,000.

Tex., Frost—Ice Plant—Frost Oil Mill Co. had plans prepared by J. C. Kett, engr., Frost, 50 x 60 ft., brick, 20 ton daily capacity. $40,000.

Tex., Rotan—Gypsum Plant—Universal Gypsum Co., 111 West Washington Blvd., Chicago, preparing plans 3 story plant, brick and rein.-con., 200 tons daily, here. $250,000. Private plans.

Tex., Snyder—Ice and Power Plant—Yoder & Anderson plan to rebuild ice and power plant, brick and concrete. $50,000.

Utah, Halliday—Factory—H. Nielson plans 1 story, 22,000 sq.ft. space. $50,000. P. C. Nielson, McIntyre Bldg., Salt Lake City, archt.

Wash., Everett—Power Plant—Delta Water & Electric Co., Central Bldg., Seattle, plans hydro-electric power plant on Pilchuch Creek, to develop 550 hp. Work includes concrete arch dam, 70 ft. high, 317 ft. long.

Calif., Fullerton—Packing Plant—Northern Orange Co. Citrus Exch. had plans prepared 1 story, 100 x 140 ft., brick and steel or hollow tile. Private plans.

Calif., Los Angeles—Warehouse—P. G. Hoffman Co., Inc., 1250 South Figueroa St., having plans prepared by F. D. Chase, Inc., archts. and engrs., Title Insurance Bldg., 2 story, rein.-con. $100,000.

Calif., Roseville—Car Repair and Car Building Shops—Pacific Fruit Express Co., 65 Market St., San Francisco, negotiating for purchase of 250-acre site, here, on which to erect car repair and car building shops.

Calif., San Francisco—Packing Plant—Frye & Co., 9th and Walker Sts., Seattle, Wash., plans packing plant, Townsend St. near 4th St., here. $100,000. Engineer or architect not announced.

Calif., Ventura—Factory—Ventura Footwear Co. had plans prepared 1 and 2 story, 50 x 140 ft., steel and concrete, first unit of plant. Private plans.

BIDS DESIRED

Pa., Ambridge—Factory—Natl. Metal Moulding Co. will build 1 story, 128 x 400 ft. steel and corrugated iron factory. Owner builds and awards separate contracts.

Pa., Darby—Plant—Feb. 5, by C. E. Wunder, archt., 1520 Locust St., Phila., 2 story, 96 x 144 ft. brick and steel plant, plain foundation, 9th and Summit Sts. here. for Supplee Wills Jones Milk Co., 26th and Jefferson Sts., Phila. $100,000.

Pa., Phila.—Plant—Jan. 31, by Ballinger & Co., archts., 12th and Chestnut Sts., 1 story and basement, 600 x 740 ft. rein.-con., brick and steel, plain foundation, Wissahickon and Abbottsford Sts., for Atwater Kent Mfg. Co. $800,000.

N. C., Mebane—Factory—White Furniture Co. taking bids, 100 x 200 ft. machine room and 80 x 240 ft. finishing room building, both 3 story, brick, steel and concrete. W. E. White, pres.

Tenn., Knoxville—Warehouse—Feb. 3, by R. F. Graf & Son, archts. Arnstein Bldg., 6 story, basement and sub-basement, rein.-con., brick and steel, plain foundation, Jackson Ave., for C. M. McClung Co., West Jackson Ave. $100,000. Noted Jan. 24.

Ky., Louisville—Factory—Standard Sanitary Mfg. Co., 6th and A Sts., receiving bids and opens same about Feb. 27, 4 story, 160 x 450 ft., rein.-con., 7th St. $750,000. Joseph & Joseph, Francis Bldg., archts. Noted Jan. 10.

Mich., Detroit—Garage—A. Des Rosiers, engr., 620 McKerchey Bldg., taking bids 1 story, 60 x 115 ft. brick and steel garage and repair shop, plain foundation, High St., for T. and R. Collins Trucking Co., 2539 Woodward Ave. $40,000.

Ill., Chicago—Auto Service—M. O. Nathan, archt., 123 West Madison St., taking bids 1 story, 119 x 150 ft., rein.-con., steel and brick, 4635 North Crawford St., for B. Bortz. $50,000.

Ill., Chicago—Garage—M. O. Nathan, archt., 123 West Madison St., taking bids 1 story, 72 x 100 ft., rein.-con., steel and brick, 54-62 East 31st St., for E. Hudson, c/o architect. $40,000.

Ill., Chicago—Garage—M. O. Nathan, archt., 123 West Madison St., taking bids 1 story, 100 x 175 ft., rein.-con., steel and brick, 3135 West Harrison St., for A. Randall, 3135 West Harrison St. $50,000.

Wis., Green Bay—Warehouse—Feb. 11, by Foeller, Schober & Stephenson, archts., Nicollet Bldg., 6 story and basement, 44 x 155 ft., addition to warehouse, brick and concrete, plain and wood pile foundation, Washington St., for Joannes Bros. Co., 118 South Washington St.; excavation and piling let to Greiling Bros. Co., East Walnut St. Total $200,000.

Wis., Milwaukee—Foundry—Pawling & Harnischfeger Co., 38th and Natl. Aves., taking bids 1 story, 182 x 400 ft., brick and steel, plain foundation, Natl. Ave. Bidders must submit own designs and include in bid all equipment for building.

Mo., St. Louis—Factory—Hellmuth & Hellmuth, archts., DeMenil Bldg., taking bids and open same about Feb. 1, 4 story, 60 x 100 ft., Theresa Ave., for Steelcote Mfg. Co., 700 North Main St. $50,000.

Calif., Los Angeles—Ice Storage—E. Borgmeyer, archt., California Bldg., receiving bids 5 story, 100 x 148 ft., rein.-con., Main and Maple Sts., for Jefferson Ice Co., 157 East Jefferson St. $85,000. Noted Jan. 24.

BIDS RECEIVED

Pa., Zelionople—Plant—Iron City Sanitary Mfg. Co., 1 story, 90 x 360 ft., brick and steel plant, from Pittsburgh Bridge & Iron Wks., Rochester, $150,000. This corrects report in Jan. 24 issue.

Calif., Los Angeles—Warehouse—Brunswig Drug Co., 501 North Main St., 5 story and basement, 50 x 150 ft., rein.-con., New High St., from C. A. Schweissinger, Jr., 625 Locust St., $120,000.

CONTRACTS AWARDED

Mass., Fall River—Boiler House—Durfee Mills, Plymouth Ave., 1 story, brick, concrete and steel addition, plain foundation, Plymouth Ave., to J. Crowe Co., Inc., 486 2nd St. Archts. est. $42,000.

Mass., Somerset—Generating Plant—Montaup Electric Co., 68 x 195 ft. turbine building, 135 x 165 ft. boiler room, 28 x 99 ft. electric bay, 25 x 56 ft. office building, all brick and steel, to Stone & Webster, Inc., 147 Milk St., Boston, $5,750,000, with equipment. Contractor in market for 100 ton overhead crane. Noted Dec. 27.

N. Y., Long Island City—Factory—Wagner Pastry Co., 14th St., factory addition, rein.-con. and brick, plain foundation, to Cunningham & Foley, 14 East 45th St., New York City. Archts. est. $60,000.

N. Y., New York—Garage—L. A. and M. Sheinert, c/o L. Sheinert, archt. and engr., 194 Bowery, will build 2 story, 150 x 200 ft., rein.-con., brick and steel, plain foundation, Delancey St., by day labor. $150,000.

N. Y., Schenectady—Garage—C. B. Christensen, (owner and contractor) 1628 Union St., will build 3 story, 40 x 120 ft., and 1 story, 40 x 60 ft. garage and storehouse, brick and steel, plain foundation, 214 Clinton St. $110,000.

N. J., Camden—Factory—B. Small, c/o J. S. Fuller, archt., 5438 Locust St., Phila., 1 story, 150 x 325 ft., brick and steel, plain foundation, 6th and Atlantic Sts., here, to S. Kaplan, 243 South 62nd St., Phila.

N. J., Camden—Machine Shop—E. F. McClintock, master carpenter, Pennsylvania Office, 1 story, 86 x 150 ft., brick and steel, plain foundation, Clinton St., here, to Armstrong & Latta, 1926 Sansom St., Phila., for Pennsylvania R.R., Broad St. Sta., Phila. Archts. est. $72,000. Noted Dec. 27.

N. J., Newark—Dairy—Newark Milk & Cream Co., 292 Broad St., rein.-con. and brick, plain foundation, Bridge St., to F. Kilgus, Inc., 13 South 6th St. Archts. est. $300,000.

Pa., Phila.—Plant—G. A. Bisler, 546 North 6th St., 4 story and basement, 138 x 143 ft. rein.-con., brick and steel plant, plain foundation, 5th and Brown Sts., to W. P. Steele & Son, 219 North Broad St.

N. C., Burlington—Burlington Mills Inc., mill building, warehouses and 70 cottages, to Gaston Constr. Co., Gastonia, main building $97,500, cottages $86,500. Noted Dec. 6.

N. C., Rhodhiss—Plant—Southern Power Co., 432 Church St., Charlotte, hydro electric plant along Catawba River, here, to develop 40,000 hp., to Rhinehart & Dennis, Charlottesville, Va. Noted Jan. 24.

Industrial Works **(Continued)**

Fla., Jacksonville—Assembly Plant—Ford Motor Co., Highland Park (Detroit P. O.), Mich., steel work for 1 story, 200 x 500 ft. assembly plant, here, to Virginia Bridge & Iron Co., Exch. Bldg., Memphis, Tenn. Noted Jan. 24.

Fla., Sanford — Factory — Florida McCracken Concrete Pipe Co., Sanford, subsidiary of McCracken Mfg. Co., Sioux City, Ia., will build factory, by day labor. $70,000. Noted Jan. 17.

Fla., Tampa — Factory — Florida McCracken Concrete Pipe Co., Sanford, subsidiary of McCracken Mfg. Co., Sioux City, Ia., will build factory by day labor, here. $70,000.

Tenn., Etowah — Shop — Louisville & Nashville R.R. Co., 10th St. and Bway., 1 story, 110 x 170 ft. steel and concrete machine shop, to Platoff & Bush, 122 West Liberty St., Louisville, Ky. Archts. est. $100,000.

Tenn., Memphis—Assembly Plant—Ford Motor Co., Highland Park, Detroit, Mich., 1 to 2 story, 300 x 800 ft., rein.-con., brick and steel, Riverside Blvd. and Parkway here, to Blair Constr. Co., Randolph Bldg.; steel work to Virginia Bridge & Iron Co., Exch. Bldg. Archts. est. $1,250,000. Noted Jan. 17.

Tenn., Nashville — Plans — Tennessee Enameling Co., Charl Park, 1 story, 95 x 180 ft., concrete and steel, 41st St. and Park Ave., to G. B. Howard & Co., 4th Ave. N. Archts. est. $40,000. Noted Jan. 3.

Ky., Louisville—Assembly Plant—Ford Motor Co., Highland Park, (Detroit P. O.), Mich., steel work for $1,000,000 assembly plant, here, to Virginia Bridge & Iron Co., Exch. Bldg., Memphis, Tenn. Noted Jan. 10.

O., Cleveland—Factory—Foster Bolt & Nut Mfg. Co., 3556 East 72nd St., 1 story and basement, 36 x 228 ft., concrete addition, to McMillan Co., 1918 East 66th St. Archts. est. $50,000.

O., Cleveland—Factory—Ohio Clay Co., 8829 Bway., will build 1 story, 46 x 396 ft., brick, steel and concrete, Warner Rd., by day labor. $50,000. Private plans.

O., Cleveland — Foundry — Stotter Metal Co., Hanna Bldg., 1 story, 51 x 100 ft., brick and steel, 7700 Bessemer Ave., to A. Bloom, 10621 Garfield Ave. Archts. est. $40,000.

O., Cleveland—Garage—J. Kofron, 1823 East 55th St., 2 story and basement, 50 x 100 ft., brick and rein.-con., 7724 Lexington Ave., to Super-Built Constr. Co., Union Bldg. Archts. est. $50,000.

O., Cleveland—Garage—C. T. Tyler, 3127 East 80th St., 1 story, 40 x 136 ft., brick and steel, 3169 East 80th St., to Painton & Dayley, 3169 East 80th St. Archts. est. $50,000. Noted Jan. 24.

Ind., Evansville — Factory — Graham Truck Co., Stringtown Rd., 1 story, 180 x 240 ft. addition, brick, steel and tile, Stringtown Rd., to M. J. Hoffman Constr. Co., 403 Furniture Bldg. Archts. est. $100,000. Noted Nov. 1.

Ind., Evansville—Garage—A. L. Maxwell Co., 2nd and Vine Sts., 3 story, 50 x 150 ft., brick and steel addition, to Tri-State Constr. Co., 22 Merchants Bank Bldg., Evansville. Archts. est. $40,000.

Mich., Detroit—Plant—J. Gagnier Printing Co., 320 West Fort St., 3 story and basement, rein.-con. and brick plant, plain foundation, McDougall Ave., to H. F. Yatzek, 1102 Beaconsfield St. Archts. est. $75,000.

Ill., Lebanon—Oil Plant—Clarkson Oil Co., Nashville, will build 1 story, 20 x 30 ft., galvanized iron and concrete plant, one 15,000 gal. gasoline storage tank and one 12,000 gal. kerosene storage tank, here, by day labor. Private plans.

Mo., St. Louis—Auto Service—Mendenhahl Motor Co., 2315 Locust St., general contract 4 story and basement, 37 x 155 ft., brick, stone and rein.-con., to T. A. O'Keefe, 4450 Margaretta St. Archts. est. $100,000.

Tex., Dallas—Laundry—Leachman Steam Laundry & Dry Cleaning Wks., Harwood and Hickory Sts., 1 story, brick and concrete, to J. A. Thomas, 4610 Munger St., $45,000. Noted Jan. 10.

Tex., Houston—Industrial—City Packing Co., Canal St., will construct industrial building, brick, by day labor. $50,000.

Tex., Houston—Shops—Otis Elevator Co., 1617 McKinney St., machine shop, brick, to D. Hall, Carter Bldg., $40,000.

Calif., Oakland—Garage—G. T. Banks, 77 Sunnyside Dr., San Leandro (Branch of Oakland), 1 story, brick, East 14th St. and 74th Ave., here, to C. A. Gossett, 327 Davis St., San Leandro, $42,000.

Calif., San Pedro—Publishing Plant—San Pedro Daily News will build 3 story, 40 x 20 ft. by day labor.

Buildings

PROPOSED WORK

Mass., Worcester — Office — Lockwood-Green & Co., archts., 24 Federal St., Boston, soon takes bids superstructure, probably 10 story and basement, 100 x 125 ft., rein.-con. and steel, for Worcester Investment Co. $2,700,000. Contract for wood pile foundation to E. D. Ward & Co., 82 Foster St.

R. I., Cranston—School—School Dept., City Hall, plans 2 story and basement, brick and fireproof, 2nd Ward. $150,000. Engineer and architect not selected.

Conn., Bridgeport—School—St. Stephens Roman Catholic Church, 330 Spruce St., plans 3 story, brick and concrete, fireproof, Fairfield Ave. $160,000. Engineer and architect not selected.

Conn., Hartford — Apartment — S. I. Ward, 750 Main St., having plans prepared by Berenson & Moses, 30 Allyn St., 3 story and basement, brick and steel, Myrtle St. $150,000.

Conn., New Haven—Fraternity House—James Gamble Rogers, archt., 367 Lexington Ave., New York City, soon takes bids 3 story, brick, stone and steel, plain foundation, York St., here, for Delta Kappa Epilson Society, c/o architect. $150,000.

Conn., Stratford — School — St. James Roman Catholic Parish, 2110 Main St., plans 2 story and basement, brick and steel, Main St. $150,000. M. J. O'Connor, pastor. Engineer and architect not selected.

N. Y., Albany — Bank — Brotherhood of Locomotive Engineers, Engineers Bldg., Cleveland, O., having plans prepared brick and steel, here. $250,000. W. Stone, Cleveland, O., ch. engr.

N. Y., Albany—Medical—Fenster Bros. Fleishman, Inc., 6 South Pearl St., plans 4 story, 66 x 140 ft., brick and steel, plain foundation, Washington St. $165,000.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 6 story, brick, steel and stone, plain foundation, Macombs Rd. $225,000. Owner's name withheld.

N. Y., New York—Hotel—Durham Realty Corp., 511 5th Ave., having plans prepared by F. H. Dewey, archt. and engr., 175 5th Ave., altering 12 story, brick, steel and stone, plain foundation, 204 West 72nd St. $350,000.

N. Y., New York—Theatre and Apartment—C. F. Zittel, 300 Central Park W., and M. Hart, 51 Chambers St., having sketches made by G. Keister, archt. and engr., 56 West 45th St., 9 story, brick, steel and stone, 241 West 42nd St. $1,175,000.

N. J., Camden—Hotel—United Hotels Co., 25 West 45th St., New York City, plans hotel, here. $1,250,000. J. D. Stern, 344 Kings Highway, Camden, chn. com.

N. J., Newark—School—Bd. Educ. soon takes bids brick, steel and stone, plain foundation, Park St. $175,000. J. F. Cook, Union Bldg., archt. and engr.

N. J., Trenton—Office—See "Industrial Works."

Pa., Corry—Hotel—Corry Hotel Co. having sketches made by E. E. Bailey & Co., Oil City, 5 story and basement, 70 x 75 ft. rein.-con. and tile, North Center St. $250,000.

Pa., McKeesport—Office—Bell Telephone Co., 17th and Arch Sts., Phila., having plans prepared by J. T. Windrim, 1201 Chestnut St., Phila., 3 story and basement, 50 x 117 ft., 6th Ave., here. $150,000.

Pa., Meadville—Home—Meadville Lodge I.O.O.F. having plans prepared by W. Holmes Crosby, Masonic Bldg., Oil City, 2 story and basement, 140 x 220 ft., Allegheny St. $200,000.

Pa., New Castle — Church — St. Marys Catholic Church plans 100 x 180 ft. stone, North and Beaver Sts. $200,000. Engineer and architect not selected.

Pa., Phila. — Apartment — Stetler & Dysher, archts., 1015 Chestnut St., preparing plans 4 story and basement, 75 x 150 ft. brick and steel, plain foundation, 43rd and Spruce Sts. $225,000. Owner's name withheld.

Pa., Pittsburgh — Apartment — G. E. Evans, 197 Watsonia Blvd., having plans prepared by F. Smart, 3418 Delaware Ave., 3 story and basement, 145 x 150 ft., Ellsworth Ave. $750,000.

D. C., Wash.—Apartment—F. H. Smith Co. having plans prepared by J. H. de Sibour, Edmonds Bldg., 8 story, rein.-con. and limestone, Massachusetts Ave. and 21st St. $1,250,000.

D. C., Wash.—Church and Community—Hamline Methodist Episcopal Church, 1500 9th St., having plans prepared by C. W. Bolton & Son, Schaff Bldg., Phila., church and community house, 16th and Allison Sts. $300,000.

D. C., Wash.—Embassy—Italian Embassy, 1400 N H Ave., having plans prepared and takes bids about Feb. 13, embassy building, 16th and Fuller Sts. $300,000. Warren & Wetmore, 16 East 47th St., New York City, and J. W. Geddes, Connecticut Ave. and De Salles St., N. W., Wash., D. C., archts.

N. C., Asheville—Office—Mutual Security Co. plans 8 story and basement, 49 x 85 ft., steel, tile, limestone, brick and terra cotta, North Market St. $250,000. Engineer and architect not announced.

N. C., Charlotte—Theatre—R. D. Craver, 105 East Boulevard, plans 8 story and basement, West Trade St. $400,000.

N. C., Concord—Hotel—Concord Realty Co. plans hotel. $300,000. J. A. Cannon and L. D. Coltrane both of Concord, interested. Engineer and architect not selected.

N. C., Greensboro — Hotel — O. Henry Hotel Co. soon takes bids 100 room addition, Greene St. $200,000. C. C. Hartmann, Greensboro, archt.

N. C., Goldsboro—Hotel—Local citizens plan 100 room hotel, Mulberry St. $300,000. T. H. Norwood, chn. Hotel Com. of Chamber of Commerce, has matter in charge.

N. C., Kinston—Office—Farmers & Merchants Bank plans 6 story and basement, Queen St. $175,000. Engineer and architect not announced.

N. C., Lexington — Orphanage — Natl. Junior Order United Mechanics plans orphanage, here, 1,000 capacity. Address Chamber of Commerce.

N. C., Wilson—Court House—Wilson Co. having new plans prepared by F. A. Bishop, Petersburg, Va., court house. $400,000. Noted Jan. 24.

N. C., Winston-Salem — Court House — Forsyth Co. plans new court house. $300,000. O. B. Eaton, chn. Bd. Co. Comrs.

Fla., Oldsmar—Hotel—C. P. Bland, 5061 Washington St., St. Louis, Mo., and A. M. Cornell, having plans prepared by P. J. Bradshaw, International Life Bldg., St. Louis, Mo., 250 room hotel, here. $250,000.

Miss., Greenwood—Schools—Voted $165,000 bonds, 2 and 3 story junior high school, small grammar and small grade schools. Bd. Educ. will select architect Feb. 1.

Tenn., Chattanooga—Hotel—Hotel Patten Operating Co., 11th and Georgia Aves., plans 10 story addition, 100 rooms, 11th St. $500,000.

Tenn., Knoxville—Store—Daniel Briscoe Co., Gay St., having plans prepared by R. F. Graf & Son, Arnstein Bldg., 6 story.

Ky., Eminence—Home—Old Odd Fellows and Rebeccas Home having plans prepared by Nevin, Wischmeyer & Morgan, Starks Bldg., Louisville, 2 story, brick and stone, here. $150,000.

Ky., Frankfort—High School—City having plans prepared by Frankel & Curtis, Ben Ali Bldg., Lexington, brick high school, 4th and Shelby Sts. $150,000. Noted Oct. 4.

Ky., Louisville—Office—Famous Players Lasky Corp., Pioneer St. and Bway., Cincinnati, O., plans 3 story, 76 x 105 ft., brick, 1st St. near Chestnut St., here. $150,000.

O., Akron—Y.M.C.A. plans 185 x 265 ft., not less than 8 story, Bowery and Buchtel Sts. $850,000.

O., Cleveland—Apartment—M. Duchon, 1077 Thornhill Dr., having plans prepared by A. F. Janowitz, 811 Prospect Ave., 3 story and basement, 37 x 145 ft., brick, East 93rd St. $150,000.

Buildings (Continued)

O., Cleveland — Apartment — M. Lewin, 11401 Hopkins Ave., and D. Kaufman, 876 Lakeview Rd., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story and basement, 47 x 150 ft., brick and timber, Cornell Rd. $175,000.

O., Cleveland — Apartment — J. Libman and I. Lerman, 12324 Edmonton Ave., having plans prepared by L. Skolnik, 6th St. Clair Bldg., 3 story and basement, 37 x 140 ft., brick, East 90th St. $150,000.

O., Cleveland—Apartment—T. Malbin, 1566 Belmar Rd., having plans prepared by A. H. Soffen, Ulmer Bldg., 3 story, 50 x 146 ft., brick and timber, Lake Shore Blvd. $200,000.

O., Cleveland—Apartment—Ohio Building Finance Co., Discount Bldg., having revised plans prepared by J. L. Cameron, 2014 East 105th St., 4 story, 32 x 135 ft., brick, 2052 East 90th St. $150,000. Former bids rejected. Noted June 7.

O., Cleveland—Apartment—A. H. Oyer and J. H. Brockman, Bangor Bldg., having plans prepared by S. H. White, 1032 Schofield Bldg., 4 story, brick and concrete, on lot 50 x 300 ft., East 97th St. $700,000.

O., Cleveland—Apartment—G. W. Spohn and G. P. Nachman, 1775 East 45th St., having plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 68 x 200 ft., brick, 1906 East 82nd St. $200,000.

O., Cleveland—Cathedral—Cleveland Catholic Diocese plans 1 story, brick, steel and concrete, 11025 Euclid Ave. $1,000,000. Engineer and architect not selected.

O., Cleveland Heights (Warrensville, P. O.) — Church — St. Pauls Episcopal Church, W. Breed, pastor, Statler Hotel, Cleveland, plans 1 and 3 story, brick, steel and concrete, on lot 185 x 500 ft., Fairmount Blvd. and Coventry Rd., here. $1,000,000. Engineer and architect not selected.

O., Cleveland—Club Rooms—High Noon Club, c/o A. L. Davis, secy., Prospect-4th Bldg., having preliminary plans prepared by Thayer & Johnson, 5716 Euclid Ave., altering 4 story building, East 4th St. and Prospect Ave., into club rooms. $150,000.

O., Cleveland—Hospital—St. Lukes Hospital, c/o C. S. Woods, supt., 6600 Carnegie Ave., plans brick, steel and concrete buildings, East 116th St. and Shaker Blvd. $3,000,000. Engineers' and architects' names withheld.

O., Cleveland—Restaurant and Commercial—Clark Restaurant Co., c/o A. V. Clark, pres., 1730 East 24th St., having plans prepared by J. Gray, 169 High St., Boston, Mass., 2 story and basement, 24 x 180 ft., brick, steel and concrete, 1530 Euclid Ave. $150,000. Noted Jan. 24.

O., Cleveland Heights (Warrensville P. O.)—Apartment—H. Freyman, 309 Prospect Ave., Cleveland, having plans prepared by F. W. Hodges, 426 Hickox Bldg., Cleveland, 3 story and basement, 64 x 132 ft., brick, Overlook Rd., here. $175,000.

O., Cleveland Heights (Warrensville, P. O.)—Temple—B'nai Jeshuran Congregation, 3502 Woodland Ave., Cleveland, having plans prepared by C. R. Greco, 729 Guardian Bldg., Cleveland, 1 and 3 story, 180 x 185 ft., brick, steel, concrete and stone, Mayfield Rd., here. $750,000.

O., Cincinnati—Hotel—Hotel Metropole, Walnut St., near 6th St., having plans prepared by H. L. Stevens & Co., 30 North Michigan Ave., Chicago, 10 story, 47 x 94 ft., Walnut St. $500,000.

O., Dayton—Church—Westminster Presbyterian Church, 3rd and Ludlow Sts., had plans prepared by Schenk & Williams, Mutual Home Bldg., Dayton, and R. A. Cram, 248 Boylston St., Boston, Mass., 2 story and basement, 60 x 110 ft., brick and Bedford stone, plain foundation, 1st St. $615,000. Noted Mar. 29.

O., East Cleveland (Cleveland P. O.)—Church—St. Philomenas Roman Catholic Church, c/o J. F. Smith, pastor, 13824 Euclid Ave., Cleveland, plans 1 story, stone and steel, Euclid Ave., here. $200,000. Engineer and architect not selected.

O., Findlay—High School—Bd. Educ. having plans prepared by T. D. McLaughlin, Savings Bldg., Lima, 2 story and basement, 128 x 200 ft., brick and concrete. $225,000.

O., Grandview—Church, etc.—First Community Church soon takes bids 95 x 140 ft. church auditorium, Sunday school assembly and community building, 13,300 sq. ft. floor space, stone, Cambridge Blvd. $200,000. Miller & Reeves, 20 South 3rd St., Columbus, archts.

O., Mansfield—High School—B. Educ. having plans prepared by Althouse & Jones, Market Bldg., 3 story and basement, brick, steel and concrete. $750,000.

O., Massillon—G. H. Schwan Co., archts., Peoples Bldg., Pittsburgh, Pa., and E. Herrmann, associated archt., Massillon, preparing plans Y. M. C. A. building, East Tremont St. $300,000. Noted Nov. 1.

O., Willard—School—Bd. Educ. having plans prepared by G. Scott, Norwalk, brick and steel. $185,000.

Ind., Evansville—Church—Central Methodist Church plans church. $150,000. W. C. Jones, 19 South La Salle St., Chicago, archt. Noted Nov. 29.

Ind., Ft. Wayne—Community—Catholic Community Center having plans prepared by C. R. Weatherhogg, 250 West Wayne St., community building, Jefferson and Barr Sts. $150,000. M. J. Grace, chn. com.

Ind., South Bend — Lodge — Improved Order of Red Men, Montauk Tribe 426, plans lodge and club, Lincoln Way. $150,000. W. Layman, East Jackson Blvd., member of building com. Engineer and architect not selected.

Ind., Valparaiso — School — Bd. Educ. plans grade school to replace one destroyed by fire. $200,000. Engineer and architect not selected.

Mich., Detroit—Apartment—D. A. Brown, 2457 Grand River Ave., having plans prepared by A. Kahn, 1000 Marquette Bldg., 4 story and basement, 100 x 365 ft. brick, steel and stone, plain foundation, Clark Ave. and Fort St.

Mich., Detroit—Mercantile—Central Detroit Realty Co., c/o Weston & Ellington, archts., 1507 Stroh Bldg., having plans prepared 12 story and basement, 95 x 137 ft. rein.-con., brick and terra cotta, plain foundation, John R St.

Mich., Plymouth—School—Bd. Educ. having plans prepared by A. Wood, 3513 Woodward Ave., Detroit, 2 story and basement, 12 room, rein.-con., brick and steel, plain foundation. $150,000.

Ill., Chicago—Store and Office—Schoenbrod & Rosengard, 140 South Dearborn St., having plans prepared 2 story, 125 x 150 ft., fireproof, Trumbell and 26th Sts. $150,000.

Ill., Chicago — Bank and Office — Immel State Bank, c/o C. Hatzfeld, archt., 7 South Dearborn St., having plans prepared 2 story, 50 x 88 x 100 ft., rein.-con., brick and steel, Belmont, Elston and California Sts. $200,000.

Ill., Joliet—Auditorium—Bd. Educ. plans 3 story, steel addition to Joliet High School. $150,000.

Wis., Beloit—Vocational School—Vocational Bd., c/o S. Lange, 711 Merrill Ave., plans 2 story, rein.-con., brick and steel, plain foundation, Pleasant St. $150,000. Engineer and architect not selected.

Wis., Fond du Lac—Theater, etc.—Fisher Paramount Theaters, 36 South State St., Chicago, had plans prepared by G. Levine, 6957 South Green St., Chicago, and soon takes bids 3 story and basement, brick, concrete and terra cotta, plain foundation, here. $500,000.

Wis., Marinette — School — St. Joseph Congregation and W. S. Reynolds, archts., Roosevelt St., Green Bay, soon takes bids 2 story and basement, 65 x 120 ft., brick and tile, plain foundation. $150,000.

Wis., Milwaukee—Apartment—Hotel—G. W. Adams Building Co., 114 Grand Ave., having new plans prepared by R. Razall, 114 Grand Ave., 2 units each 4 story, 103 x 118 ft., brick and concrete, plain foundation, East side. $600,000.

Wis., Milwaukee—Apartment—M. Tullgren & Sons, archts., 425 East Water St., preparing preliminary plans 3 story and basement, brick, tile and concrete, plain foundation, Grand Ave. $175,000. Owner's name withheld.

Wis., Milwaukee — Business — Ninth & Mitchell Realty Co., 216 West Water St., had plans prepared by Herbst & Kuenzli, 114 Grand Ave., 2 story, 92 x 140 ft., brick and concrete, plain foundation. $150,000.

Wis., Milwaukee—Church—St. Boniface Congregation, c/o H. Stemper, 1118 Clarke St., had plans prepared by Riesch & Hess, 128 Wisconsin St., and soon takes bids 2 story, 130 x 186 ft., Clarke and 11th Sts. $250,000.

Wis., Milwaukee—Church—St. Leo Congregation, c/o P. Theisen, pastor, 2442 Locust St., soon takes bids 2 story, 88 x 160 ft., brick and tile, plain foundation, 24th and Locust Sts. $250,000. Engineer and architect not announced. Noted Nov. 8.

Wis., Milwaukee—Clubhouse—Milwaukee Eagles, Aerie 137, T. Manning, chn., 82 Wisconsin St., soon receives competitive sketches 3 story and basement, 50 x 150 ft., brick and concrete, plain foundation, Grand Ave. $500,000.

Wis., Milwaukee—Store and Apartment—V. H. Esser, archt., 82 Wisconsin St., preparing plans 3 story, 100 x 112 ft., brick and tile, plain foundation, North Ave. $50,000. Owner's name withheld.

Wis., Shorewood (Milwaukee, P. O.)—School—School Dist. 4, W. C. Sieker, clk., having preliminary plans prepared by Eschweiler & Eschweiler, 210 Mason St., 2 story and basement, brick, tile and concrete, plain foundation, Atwater Rd. $200,000 complete. Will be erected on unit basis.

Wis., Rhinelander—High School—Mar. 3, by School Bd., 2 story and basement, 135 x 214 ft. and 74 x 87 ft., brick, tile and concrete, plain foundation, Smith Reynolds & Brandt, Dempsey Bldg., Manitowoc, archts.

Ia., Des Moines—School—Bd. Educ having preliminary plans prepared by Boyd & Moore, Fine Arts Bldg., Jr. Highland Park High School, rein.-con., brick and steel. $500,000.

Ia., Ft. Dodge — Hospital — St. Josephs Hospital c/o Sisters of Mercy, takes bids in February 3 story and basement, 45 x 135 ft., rein.-con., brick and tile addition, plain foundation. To exceed $150,000. W. L. Steele, United Bank Bldg., Sioux City, archt. Noted Oct. 4.

Ia., Iowa City—Memorial—University of Iowa having preliminary plans prepared by Boyd & Moore, Fine Arts Bldg., Des Moines, 3 story and basement, 166 x 230 ft., on Campus. $1,000,000.

Ia., Tipton—School—Election soon to vote on $250,000 bonds for school. Thomas, McLenon & Thomas, 527 West 17th St., Des Moines, archts.

Minn., St. Paul—Hotel—Alverdes Restaurant, Inc., 379 St. Peter St., having plans prepared by Hausler & Kerr, 548 Hamm Bldg., 15 story and basement, 80 x 120 ft., rein.-con., brick and tile, 379 St. Peter St. $1,000,000.

Minn., St. Paul—School—Dept. Educ., City Hall, plans 3 story and basement, rein.-con., brick and tile, Marion and Gaultier Sts. $200,000. F. X. Tewes, city archt.

Kan., Chanute—Memorial—City having plans prepared by Lorentz Schmidt & Co., 516 4th Natl. Bank Bldg., Wichita, 3 story, rein.-con. and brick, plain foundation, will contain auditorium 2,000 seating capacity, city hall, officers, fire department, etc. $200,000. Noted Nov. 7.

Kan., Newton—College—Bethel College soon takes bids 2 story and basement, 76 x 134 ft., rein.-con. and stone, on Campus. $150,000. Foundation and basement being built by day labor. Lorentz Schmidt & Co., 4th Natl. Bank Bldg., Wichita, archts.

Kan., Winfield—College, Dormitory, etc.—St. Johns Lutheran College having plans prepared by Lorentz Schmidt & Co., 516 4th Natl. Bank Bldg., Wichita, rein.-con. and brick, plain foundation. $350,000.

Neb., Grand Island — Temple — Masonic Assn. having plans prepared by Kirschke & Baker, Ryan Bldg., 7 story and basement, 33 x 52 ft. rein.-con., brick and steel. $150,000.

Neb., Omaha—Lodge—I. O. O. F., 1402 Dodge St., having plans prepared by W. E. Stockham, 426 Sunderland Bldg., 5 story and basement, 80 x 120 ft. brick and stucco, 19th and Capital Sts. $200,000.

Neb., South Omaha — Exchange — Union Stock Yards Co., 38 South Dearborn St., Chicago, having preliminary plans prepared by G. B. Prinz, 1037 Omaha Natl. Bank Bldg., Omaha, 10 story and basement, 160 x 160 ft. brick and stone. $1,000,000.

N. D., Bismarck—Cathedral—Holy Ghost Cathedral, V. Wehrle, bishop, having plans prepared by A. Dohmen, 68 Wisconsin St., Milwaukee, Wis., 2 story, 96 x 200 ft. brick, stone and tile, plain foundation, $500,000.

Mo., Independence—Sunday School—First Presbyterian Church soon takes bids 3 story and basement, 53 x 56 ft., rein.-con., brick, stone, etc., plain foundation. $150,000. Shephard & Wiser, 302 R. A. Long Bldg., Kansas City, archts.

Mo., Jefferson City—High School—Bd. Educ. plans 3 story, rein.-con., brick, stone and tile, plain foundation. $200,000. Engineer and architect not announced.

Mo., Joplin—Convention Hall—City having plans prepared by A. S. Michaelis, 324 Miners Bank, 2½ story, 8th and Joplin Sts. $250,000.

Buildings (Continued)

Mo., Koch—Employees, etc.—City of St. Louis soon takes bids 3 story employees building, $150,000, also 3 story and basement, 62 x 165 ft. mens infirmary, $230,000, both rein.-con., steel, stone and brick, for Robert Koch Hospital, here. L. R. Bowen, 301 City Hall, St. Louis, engr. E. E. Christopher, 301 City Hall, St. Louis, archt.

Mo., Springfield—Club and Office—Aviation Town & Country Club, plans 32 story, rein.-con., steel, brick and tile, Washington and Clifton Sts. $2,000,000. Engineer and architects names withheld.

Mo., St. Joseph — College — Christian Brothers Commercial College, 12th and Henry Sts., plans 3 story, brick, concrete and stone, etc. $200,000. May not mature until early in 1925. F. X. Gilfillan, bishop. Engineer and architect not announced.

Mo., St. Louis — Market — City having plans prepared by E. E. Christopher, 301 City Hall, 3 story and basement, 226 x 270 ft., rein.-con., brick, stone and steel, Bway. $1,000,000. H. Updike, and L. R. Bowen, 301 City Hall, engrs.

Ark., Pine Bluff—Church—Presbyterian Church, c/o R. E. Fry, pastor, plans 2 story, brick and stone, church and Sunday school. $150,000. Engineer and architect not announced.

Tex., Ft. Worth—Office—W. L. Hurst, 2610 Azel St., plans 11 story. $150,000. Engineer and architect not announced.

Tex., San Antonio—Business—T. Goggan & Bros., c/o Woolworth Bldg., having plans prepared by R. Kelly, 310 Brody Bldg., 6 story, brick and rein.-con., Bway. and Travis St. $150,000.

Tex., San Antonio — Church — Baptist Church, 126 4th St., having plans prepared by J. M. Marriott, Frost Bldg., remodeling and repairing stone church, also constructing 2 story, brick addition. $150,000.

Colo., Denver—High School—School Dist. had plans prepared by G. H. Williamson, Majestic Bldg., 4 story, 280 x 417 ft., brick, terra cotta, steel and concrete, plain foundation, Detroit and Colfax Sts. $1,800,000.

Colo., Denver—High School—School Dist. 1 had plans prepared by W. H. Edwards, 1172 Stout St., 3 story, 250 x 450 ft., rein.-con., brick and steel, concrete pile foundation, between West 9th and West 10th Aves. and Elati and Fox Sts. $1,000,000.

Calif., Huntington Park (Branch Los Angeles)—Theatre—Hulsman & Boyd having plans prepared by Lindley & Selkirk, Amer. Bank Bldg., Los Angeles, 3 story, 114 x 150 ft. rein.-con. $200,000.

Calif., Lemoore—High School—Lemoore Union High School Dist. had plans prepared by W. H. Weeks, 369 Pine St., San Francisco, rein.-con., to contain 30 classrooms and auditorium. $325,000. Noted May 17.

Calif., Long Beach—Store and Loft—Middough Bros., 126 West Bway., having plans prepared by H. H. Lochridge, Markwell Bldg., 6 story and basement, brick and steel, Locust St. and Bway. To exceed $150,000.

Calif., Los Angeles—Apartment—T. C. Kistner, archt., Pantages Theatre Bldg., preparing plans 4 story and basement, 50 x 150 ft., brick, Bonnie Brae St. Owner's name withheld.

Calif., Los Angeles—Apartment—E. J. Stange, 1647 West 11th St., had plans prepared by H. W. Charlton, Central Bldg., 4 story and basement, 55 x 115 ft., brick, Witmer St. $150,000.

Calif., Los Angeles — Church — Melrose Ave. Methodist Episcopal Church, c/o R. H. Orr, archt., Corporation Bldg., had preliminary plans prepared for chapel, educational building for bible school, etc., brick and concrete. To exceed $300,000.

Calif., Los Angeles—Store, Office and Loft—M. Lombardi, et al., 1203 North Kenmore Ave., having plans prepared by Taylor & Taylor, 713 8th St., 8 story (ultimately 12 story), 50 x 100 ft., rein.-con. or steel frame, Bway.

Calif., Los Angeles—Office—Tropp Realty Co., 7th and Hill Bldg., representing interests, having preliminary plans prepared by Walker & Eisen, Pacific Finance Bldg., 13 story and basement, 100 x 184 ft., rein.-con., Francisco and 8th Sts.

Calif., Oakland—Bank—Bank of Italy, Eddy and Powell Sts., San Francisco, having plans prepared by H. A. Minton, 550 Montgomery St., San Francisco, 2 story addition to bank on 11th St. and Bway., here, Class A construction. $150,000.

Calif., Oakland—Hotel—Clay-To-Castro Improvement Assn., c/o C. H. Miller, archt., Perry Bldg., is representing interests and having preliminary plans prepared Class A Hotel, Jefferson St. near 14th St. $500,000.

Calif., Ocean Park—Theatre—See "Unclassified."

Calif., Sacramento—Store—C. P. Nathan & Sons Co., 800 L St., plans fireproof department store, J St. between 11th and 12th Sts. To exceed $150,000. Engineer and architect not selected.

Calif., San Francisco—Apartment—M. K. Ladd, c/o Baumann & Jose, archts., 251 Kearny St., having plans prepared 6 story and basement, rein.-con., O'Farrell St. $150,000.

Calif., San Francisco—Apartment—Stock & Jose, c/o Baumann & Jose, archts., 251 Kearny St., having plans prepared 6 story and basement, rein.-con., Hyde and O'Farrell Sts. $150,000.

Calif., San Francisco — Natatorium — E. Cerruti, (New Crystal Palace Baths,) c/o P. Righetti, archt., 12 Geary St., having plans prepared 50 x 150 ft. tank with filtration system, Lombard and Taylor Sts. $150,000.

Calif., San Jose—High Schools—Bd. Educ. plans to build two high schools, also grammar school. $700,000 and $95,000. Noted Nov. 15.

Calif., Venice—Apartment—J. Quinto, c/o Russell & Alpaugh, archts., Story Bldg., Los Angeles, having plans prepared 12 story and basement, 75 x 80 ft. brick, here.

Que., Montreal — Office — Title Trust & Guarantee Co. of Canada, E. R. Decary, director-general, plans 14 story, 130 ft. high, 144 x 172 ft., St. James St. Royal Bank of Canada, St. James St., will finance above project.

BIDS DESIRED

Mass., Boston — Fire Signal Station — Feb. 6, by T. A. Glynn, fire comr., Bristol St., 1 story and basement, 75 x 125 ft., rein.-con., Indiana limestone and Vermont blue marble, wood pile foundation, Westland Ave. Cost of building $220,000, cost of apparatus and changing wiring system $280,000. O'Connell & Shaw, 134 Newberry St., archt. J. T. Shaw, city fire dept. engr. and archt. Noted Apr. 12.

Mass., Webster—School and Rectory—H. F. Ludorf, archt., Mutual Bldg., New Britain, taking bids 2 story and basement, 120 x 140 ft. school, and 2 story, 46 x 50 ft. rectory, brick, plain foundation, Myrtle St., here, for St. Joseph Roman Catholic Church. A. A. Cryan, pastor. $200,000.

Conn., Bristol—Hospital—Feb. 2, by R. S. Newell, chn. com. Bristol Hospital, 249 Main St., 4 story and basement, 47 x 100 ft. main building, 2 story and basement, 50 x 60 ft. service building and 3 story and basement, 40 x 100 ft. nurses building. $400,000. C. S. Palmer, 114 Whitney Ave., New Haven, archt.

N. Y., Hamburg—High School—Feb. 11, by Bd. Educ., 2 story and basement, 150 x 250 ft., rein.-con. and brick, Pleasant Ave. To exceed $300,000. Former bids rejected. F. A. Spangenberg, 250 Delaware Ave., Buffalo, archt. Noted June 7.

N. Y., Rome—Employees—Feb. 25 (extended date) by R. C. Briggs, pres. Bd. Mgrs. State School for Mental Defectives, constructing, etc., employees building. S. W. Jones, Albany, state archt.; adv. E. N.-R. Jan. 31. Noted Jan. 10.

N. J., Florence—School—Feb. 7, by Bd. Educ., Florence Twp., 2 story and basement, 84 x 146 ft., brick and steel, plain foundation. $175,000. P. L. Fowler Co., 25 North Montgomery St., Trenton, archts.

Pa., Lancaster — School — Feb. 7, by School Bd., Administration School Bldg., Prince and Chestnut Sts., 3 story, West Walnut and Nevin Sts. C. E. Urban, 442 Woolworth Bldg., archt. Noted Dec. 27.

Pa., Phila.—Hospital—Feb. 28, by P. Johnson, archt., 1713 Sansom St., constructing hospital for crippled children, refectory building, 3 story, 44 x 59 ft., 2 dormitories each 2 story, 25 x 43 ft., administration building 3 story, 42 x 126 ft., power house 1 story, 40 x 66 ft., also three 2 story wings 25 x 45 ft., 27 x 36 ft. and 25 x 41 ft., brick and steel, plain foundations, Roosevelt Blvd. near Pennyback Park, for Penna. Mystic Shrine, 1337 Spring Garden St. $500,000.

Pa., Phila.—Institute—Feb. 5, by Ballinger & Co., archts., 12th and Chestnut Sts., 5 story and basement, 92 x 102 x 123 x 150 ft. brick and steel, plain foundation, for Seamans Church Institute, Walnut and Dock Sts. $300,000.

Pa., Phila. — Schools—Feb. 7, by Bd. Educ., 3 story and basement, 50 x 120 ft. with two 48 x 97 ft. wings, and one 50 x 96 ft. wing, rein.-con. and brick, B St. and Wyoming Ave., $500,000, also 3 story and basement, 39 x 120 ft. with two 38 x 76 ft. wings and one 38 x 105 ft. wing, rein.-con. and brick, plain foundations, Beuner and Pitman Sts., $500,000.

Pa., Phila.—Synagogue and Community—Feb. 4, by Congregation B'Nai Jeshurum, c/o M. Teber, 1011 Chestnut St., 2 story and basement, 140 x 150 ft. brick and steel, plain foundation, 33rd St. between Diamond and Susquehanna Aves. $200,000. Sugarman, Hess & Berger, 16 East 43rd St., New York City, archts.

Pa., Phoenixville—Bank—Feb. 14, by A. D. Eaches, cashier Natl. Bank of Phoenixville, 2 story and basement, 50 x 88 ft., brick and steel, plain foundation, Bridge St. $150,000. J. H. Mowere, 201 Bridge St., archt.

Md., Baltimore—Bank—Feb. 6, by J. E. Sperry, archt., Calvert Bldg., remodeling bank on Howard and Madison Sts., for Commonwealth Bank, Madison and Howard Sts. $150,000.

Md., Baltimore—Synagogue—Feb. 16, by S. Russell, archt., 11 East Lexington St., 2 story, 72 x 73 ft. synagogue and 35 x 85 ft. house, Garrison and Dalrymple Aves., stone, plain foundation, for Beth Tfilloh Synagogue, Equitable Bldg. $250,000. Noted Dec. 6.

La., Shreveport—High and Grade School—Feb. 4, by Caddo Parish School Bd., 3 story high school, concrete, brick and stone, also West Grade School, concrete and brick. $800,000. W. F. Nield, Shreveport, archt.

Tenn., Chattanooga—Hotel—Mar. 1, by Hotel Patten Operating Co., 11th St. and Georgia Ave., 10 story addition, 11th St. Smith & Downing, Atlanta, Ga., archts.

O., Bellaire—High School—Feb. 15, by Bd. Educ., 2 story and basement, 85 x 250 ft., brick, stone and concrete. $350,000. C. W. Bates, 77 12th St., Wheeling, W. Va., archt.

O., Canton—Store—Stern-Mann Co., Market Ave. N., taking new bids altering and building 2 and 3 story, 33 x 200 ft., brick, steel and concrete addition. $150,000. A. Garfield, 915 Natl. City Bldg., Cleveland, archt. Noted Apr. 2.

O., Celina—High School—Feb. 8, by Bd. Educ., 2 story and basement, 127 x 158 ft., brick, steel and concrete. $250,000. P. M. Hulsken, 216 West Market St., Lima, archt. Noted Oct. 4.

O., Cleveland — Apartments — T and R Constr. Co., 8318 Cedar Ave., taking bids and opens same about Feb. 15, two 3 story and basement, 37 x 157 ft. and 37 x 94 ft., brick, one at 775 East 80th St., other at 732 East 90th St. $175,000. M. Altschuld, 5116 Woodland Ave., archt.

O., East Cleveland (Cleveland P. O.)—Apartment—Cadkin & Jones, 3300 East 121st St., Cleveland, taking bids and open same about Feb. 15, 3 story and basement, 47 x 145 ft., brick, 1725 Wymore Ave., here. $150,000. Braverman & Havermaet, 201 Ulmer Bldg., Cleveland, archts.

O., Portsmouth — Temple — Feb. 11, by Building Com. Masonic Temple Assn., 3 story and basement, 84 x 180 ft., brick, stone, terra cotta and concrete, Gallia St. $500,000. Pretzinger & Musselman, 1155 Reibold Bldg., Dayton, archts.

O., Tiffen—High School—Feb. 15, by Bd. Educ., 2 story and basement, brick and concrete addition. $150,000. Langdon, Hohly & Gram, Toledo, archts.

O., Youngstown—Hospital—Feb. 14, by Mahoning Co., 3 story, brick, steel and concrete, Austintown Twp. $150,000. Stanley & Scheibel, Wick Bldg., archts. Noted Nov. 15.

Ind., Bloomington — Lodge — Rubush & Hunter, archts., 430 Amer. Central Life Bldg., Indianapolis, taking bids 2 story, 87 x 127 ft., limestone and steel, 7th and College Sts., for Masonic Lodge. $200,000.

Ind., Ft. Wayne—School—Feb. 8, by Bd. Educ., Lakeside Public School, Forest Park, $275,000; Harrison Hill School, $175,000, both brick and steel. G. Mahurin, 425 Standard Bldg., and C. R. Weatherhogg, 250 West Wayne St., archts. on respective schools. Noted Jan. 17.

Mich., Detroit—Bank and Office—Feb. 7, by A. Kahn, archt., 1000 Marquette Bldg., 5 story and basement, 65 x 81 ft. rein.-con.,

Buildings (Continued)

brick, steel and stone, plain foundation, Griswold St., for Security Trust Co., 655 Griswold St. $200,000.

Mich., Ypsident—School—Feb. 14. by W. M. Derbyshire, secy. Bd. Educ., 3 story; 140 x 160 ft. rein.-con., brick and steel, plain foundation, $200,000. Warren Holmes-Power Co., Tussing Bldg., Lansing, archts.

Ill., Chicago—Hotel—Rissman & Hirschfeld, archts., 64 West Randolph Sts, taking bids 3 story, 75 x 150 ft., fireproof, 1025 North Dearborn St., for F. Brons, c/o archt. $200,000.

Ill., Urbana—College—Feb. 11 (extended date), by J. M. White, archt., 256 Administration Bldg., general construction 4 buildings on campus. Noted Dec. 13.

Ill., Wheaton—High School—Feb. 18, by Bd. Educ., 3 story and basement, 150 x 300 ft., brick, concrete and stone, plain foundation. $160,000. J. C. Llewellyn, 38 South Dearborn St., Chicago, archt. Noted Oct. 25.

Wis., Appleton—High School—Feb. 19, by School Bd., H. Reuter, chn. building com., 2 story and basement, brick, tile and concrete, plain foundations. Total cost $400,000. Perkins, Fellows & Hamilton, 814 Tower Court, Chicago, archts. Noted Nov. 22.

Wis., Kenosha — Temple — Feb. 4, by Masonic Temple Assn., c/o J. M. Albers, chn. building com., 2 story, 80 x 120 ft., brick and concrete, plain foundation. $150,000. R. G. Schmidt & Co., 77 West Washington St., Chicago, archts.

Wis., Milwaukee—Apartment—Feb. 16, by C. W. Valentine, archt., 405 Bway, 7 story, 95 x 135 ft., brick and concrete, plain foundation, Prospect Ave., for L. C. and L. Goldman, 534 Mitchell St. $350,000.

Wis., Milwaukee—Business—M. Tullgren & Sons, archts., 425 East Water St., taking new bids 4 story and basement, 87 x 150 ft., brick and concrete, plain foundation. 3rd St. for C. Niss & Sons, 697 3rd St. $200,000. Former contract recinded. Noted Jan. 17.

Calif., San Francisco — Post Office — J. Kulp, 33 South La Salle St., Chicago, receiving bids 4 story and basement, fireproof, The Embarcadero, here. To exceed $150,000. U. S. Government, lessee. Noted Dec. 20.

Wis., Wausau — School — Feb. 15, by School Bd., S. B. Tobey, supt. schools, superstructure, 2 story, 54 x 162 ft. and 30 x 40 ft., 2nd unit to Central School, brick, tile and concrete, plain foundation. $150,000. Oppenhamer & Obel, Spencer Bldg., archts

Minn., Minneapolis—School—Feb. 15, by Bd. Educ., 305 City Hall, 2 story and basement, rein.-con., brick and tile, 15th Ave. N. and 4th St. $200,000. Bureau of Bldgs., Bd. Educ., City Hall, archts.

Neb., Falls City—Hotel—Feb. 12, by J. H. Craddock & Co., 315 South 15th St., Omaha, 4 story and basement, 92 x 130 ft. brick and stone, for Falls City Hotel Co. $150,000.

Tex., Houston—School—Sisters of Charity of Incarnate Word taking bids 3 story and basement, 65 x 260 ft., concrete, brick and stone, incl. power house, dormitory, class rooms, etc., Wayside and Telephone Rds. $500,000. M. Sullivan, 2nd Natl. Bank Bldg., archts.

Tex., Houston — Library — City taking bids and opens same about Feb. 15, 3 story and basement, 57 x 200 ft., rein.-con. and brick, McKinney and Smith Sts. $200,000. W. W. Watkins, Scanlon Bldg., archt. Cram & Ferguson, 248 Boylston St., Boston, Mass., consult. archts. Noted Dec. 20.

Calif., Stockton — Bank — L. P. Hobart, archt., Crocker Bldg., San Francisco, receiving bids 1 story (ultimately 10 story), rein.-con., Main St., for Union Safe Deposit Bank of Stockton, here. $150,000.

BIDS RECEIVED

N. Y., Brooklyn—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Jan. 22, P. S. 197, Elmore Pl. through to Delamere Pl., 200 ft. south of Ave. O, from T. A. Clarke Co., 122 Livingston St., $787,300, A deduct $14,000, B add $11,000, C add $4,000. Noted Jan. 17.

N. Y., Creedmoor (Jamaica, P. O.)—W. T. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Jan. 22, P. S. 33, 222nd St. through to 224th St. from 91st Rd. to 92nd Ave., here, for Bd. Educ., 500 Park Ave., New York City, from Frymier & Hanna Co., Inc., 25 West 45th St., New York City, $798,900, A deduct $15,000, B add $11,671, C add $2,856. Noted Jan. 10.

N. Y., Jamaica—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Jan. 22, P. S. 116, Wren Pl. from Pohlemas Ave. to Rex Rd. and extending to Fern Pl., Jamaica south, here, for Bd. Educ., 500 Park Ave., New York City, from Dooley-Stapleton Co., $807,000, A deduct $21,000, B add $2,500, C add $5,500. Noted Jan. 10.

Minn., St. Paul—School—Dept. Educ., City Hall, Jan. 22, 2 story and basement, rein.-con., brick and tile, general contract from Perry A. Swanson Co., 345 Endicott Bldg., $122,014. Noted Jan. 17.

CONTRACTS AWARDED

Mass., Brookline (Boston P. O.)—Apartment—Brookline Realty Associates, Inc., will build five 3 story, brick, stone and concrete, plain foundation, Alton Court, by day labor. $200,000. Private plans.

Conn., Meriden — Telephone — Southern New England Telephone Co., 114 Court St., New Haven, 3 story, 60 x 100 ft., brick and concrete, plain foundation, Butler St., to Immick Co., State St. Archts. est. $135,000-$150,000. Noted Oct. 11.

Conn., Norwich — Ward, etc. — Norwich State Hospital for Insane, 3 story ward building, and 2 story and basement nurses home, both brick, fireproof, at State Hospital, to H. Wales Lines Co., 134 State St., Meriden, $225,000 and $145,000 respectively. Archts. est. $370,000. Noted July 26.

N. Y., Brooklyn—Apartment—C. & K. Constr. Co., c/o Shampan & Shampan, archts. and engrs., 189 Montague St., will build 6 story, 84 x 210 ft., brick, stone and steel, plain foundation, Ocean Ave. near Albermarle Rd., by day labor. $700,000.

N. Y., Brooklyn—Hospital—Bikur-Cholim Hospital, Lafayette and Sumner Aves., brick, steel and stone, plain foundation, Sumner and Lafayette Aves., to Tenential Corp., 565 5th Ave., New York City. Archts. est. $1,000,000. Noted Aug. 9.

N. Y., Long Island City—School—Church of St. Patrick, 123 Academy St., 3 story, brick, steel and stone, plain foundation, Paynter Ave., to G. H. McEntee Co., 103 Park Ave., New York City. Archts. est. $200,000.

N. Y., New York—Apartment—S. Gennenberg, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, Grand Concourse and 196th St., by day labor. $400,000.

N. Y., New York—Apartment—J. Kliner, c/o D. S. Lang, archt. and engr., 110 West 40th St., will build 5 story, brick, steel and stone, plain foundation, Whitlock Ave., by day labor. $250,000.

N. Y., New York — Apartment — H. A. Lenzer, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 6 story, brick, steel and stone, plain foundation, Haven Ave. and 178th St., by day labor. $1,000,000. Noted Nov. 29.

N. Y., New York — Apartment — H. O. Osenoff, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 6 story, brick, steel and stone, plain foundation, Nelson Ave., by day labor. $350,000.

N. Y., New York—Apartment—Phelan & Billingsley, Inc., c/o Moore & Landseidel, archts. and engrs., 148th St. and 3rd Ave., will build brick, steel and stone, plain foundation, Burnside Ave., by day labor. $250,000.

N. Y., New York—Bank and Office—Bank of America, Wall and William Sts., 23 story, brick, steel and stone, plain foundation, to C. T. Wills, Inc., 286 5th Ave.; 4,500 tons steel, to Post & McCord, 101 Park Ave.

N. Y., New York—Bank—Chatham & Phenix Natl. Bank, 149 Bway., 3 story, brick, stone and steel, 144 East 86th St., to Sobray Whitcomb Co., 105 West 40th St. Archts. est. $150,000.

N. Y., New York—Office and Showroom—M. Kosofsky, c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., will build 10 story, brick, steel and stone plain foundation, 7th Ave. and 38th St., by day labor. $300,000.

N. Y., New York — Office — Dwight P. Robinson, 125 East 46th St., will build 11 story, brick, stone and steel, plain foundation, 2 Vanderbilt Ave., by separate contracts. $500,000. Warren & Wetmore, 10 East 47th St., archt. H. G. Baleoni, 10 East 47th St., engr.

N. Y., New York—Store and Loft—Trinity Corp., c/o Starrett & Van Vleck, archts., 8 West 40th St., 6 story, brick, stone and steel, plain foundation, Varick St., to Rheinstein & Haas, Inc., 21 East 40th St. Archts est. $200,000.

Pa., Palmerton—High School—W. H. Lee, archt., 15th and Race Sts., 3 story and basement, 139 x 165 ft., 3rd and Lafayette Sts., for Bd. Educ., general contract to J. Y. Loux, 15th and Hunting Park Aves., $224,480, heating to B. G. Carpenter Co., Wilkes-Barre, $32,500 Noted Jan. 17.

Pa., Phila.—Apartment—Arrow Constr. Co., 1627 Sansom St., will build 4 story and basement, 150 x 170 ft., brick and steel, plain foundation, Overbrook Ave. and Lancaster Pike, by day labor. $300,000. Private plans.

Pa., Reading—Hospital—F. H. Muhlenberg, archt., Hope Bldg., 6 story and basement, 45 x 150 ft., rein.-con., brick and steel, plain foundation, Walnut St., for St. Joseph Hospital, to L. H. Foch & Son, Reading. Noted Dec. 13.

Pa., St. Marys—High School—St. Marys Roman Catholic Church, 2 story and basement, to Hyde-Murphy Co., Ridgeway. Archts. est. $150,000.

Pa., Tamaqua—Lodge—Loyal Order of Moose, 3 story, brick, stone and stucco, to Butz & Clayder Co., Allentown, $150,000.

Md., Baltimore—Bank—J. E. Sperry, archt., Calvert Bldg., altering and building 1 story, 25 x 128 ft., brick addition, Howard and Saratoga Sts., to Cogswell-Koether Co., 406 Park Ave., $150,000, for Calvert Bank. Noted Jan. 10.

S. C., Spartanburg—Office—Montgomery Bldg., Inc., 10 story and basement, 132 x 188 ft., rein.-con., and steel, wood pile foundation, to Lockwood-Green & Co., 24 Federal St., Boston, Mass., $1,000,000; contractors taking bids on 970 tons structural steel and steel fireproofing. Noted Oct. 11.

Tenn., Nashville — Hospital — Protestant Hospital, 200 Church St., 4 story, rein.-con., brick and steel, concrete pile foundation; concrete work to Foster-Creighton Co., 4th and 1st Natl. Bank Bldg., brick work to J. R. Vaughn, cut stone to J. Oman, Jr., Chamber Commerce Bldg., steel work to Nashville Bridge Co., Shelby Ave. Archts. est. $150,000.

O., East Cleveland (Cleveland P. O.)—Commercial and Apartment — Commodore Impvt. Co., Ulmer Bldg., Cleveland, masonry contract 12 story, 122 x 160 ft., brick, steel and concrete, Euclid Ave. and Ford Dr., here, to J. Miller, 10719 Drexel Ave., Cleveland. Archts. est. $750,000.

O., Kalida—Church—St. Nichols Congregation, 1 story and basement, brick and stone, to Orr & Miller, 510 Savings Bldg., Lima, $175,000.

O., Lakewood—Commercial and Apartment—S. Rosenthal, Ulmer Bldg., Cleveland, 3 story and basement, 60 x 120 ft., brick, 13540 Detroit Ave., here, to J. M. Buros, 482 East 110th St., Cleveland. Archts. est. $150,000.

O., Shelby—High School—Bd. Educ., 2 story and basement, 195 x 250 ft., brick and concrete, to E. Mast & Sons, Zanesville, $172,998; plumbing and heating, to Knox Plumbing & Heating Co., Mansfield, $46,000. Noted Jan. 10.

O., Toledo — Bank — First Natl. Bank, Summit St., altering and building 2 story, brick, steel and stone addition, plain foundation, to Hoggson Bros., 485 5th Ave., New York City. Archts. est. $400,000.

Mich., Detroit—Office—Conductors Protective Assurance Co., 2222 First Natl Bank Bldg., 6 story and basement, 57 x 108 ft. rein.-con. and brick, plain foundation, 14th and Michigan Aves., to W. E. Lennane, 2631 Woodward Ave. Archts. est. $150,000.

Mich., Ironwood—School—Bd. Educ., 3 story and basement, rein.-con., brick and stone, general contract to P. J. Nickel, Ironwood, $713,464, plumbing and heating to Shoppe Eng. Co., 87 South 13th St., Minneapolis, Minn., $104,278, electric wiring to Sterling Electric Co., 33 South 5th St., Minneapolis, $41,000. Noted Jan. 24.

Ill., Chicago—Apartment—S. Dulkin, c/o J. H. Klafter, 127 North Dearborn St., 3 story, 45 x 100 ft., fireproof, Lincoln and Aubert Sts., to B. Kappel, 2114 West North Ave. Archts. est. $150,000.

Ill., Chicago—Hotel—Chicago Hotel Co., 15 East Monroe St., 21 story, 246 x 254 ft., fireproof, State, Monroe and Wabash Sts., known as Palmer House Hotel, to Starrett Bros., 8 South Dearborn St. Archts. est. $5,000,000. Noted Jan. 25, 1923.

Buildings (Continued)

Wis., Milwaukee — Apartment — Ivanhoe Realty Co., c/o H. J. Kusel, 35 South Dearborn St., Chicago, 3 story and basement, 50 x 60 x 160 ft., brick, tile and concrete, plain foundation, Farwell Ave., here, to H. Schmitt & Son, 430 Farwell Ave. Archts est. $250,000.

Wis., Milwaukee—Business—F. W. Woolworth Co., 301 Grand Ave., 2 story, 64 x 120 ft., brick and concrete, plain foundation, Vliet St., to S. M. Siesel Co., 160 Ogden Ave. Archts. est. $150,000.

Wis., Milwaukee—Office—Broadway-Wisconsin Investment Co., c/o contractor, 5 story and basement, 80 x 120 ft., brick and concrete, plain foundation, Bway., to Bently Bros., 808 South Pierce St. $380,000.

Kan., Topeka—Hospital—Security Benefit Assn., Security Bldg., 3 story, 40 x 110 ft., concrete, brick and stone, to Lundgren & Carlson, 213 Jackson St. Archts. est. $200,000. Noted Dec. 13.

Calif., Los Angeles—Apartment—Stonehill Constr. Co., Stock Exch. Bldg., will build 3 story and basement, brick, 42nd and Main Sts., by day labor. $150,000.

Calif., Los Angeles—Home—Good Shephert Convent, 1312 Arlington St., 4 story and basement, rein.-con. and brick, general contract to Bavin & Burch, 173 East Jefferson St., $138,600. Noted Dec. 6.

Federal Government Work

PROPOSED WORK

R. I., Providence—Dredging—War Dept., Chief of Engineers, Wash., D. C., plans dredging in Connecticut River.

N. Y., New York—Dredging—U. S. Engineer, Army Bldg., Whitehall St., rejected bids Jan. 14, dredging in harbor at Flushing Bay, 1st Dist. Noted Jan. 10.

N. J., Killochook Meadows—Dike and Sluice—War Dept., Chief Engineers, Wash., D. C., plans dike and sluice in Delaware River here.

N. C., Fayetteville—Lock—O. O. Keuntz, dist. engr., Wilmington, will make surveys for new lock on Cape Fear River between here and Wilmington.

Ala., Florence—Switchboard Apparatus—War Dept., Chief of Engineers, Wash., D. C., plans to purchase switchboard apparatus.

Ky., Addison—Copper Rods—U. S. Engineer, P. O. 72, Louisville, plans to purchase 80 tons ¾ and 1 in. form and copper rods.

Ky., Louisville—Steel Boat Hulls—U. S. Engineer, P. O. Box 72, plans to purchase 3 steel hull maneuver boat hulls for Cincinnati Dist., 24 x 60 ft.

Ore., Tillamook—Channel—U. S. Government, Tillamook, having surveys made 24 ft. channel through Tillamook Harbor to ocean. G. Mayo, Post Office Bldg., Portland, engr.

BIDS DESIRED

Mass., Plymouth—Dredging—Feb. 25, by U. S. Engineer, 13th Floor Custom House, Boston, dredging in Plymouth Harbor, here; adv. E. N.-R. Jan. 31.

N. Y., New York—Laundry Equipment—Feb. 13, by Bureau Yards & Docks, Navy Dept., Wash., D. C., reinstallation of laundry equipment, etc. at Naval Hospital, here; adv. E. N.-R. Jan. 31.

Pa., Phila.—Water Piping—Feb. 26, by Treasury Dept. at office J. A. Wetmore, acting supervising archt., new water piping, etc., at United States Appraisers Stores, here; adv. E. N.-R. Jan. 31.

D. C., Wash.—Piles—Feb. 6, by A. L. Flint, genl. purch. officer of Panama Canal, Wash., D. C., furnishing on dock at either Cristobal (Atlantic port) or Balboa (Pacific port) Canal Zone, Isthmus of Panama, creosoted yellow pine or Douglas fir piles.

W. Va., Huntington—Steel Boat Hull—Feb. 28, at office U. S. Engineer, Huntington, steel quarter boat hull for Ohio River; adv. E. N.-R. Jan. 31.

Miss., Vicksburg—Artesian Wells—Feb. 11, by U. S. Engineer, Vicksburg, sinking 2 deep artesian wells.

Ind., Leavenworth—Lumber—Feb. 4, by U. S. Engineer, P. O. Box 72, Louisville, Ky., furnishing 80,000 ft. yellow pine for Dam 44, Ohio River. Former bids rejected. Noted Jan. 24.

Minn., Duluth—Dump Scow—Feb. 28, by U. S. Engineer, one steel dump scow; adv. E. N.-R. Jan. 31.

Tex., Ft. Worth—Mooring Mast—Spec. 4939—Feb. 13, by Bureau Yards & Docks, Navy Dept., Wash., D. C., erecting mooring mast here.

ROAD WORK—KENTUCKY

Following are lowest three bids opened by State Highway Comn., Frankfort, Jan. 8, for constructing Owenton-Georgetown Rd., Scott Co., (A) Georgetown Constr. Co., Georgetown; (B) Staebler Constr. Co., St. Matthews; (C) J. W. Harris Contg. Co., Covington. The unit bids were as follows:

	A	B	C
2 acres clearing and grubbing (lump sum)	$100.00	$125.00	$250.00
Removing 864 trees and stumps	4.00	5.00	5.00
87,780 cu.yd. earth excavation	.43	.50	.55
1,000 cu.yd. solid rock excavation	1.50	1.40	1.50
20,140 cu.yd. borrow excavation	.48	.50	.55
5,000 cu.yd. loose rock excavation	1.00	1.00	.70
2,000 cu.yd. macadam excavation	1.00	.80	1.25
114 cu.yd. dry earth excavation	1.00	.85	1.00
38 cu.yd. wet earth excavation	3.00	1.10	4.00
38 cu.yd. dry rock excavation	3.00	1.50	4.00
13 cu.yd. wet rock excavation	5.00	2.50	5.00
6,173 sq.yd. overhaul	.05	.035	.05
50 cu.yd. removing masonry	1.00	7.00	2.00
247 ft. removing pipe	1.00	.75	1.00
16 cu.yd. stone retaining walls	10.00	13.00	20.00
1,651 cu.yd. removing stone fence	.60	2.00	1.00
44,579 sq.yd. scarifying and reshaping	.05	.07	.50
825 ft. 12 in. culvert metal pipe	2.00	2.50	1.50
2 rural catch basins	30.00	15.00	50.00
157 ft. concrete valley gutter	2.00	1.85	1.00
2,043 ft. concrete curb and gutter	2.25	2.00	1.60
815 cu.yd. class A concrete	22.00	24.00	23.00
518 cu.yd. class B concrete	22.00	21.50	22.00
6 cu.yd. class D concrete	60.00	65.00	75.00
78,820 lb. reinforcement	.06	.10	.07
553 cu.yd. structure excavation	1.00	.75	1.50
61,401 tons crushed limestone	2.72	3.10	3.30
824 ft. 18 in. vitrified pipe	2.50	2.50	....
52 ft. 24 in. vitrified pipe	4.00	3.50	....
78 cu.yd. encasing concrete	22.00	25.00	....
824 ft. 18 in. concrete pipe	3.00	3.50	3.00
52 ft. 24 in. concrete pipe	5.00	4.50	4.60
Extended totals waterbound macadam and vitrified pipe	$294,451	$327,347	
Extended totals waterbound macadam and concrete pipe	$293,205	$326,280	$337,579

Wash., Puget Sound—Barrack—Spec. 4928—Feb. 27, by Bureau Yards & Docks, Navy Dept., Wash., D. C., barrack for unmaried operator, here. Noted Nov. 29.

Calif., Mare Island—Lumber—Feb. 12, by Bureau Supplies & Accounts, Navy Dept., Wash., D. C., furnishing 396,000 ft. Douglas fir for Navy Yard, here.

BIDS RECEIVED

Miss., Vicksburg—Steel Boat Hulls—U. S. Engineer, Vicksburg, 2 steel maneuver boat hulls, from C. Hegewald Co., New Albany, Ind., $11,990. Noted Dec. 6.

Wis., Milwaukee—Steel Crane—U. S. Engineer, Federal Bldg., one revolving steel crane, from McMyler-Interstate Co., Stop 27, A, B and C Electric Ry., Cleveland, O., $19,200.

CONTRACTS AWARDED

D. C., Wash. — Filtration Plant — U. S. Engineer, 250 Old Land Office Bldg., Wash., D. C., filtration plant and pumping station substructures for Dist. of Columbia Water Supply system, to C. H. Tompkins, 1612 Park Rd., N. W., $861,960. Noted Jan. 24.

Va., Norfolk — Remodeling Quarters — Spec. 4912—Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling officers' quarters at Marine Corps Base, here, to Agostini Bros., 243 Arcade Bldg., $3,240. Noted Jan. 17.

Ky., Louisville—Steel—U. S. Engineer, P. O. Box 72, furnishing 1,800 round bars soft steel and 200 flat bars soft steel Lot A, and 110 sheets blue annealed steel 36 x 96 in., Lot B, to Bourne-Fuller Co., 1105 Union Trust Bldg., Cincinnati, O., $2.83 and $3.43 per 100 lb. respectively. Noted Jan. 17.

Ark., Marianna — Post Office — Treas. Dept., Wash., D. C., constructing U. S. Post Office, here, to A. Blair, 11 South Lawrence St., Montgomery, Ala., $42,479. Noted Dec. 13.

Wash., North Head—Buildings, Sewer, Water System, etc.—Spec. 4895—Bureau Yards & Docks, Navy Dept., Wash., D. C., buildings, sewers, water and heating systems at Naval Radio Sta., here, to B. Ward, 521 Peoples Bank Bldg., Seattle, $42,628.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

456—Grays Harbor Ry. & Light Co., Aberdeen, Wash.—Wants preliminary permit for dam in Wynooche River in vicinity of Aberdeen, Grays Harbor Co.

457—Idaho Power Co., 7th and Bennock Sts., Boise, Idaho — Wants license for power development in Snake River, Gooding and Twin Falls Counties.

458—Amer. Alum Corp., 55 Liberty St., New York City—Want preliminary permit for small power plant in Gila River, Grant Co., New Mexico (in vicinity of Silver City).

459—W. Cravens, 15 West 10th St., Kansas City, Mo.—Wants preliminary permit for 100 ft. dam about 8 mi. up Osage River from Bagnell.

460—City of Tacoma, Wash.—Wants license for power development in North Fork of Skokomish River, Mason Co.

461—Southern California Edison Co., 306 West 3rd St., Los Angeles, Calif.—Wants license for transmission line in Santa Barbara and Ventura Counties.

Unclassified

PROPOSED WORK

Elimination of Grade Crossings—Niagara Falls, N. Y. — New York Central R.R., Grand Central Terminal, and Erie R.R., 50 Church St., both New York City, plan elimination of grade crossings, here. Work includes subways and retaining walls. $1,200,000. G. W. Kittredge, ch. engr. New York Central R.R.

Power Units, etc.—Spier Falls, N. Y.—Adirondack Power & Light Co., 511 State St., Schenectady, having plans prepared additional power units of 10,000 hp. each, $70,000 each, also additional transmission lines, transformer stations, etc., here. Total cost $1,000,000. Private plans.

Fair Grounds—Nashville, Tenn.—Davidson Co. appropriated $30,000 for construction and repairs to buildings, incl. pavilions, stalls, stables, grand stand, etc., at State Fair Grounds, here. L. Hickman, co. judge.

Docks — Cleveland, O. — Erie R.R., 50 Church St., New York City, plans improving ore docks, here, incl. new ore unloader and apparatus. $500,000. H. O. Dunkle, Scranton Ave., Cleveland, genl. agt.

Transmission Lines, etc. — Indiana — Calumet Electric Co., 533 Bway., Gary, plans to extend power and light lines into Lake, Porter and La Porte Counties. Work includes substations, etc. $45,000.

Elimination of Grade Crossing — Ft. Wayne, Ind.—Pennsylvania R.R., Pennsylvania Bldg., 323 South Wells St., Chicago, and Wabash Ry. Co., Exch. Bldg., St. Louis, Mo., plan elimination of grade crossing on Clinton St., here. $50,000. T. J. Skillman, and R. H. Howard, ch. engrs. of respective railroads.

Hydro-Electric Development — Shelbyville, Ind.—J. A. Shafer, 1008 Odd Fellows Bldg., Indianapolis, engr. and promoter of company which plans hydro-electric development, dam on Flat Rock River, near here. $25,000.

Golf Course—South Bend, Ind.—Miami Country Club plans improvements to property on Lincoln Highway, including improvements to golf course and grounds, also club house. $50,000. N. S. Gingrich, secy.

Parks — Milwaukee, Wis. — Election in April to vote on $750,000 bonds for extensions to parks. Address Park Bd., City Hall.

Unclassified (Continued)

Retards—Missouri—Harmony D. D., c/o Clerk Saline Co. (Marshall) plans series of standard retards in Missouri River near Glasgow, to stop cutting off banks. $200,000.

Pipe Line—Texas—Griswold Oil & Refining Co., Electra, had plans prepared 4 in. oil pipe line from owners refinery to Archer Co. oil fields. $30,000. Private plans.

Pipe Line — Texas — United Producers Pipe Line Co., W. T. Waggoner Bldg., Ft. Worth, having plans prepared 8- to 16-in. oil pipe line from Ft. Worth to Ranger and Burkburnett. $1,500,000. Private plans.

Stadium — Austin, Tex. — University of Texas Athletic Council, c/o M. Fichtenbaum, had preliminary plans and sketches made concrete and steel stadium, Clark Field, first unit 30,000 seating capacity, 60,000 ultimate capacity. $500,000. H. M. Green Co., North Texas Bldg., Dallas, engrs. Noted Sec. 6.

Distribution System—Brownwood, Tex.—Texas Power & Light Co., c/o W. P. Murphy, having plans prepared new distribution system between Atchison, Topeka & Santa Fe R.R. and St. Louis & San Francisco R.R., here. $25,000.

Distribution Lines — Houston, Tex. — Houston Lighting & Power Co., Capitol Ave., had plans prepared underground conduits in various streets $132,400; improvements to distribution lines, $275,000. W. E. Browne, Jr., supt.

Hydro-Electric Development—Port Angeles, Wash.—Northwestern Power & Mfg. Co., represented by J. C. Higgins, attorney, Hoge Bldg., plans hydro-electric power development on Elwha River, near here. Plans include development of 20,000 hp. additional unit to present plant, rein.-con. dam, 15 ft. high, 180 ft. long, and 3.5 mi. canal. $1,600,000.

Tunnels—Oregon—See "Railways."

Civic Center—Fresno, Calif.—City plans to vote on $1,500,000 bonds for purchasing land and laying out civic center. W. Stranahan, city engr.

Electrolier System—Fresno, Calif.—See "Streets and Roads."

Gas Mains—Napa, Calif.—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, appropriated funds to install high pressure gas main, 66,000 ft. long, 6½ in. net, between here and Vallejo, and other minor improvements to system. To exceed $90,000.

Pleasure Pier, etc.—Ocean Park, Calif.—West Coast Pier Co. having plans prepared by Eng. Serv. Co., Washington Bldg., Los Angeles, pleasure pier, theatre, dance pavilion, etc. To exceed $500,000.

Sea Wall—Ventura, Calif.—See "Streets and Roads."

BIDS DESIRED

Sea Wall, Dock, etc.—New Haven, Conn.—Feb. 25, at office Director Pub. Wks., Room 16 City Hall, constructing sea wall, dock and extending overflow sewer. E. S. Nettleton, city engr.; adv. E. N.-R. Jan. 31.

Heating and Ventilating Apparatus — Brooklyn, N. Y. — Feb. 4, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., heating and ventilating apparatus in P. S. 196, easterly side of Bushwick Ave. between Scholes and Meserole Sts., for Bd. Educ., 500 Park Ave., New York.

Heating and Ventilating Apparatus—New York, N. Y.—Feb. 4, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in George Washington High School, Audubon Ave. about 400 ft. north from West 190th St., Manhattan Boro, also in P. S. 75, Faile St. north of Whitlock Ave., Bronx Boro, for Bd. Educ., 500 Park Ave.

Grandstand, etc.—Detroit, Mich.—Feb. 7, by G. W. Dickinson, secy. mgr., Michigan State Fair Assn., 815 Farwell Bldg., concrete and steel bleachers and addition to grand stand, 341 ft. long, 96 ft. wide, 32 ft. high, also steel, concrete and tile wall, 403 ft. long, in connection with grandstand. $100,000. L. W. Fry, Ann Arbor, archt.

Grade Separation—Springwells, Mich.—Feb. 12, by B. P. Esper, village clk., grade separation at Schaefer Rd. under main line of Michigan Central R.R., here. Hubbell, Hartgering & Rotg., 2348 Penobscot Bldg., Detroit, consult, engrs.; adv. E. N.-R., Jan. 31.

Lumber, Steel, etc.—Iowa City, Ia.—Feb. 5, by Clerk Johnson Co., 7 cars lumber, 3,900 ft. corrugated culvert metal and 40,000 lb. reinforcing steel.

Levee — Jonesboro, Ark. — Feb. 12, by Cane Island D.D. 26, at office of Cobb & Lee, engrs., 1819 Amer. Trust Bldg., 427,000 cu.yd. excav. in levees and 148,000 cu.yd. excav. in ditches. Noted Jan. 17.

Electrolier System—Bakersfield, Calif.—City Council, receiving bids and opens same about Feb. 4, electrolier system on various streets. To exceed $25,000. W. D. Clarke, city engr.

Parking Court—San Francisco, Calif.—Feb. 14, by G. B. McDougall, state archt., Sacramento, automobile parking court, incl. excav. and concrete retaining wall, here, for State. $25,000.

BIDS RECEIVED

Heating and Ventilating Apparatus — New York, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Jan. 25, heating and ventilating apparatus in P. S. 92, West 212th St., 100 ft. westerly from 10th Ave., also in P. S. 78, Fish Ave. between Needham Ave. and Hicks St., here, from Austin Eng. Co., 124 West 42nd St., $100,772 and $101,468 respectively. Noted Jan. 17.

CONTRACTS AWARDED

Conduit—New York—Bd. Water Supply, Municipal Bldg., New York City. Clove conduit a portion of city conduits of Catskill aqueduct extending from Bay St. and Vanderbilt Ave., Clifton, to Silver Lake reservoir, Richmond Boro. Contr. 199, to P. F. Connoly Co., 20-29 East 102nd St., Cleveland, O., $677,530. Noted Jan. 10.

Levee—Clarksdale, Miss.—Yazoo-Mississippi Delta Levee Bd. 10,000 cu.yd. topping and 75,000 cu.yd embankment on Old Ward Lake Levee, to Powell Bros., Jackson, $25,900. Noted Jan. 10.

Roadway Columns—New York, N. Y.—Transit Comn., 49 Lafayette St., removing roadway columns and reconstructing structure of Manhattan-Bronx Rapid Transit R.R. at East 177th St. (Tremont Ave.) and Boston Rd., Bronx Boro, Agreement "CV", to Gotham Constr. Co., 220 Bway., $28,743. Noted Jan. 24.

Stadium—Terre Haute, Ind.—City, memorial stadium to be used as athletic center, Memorial Stadium Park, to North-Raffin Constr. Co., Indiana Theatre Bldg., Terre Haute. Archts. est. $450,000.

Foundation—Madison, Wis.—Bd. Educ., J. Moran, clk., 22 West Dayton St., rein.-con. foundation and excavation for addition to Longfellow School, to O'Dea & Schafer, 1019 Oregon St. Noted Dec. 20 under Buildings.

Pipe Line—Texas—Brownwood Gas Co., Brownwood, 8 in. gas line from Brownwood, to Jane Ellen gas field, to Janes Constr. Co., South Western Life Bldg., Dallas, $50,000. Noted Dec. 6.

Electrolier System—Arcadia, Calif.—Installing electrolier lighting system on various streets, to O. U. Miracle, 1036 Lime Ave., Long Beach, $25,650.

Rock Crushing Plant—Los Angeles, Calif.—Union Rock Co., 1403 East 16th St., rock crushing plant, incl. bins and gravel washing plant, to Wheeler Co., 1060 South Bway., $37,500 plus $75 per ton for steel.

Materials and Equipment

PROPOSED WORK

Ashes, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., rejected bids Jan. 14, 3,000 cu.yd. boiler ashes, and two 5 ton macadam steam rollers. Noted Jan. 17.

Ore Unloader—Cleveland, O.—See "Unclassified."

Dragline—Manitowoc, Wis.—City having specifications prepared and soon takes bids dragline. F. Alter, City Hall, engr.

Street Oil — Manitowoc, Wis. — A. H. Zander, city clk. soon takes bids 60,000 gal. street oil having 60% asphaltic content.

BIDS DESIRED

Overhead Crane—Somerset, Mass.—See "Industrial Works," under "Contracts Awarded."

Grinding Mill, etc.—Howe Cave, N. Y.—Helderberg Cement Co., in market for 1 grinding mill to reduce 2½ in. limestone to 60 per cent through 20 mesh at 8 tons per hr. with 135 hp. Ball hammer or any other that will do work. W. K. Fullerton, supt.

Stone—Newark, N. J.—Feb. 8, by G. C. Bergen, purch. agt. Essex Co., Court House, various sizes crushed stone for highway maintenance. $25,000. W. A. Stickel, Court House, engr. Noted Jan. 24.

Asphaltic Cement, etc.—Trenton, N. J.—Feb. 8, 300 tons asphaltic cement, 50-60 penetration, shipped in car lots, also Buffalo-Pitts 24,000 lb. steam road roller. J. E. English, City Hall, engr.

Culvert Pipe—South Carolina—Feb. 2, at office State Highway Engineer, Columbia, 11,612 lin.ft. 15- to 36-in. concrete culvert pipe for use in various counties.

Structural Steel, etc.—Spartanburg, S. C.—See "Buildings" under Contracts Awarded.

Coal Tar Pitch Filler, etc.—Cincinnati, O.—Feb. 11, by A. Von Bargen, city purch. agt., 100 tons coal tar pitch filler, 300 tons asphalt cement, 500 tons lake sand, 100 tons dust filler, 500 tons bank or river sand, and miscellaneous fittings for Water Works Dept.

Road Grader—Columbus, Ind.—Feb. 4, by J. L. Bonham, aud. Bartholomew Co., one 4-horse road grader, 7 ft. blade.

Crushed Stone—Oshbosh, Wis.—Feb. 8, by F. C. Steiner, comr. Winnebago Co. 7,000 cu.yd. crushed stone. $10,000. Former bids rejected. Noted Dec. 20.

Culvert Pipe, Posts, etc.—Clinton, Ia.—Feb. 7, by Clinton Co., 5,928 ft. corrugated culvert pipe, 75,000 ft. Douglas fir and eight hundred 6 in. x 8 ft. butt treated white cedar posts. E. B. Lorenzen, Clinton, engr.

Lumber—Tipton, Ia.—Feb. 4, by Cedar Co., 244,800 ft. bridge lumber.

Truck—San Antonio, Tex.—I. Iwig, city engr., taking bids 10 ton caterpillar truck.

Portland Cement, Crane, Piles, etc.—St. Paul, Minn.—Feb. 5, by H. W. Austin, city purch. agt., 1,550 bbl. portland cement for Dept. Pub. Wks.; hand-power or motor-operated traveling crane, 7½ ton capacity, 2 Rex or equal vertical type traveling water screens, 1,520 24-ounce cold rolled copper expansion plates, 270 cast aluminum forms for Water Dept.; furnishing and driving about 637 piles between Mississippi River and Charles Lake. G. M. Shepard, city engr.

BIDS RECEIVED

Bituminous Patching—Trenton, N. J.—Bd. Freeholders Mercer Co., Jan. 22, asphalt cut back patch, from Atlantic Refining Co., 3144 Passayunk St., Phila., $2,286; cold tar patch, from T. Tobish, Amer. Mechanic Bldg., $7,800. Noted Jan. 10.

Vitrified Paving Brick, etc.—Minneapolis, Minn.—F. S. Gram, city purch. agt., 190,000 vitr. paving brick for sewer construction, from A. C. Ochs Co., 204 South 9th St., $20 per M.; 400 tons special sewer castings, from Crown Iron Wks. Co., 1229 Tyler St. N. E., for manhole rings and covers $67.50 per ton, for catchbasin rings and covers $68.50 per ton; sewer pipe and segment blocks for 1924 season, from Red Wing Sewer Pipe Co., Red Wing; 185,000 ft. No. 1 rough Norway pine, from J. Neils Lumber Co., 932 Lumber Exch., $45 per M. for 3 x 12 and $34 per M. for 2 x 8 (bid on only small amount). Virginia & Rainy Lake Co., 1032 Lumber Exch., $48.50 for 3 x 12, $35 per M. for 2 x 8, 12-ft. lengths, and $34 per M. for 2 x 8, 16-ft. lengths (bid on full amount). Noted Jan. 8 and 10.

Dump Cars, etc.—St. Paul, Minn.—H. W. Austin, city purch. agt., 10 steel dump cars, to Genl. Contg. Co., 1222 Plymouth Bldg., Minneapolis, $1,000; one thousand six hundred and eighty 16-ft. steel tracks, to W. H. Ziegler Co., 425 South 5th St., Minneapolis, $12,153. Bids rejected on 4-ton gasoline locomotive. Noted Dec. 6.

CONTRACTS AWARDED

Road Surfacing Material, etc.—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Jan. 14, 75,000 gal. road surfacing material and 50 tons pitch joint filler, to F. J. Lewis Mfg. Co., Eastern Blvd. and East 177th St., $12,270 and $1,199 respectively; 600,000 gal. asphalt road oil, to Texas Co., 17 Battery Pl., $31,980; 500 cu.yd. fine sand, to Gallagher-Shand, Inc., 420 East 105th St., $875; broken stone and trap rock screening, also 500 cu.yd. paving gravel, to Ames Building Material Co., 3437 Kingsbridge Rd., $27,810 and $1,550 respectively; 2,000 bags Portland cement, to C. J. Mallett, Inc., 2554 St. Raymond Ave., $1,390; 1,200 tons asphaltic cement, to Standard Oil Co. of New York, 26 Bway., $22,356; 300,000 gal. tar road oil, to Barrett Co., 40 Rector St., $32,730; 7,500 cu.yd. binder stone, to Calvin Tompkins Co., 30 Church St., $14,850; 10,000 cu.yd. asphalt sand, to C. W. Crane, 17 Battery Pl., $13,200. Noted Jan. 10.

Tractor—Crookston, Minn.—Polk Co., one 10-ton tractor, to W. H. Zeigler Co., 425 South 5th St., Minneapolis, $6,200, incl. $800 credit for old tractor owned by county. Noted Dec. 13.

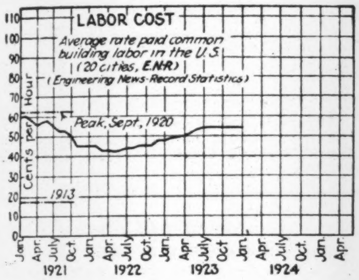
CONSTRUCTION NEWS

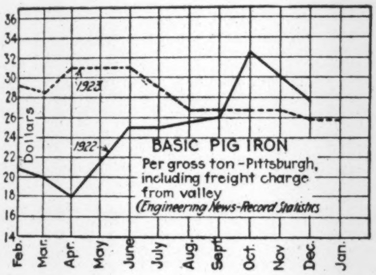
Engineering News-Record, February 7, 1924

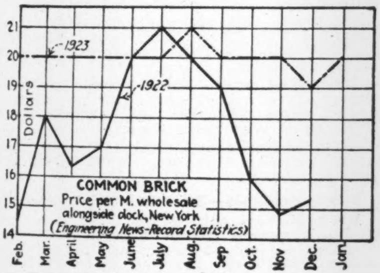
The Construction Barometer

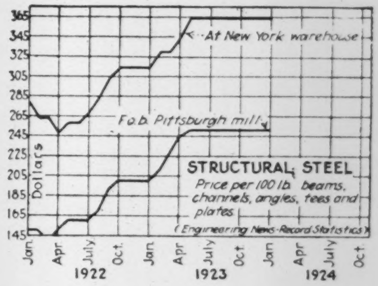
Cement, Brick and Lumber Prices Firmer as Spring Buying Approaches—1923 Wage Schedules Prevail in Many Cities

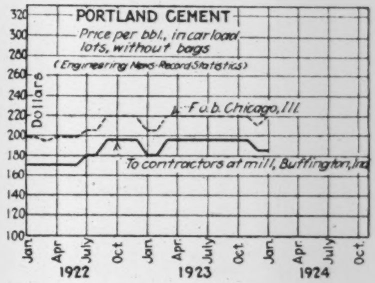
WITH mills operating at 80 to 90 per cent of capacity, a continued improvement is evident in the demand for steel. A similar condition also exists in pig-iron buying. Despite the stronger demand and an estimated 10 per cent increase in production cost, due to the adoption of the 8-hr. shift, slight deviations from the $2.50 base on steel structurals, have been recently noted. Cement, brick and pine lumber prices are gradually becoming firmer as the spring buying season approaches. In eleven out of sixteen important cities reporting regularly to *Engineering News-Record*, satisfactory labor conditions are in evidence, with little tendency toward the adoption of higher wage schedules for the 1924 building season.

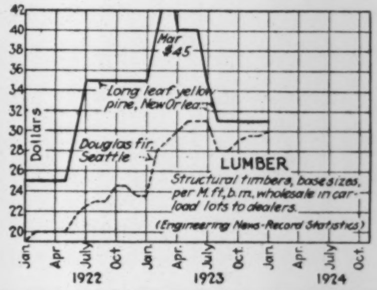












Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Jan. 17	$9,074,000	$28,657,000	$37,731,000
Jan. 24	12,455,000	13,457,000	25,912,000
Jan. 31	8,013,000	25,998,000	34,011,000
3 weeks	$29,542,000	$68,112,000	$97,654,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

Week Ended	No.	Public Work	No.	Private Work
Jan. 17	9	$2,551,000	38	$20,232,000
Jan. 24	12	5,710,000	26	6,476,000
Jan. 31	5	1,704,000	35	16,119,000
3 weeks	26	$9,965,000	99	$42,827,000

NUMBER OF LARGE JOBS NOW OUT FOR BIDS

		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Jan. 17	40	155	37	30	49
Jan. 24	39	205	55	31	66
Jan. 31	44	195	46	37	63

CEMENT AND LUMBER FIRM—SLIGHT CONCESSIONS IN STEEL DESPITE HEAVY BUYING

	Quoted on Feb. 7, at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.35 @2.50	$2.50	Jan. 31
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	61.00	60.00	Jan. 24
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.54	.53	June 28

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb. 9	Coney Island (Brooklyn P. O.) N. Y.	Feb. 7
Feb. 11	Fairmont, Okla.	Jan. 17
Feb. 11	McKeesport, Pa.	Jan. 17
Feb. 11	Armory (Springfield P. O.), Mass. Adv. Jan. 31 and Feb. 7.	Jan. 31
Feb. 12	Greensboro, N. C.	Jan. 31
Feb. 12	Faribault, Minn.	Feb. 7
Feb. 13	St. Paul, Minn.	Feb. 7
Feb. 14	Rochester, Minn.	Feb. 7
Feb. 15	Buffalo, N. Y.	Feb. 7
Feb. 15	University Place (Lincoln P. O.), Neb.	Feb. 7
Feb. 18	Bedford, Ind.	Jan. 31
Feb. 18	Pacific Grove, Calif.	Feb. 7
Feb. 18	Casper, Wyo.	Feb. 7
Feb. 19	Woodbury, N. J. Adv. Feb. 7.	Feb. 7
Feb. 19	Bloomington, Ind.	Jan. 24
Feb. 19	Corsicana, Tex.	Jan. 24
Feb. 20	San Francisco, Calif.	Jan. 24
Feb. 20	Goldsboro, N. C.	Jan. 31
Feb. 20	Phillip, Wis.	Jan. 31
Feb. 20	Hammond, Ind.	Jan. 31
Feb. 21	Phila., Pa.	Feb. 7
Feb. 21	Palmyra, N. Y. Adv. Jan. 31 and Feb. 7	Feb. 7
Feb. 22	Smithfield, N. C.	Jan. 31
Feb. 28	Buffalo, N. Y.	Feb. 7
Mar. 4	Gloversville, N. Y. Adv. Jan. 31 and Feb. 7.	Jan. 31

SEWERS

Bids Close		See Eng. News-Record
Feb. 11	Pleasantville, N. Y. Adv. Jan. 10 to Feb. 7.	Jan. 17
Feb. 11	Carthage, Mo.	Jan. 31
Feb. 11	Long Island City, N. Y.	Feb. 7
Feb. 11	Winona, Minn.	Feb. 7
Feb. 12	Big Springs, Tex.	Jan. 24
Feb. 12	University (St. Louis P. O.), Mo.	Jan. 24
Feb. 12	Elizabethtown, Ky.	Jan. 17
Feb. 12	Greensboro, N. C.	Jan. 31
Feb. 15	Milwaukee, Wis.	Feb. 7
Feb. 16	Wisconsin	Feb. 7
Feb. 19	Lyndonville, N. Y. Adv. Jan. 31 and Feb. 7.	Jan. 31
Feb. 23	Lima, O. Adv. Feb. 7.	Feb. 7
Feb. 27	Mobile, Ala. Adv. Jan. 31 and Feb. 7.	Feb. 7
Feb. 29	Wash., D. C. Adv. Feb. 7.	Feb. 7

BRIDGES

Bids Close		See Eng. News-Record
Feb. 13	Phila., Pa.	Jan. 17
	Adv. Jan. 17 to Feb. 7.	
Feb. 13	Columbus, Ga.	Feb. 7
Feb. 14	Mendota, Minn.	Jan. 24
Feb. 15	Richmond, Tex.	Feb. 7
Feb. 15	Illinois	Feb. 7
Feb. 19	Blakeley, Minn.	Feb. 7
Feb. 20	New York	Jan. 17
	Adv. Jan. 17 to Feb. 7.	
Feb. 20	Tohlequoh, Okla.	Feb. 7
Feb. 27	Austin, Minn.	Feb. 7
Feb. 28	Houston, Tex.	Feb. 7
Mar. 3	St. Paul, Minn.	Jan. 24
	Adv. Jan. 24 to Feb. 7.	
Mar. 10	St. Anne de Bellevue, Que.	Jan. 31
May 1	Tientsen, North China	Oct. 11

DAMS

Feb. 14	Phila., Pa.	Jan. 31
Mar. 1	Kingston, Jamaica — West Indies	Feb. 7

RAILWAYS

Mar. 18	New Zealand	Sept. 20
Apr. 1	Indiana	Jan. 24

EXCAVATION, DRAINAGE IRRIGATION

Feb. 12	Shrewsbury, La.	Feb. 7
Feb. 15	Bartow, Fla.	Feb. 7
Feb. 15	Morehead City, N. C.	Jan. 24
Feb. 15	North Carolina	Jan. 31
Feb. 18	Tampa, Fla.	Jan. 24
	Adv. Jan. 24 to Feb. 7.	
Feb. 25	Kingston, Pa.	Feb. 7
	Adv. Feb. 7.	

STREETS AND ROADS

Feb. 9	Plantagenet, Ont.	Feb. 7
Feb. 11	Scottsburg, Ind.	Jan. 17
Feb. 11	Long Island City, N. Y.	Feb. 7
Feb. 11	Oklahoma City, Okla.	Feb. 7
Feb. 11	New York, N. Y.	Feb. 7
Feb. 12	Salem, N. J.	Jan. 31
	Adv. Jan. 31 and Feb. 7.	
Feb. 12	Oklahoma City, Okla.	Feb. 7
Feb. 12	Ballinger, Tex.	Feb. 7
Feb. 12	Norman, Okla.	Feb. 7
Feb. 13	Baltimore, Md.	Feb. 7
Feb. 13	Akron, O.	Feb. 7
Feb. 14	Jasper, Ind.	Jan. 17
Feb. 14	New York, N. Y.	Feb. 7
Feb. 15	Illinois	Jan. 31
Feb. 15	Anniston, Ala.	Jan. 24
Feb. 15	Alpine, Tex.	Jan. 31
Feb. 15	Ohio	Jan. 31
Feb. 15	Oklahoma City, Okla.	Jan. 31
Feb. 15	New Hampshire	Feb. 7
Feb. 15	New York, N. Y.	Feb. 7
Feb. 17	Atlantic, Ia.	Feb. 7
Feb. 18	New Philadelphia, O.	Jan. 24
Feb. 18	Houston, Tex.	Feb. 7
Feb. 18	San Diego, Calif.	Feb. 7
Feb. 18	California	Feb. 7
Feb. 19	St. Louis, Mo.	Jan. 24
Feb. 19	Morristown, N. J.	Feb. 7
	Adv. Feb. 7.	
Feb. 25	Daingerfield, Tex.	Feb. 7
Feb. 26	Plymouth, Wis.	Jan. 31
Feb. 26	Plymouth, Wis.	Feb. 7
Feb. 26	Greenville, Tex.	Feb. 7
Feb. 27	Rio Grande, Tex.	Feb. 7
Feb. 28	Kenosha, Wis.	Jan. 17
Mar. 1	Tuscaloosa, Ala.	Jan. 31
Mar. 4	Beaumont, Tex.	Feb. 7
Mar. 11	Washington	Jan. 10
Mar. 11	Antigo, Wis.	Feb. 7
Mar. 18	Washington	Feb. 7

INDUSTRIAL WORK

Feb. 11	Green Bay, Wis.	Jan. 31
Feb. 11	Dallas, Tex.	Feb. 7
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Bids Close		See Eng. News-Record
Feb. 8	Baltimore, Md.	Feb. 7
Feb. 10	Trenton, N. J.	Jan. 10
Feb. 10	Albany, N. Y.	Feb. 7
Feb. 11	Claymont, Ill.	Jan. 24
Feb. 11	Urbana, Ill.	Jan. 31
Feb. 11	Hamburg, N. Y.	Jan. 31
Feb. 11	Portsmouth, O.	Jan. 31
Feb. 12	Falls City, Neb.	Jan. 31
Feb. 12	Milwaukee, Wis.	Feb. 7
Feb. 12	Kansas City, Mo.	Feb. 7
Feb. 13	Industry, N. Y.	Jan. 17
Feb. 14	Phoenixville, Pa.	Jan. 31
Feb. 14	Youngstown, O.	Jan. 31
Feb. 14	Ft. Dodge, Ia.	Feb. 7
Feb. 15	Wausau, Wis.	Jan. 31
Feb. 15	Waukegan, Ill.	Jan. 24
Feb. 15	Bellaire, O.	Jan. 31
Feb. 15	Tiffin, O.	Jan. 31
Feb. 15	Ypsilanti, Mich.	Jan. 31
Feb. 15	Minneapolis, Minn.	Jan. 31
Feb. 15	Beardstown, Ill.	Feb. 7
Feb. 16	Milwaukee, Wis.	Jan. 31
Feb. 16	Baltimore, Md.	Jan. 31
Feb. 18	Wheaton, Ill.	Jan. 31
Feb. 18	Boston, Mass.	Feb. 7
Feb. 18	Tyler, Tex.	Feb. 7
Feb. 19	Appleton, Wis.	Jan. 31
Feb. 19	Milwaukee, Wis.	Jan. 31
Feb. 19	Bluefield, W. Va.	Feb. 7
Feb. 19	Ashland, O.	Feb. 7
Feb. 19	Akron, O.	Feb. 7
Feb. 20	Irvington (branch of Newark), N. J.	Jan. 24
Feb. 20	Huntington, W. Va.	Jan. 24
	Adv. Jan. 24 to Feb. 7.	
Feb. 20	Lecompte, La.	Feb. 7
Feb. 25	Rome, N. Y.	Jan. 31
Feb. 25	Amarillo, Tex.	Feb. 7
Feb. 26	Brooklyn, N. Y.	Feb. 7
Feb. 26	Long Island City, N. Y.	Feb. 7
Feb. 27	Vermilion, S. D.	Feb. 7
Feb. 28	Phila., Pa.	Jan. 31
Mar. 1	Gilbert, Minn.	Feb. 7
Mar. 1	Akron, O.	Jan. 24
Mar. 1	Chattanooga, Tenn.	Jan. 31
Mar. 3	Rhinelander, Wis.	Jan. 31
Apr. 1	Duluth, Minn.	Feb. 7
Apr. 1	Atlantic City, N. J.	Feb. 7
May 1	Youngstown, O.	Feb. 7

FEDERAL GOVERNMENT WORK

Feb. 11	Sub-Post Office—Memphis, Tenn.	Jan. 10
Feb. 11	Laundry — Northampton, Mass.	Jan. 17
Feb. 11	Steel Castings, etc.—Louisville, Ky.	Jan. 17
	Adv. Jan. 17 to Feb. 7.	
Feb. 11	Artesian Wells—Vicksburg, Miss.	Jan. 31
Feb. 11	Lumber—Louisville, Ky.	Feb. 7
Feb. 12	Roof—Baltimore, Md.	Jan. 24
Feb. 12	Crib Timber—Louisville, Ky.	Feb. 7
Feb. 13	Laundry Equipment—New York, N. Y.	Jan. 31
	Adv. Jan. 31 and Feb. 7.	
Feb. 13	Mooring Mast—Ft. Worth, Tex.	Jan. 31
Feb. 14	Stone—Portland, Ore.	Jan. 17
	Adv. Jan. 17 to Feb. 7.	
Feb. 14	Breakwater — Gulfport, Miss.	Jan. 24
	Adv. Jan. 24 to Feb. 7.	
Feb. 14	Storehouse—Fort Tilden (Far Rockaway Sta.), N. Y.	Feb. 7
	Adv. Jan. 31 and Feb. 7.	
Feb. 15	Kitchen and Mess Hall — Prescott, Ariz.	Jan. 17
Feb. 15	Steel Forging, etc.—Owensboro, Ky.	Jan. 17
Feb. 20	Cement—Milwaukee, Wis.	Jan. 24
	Adv. Jan. 24 to Feb. 7.	
Feb. 20	Steel Bars—Milwaukee, Wis.	Jan. 24
	Adv. Jan. 24 to Feb. 7.	
Feb. 23	Steel Barges—Florence, Ala.	Feb. 7
	Adv. Feb. 7.	
Feb. 25	Dredging—Chelsea, Mass.	Feb. 7
Feb. 25	Laundry—American Lake, Wash.	Jan. 24
	Adv. Jan. 24 to Feb. 7.	
Feb. 25	Dredging—Plymouth, Mass.	Jan. 31
	Adv. Jan. 31 and Feb. 7.	
Feb. 26	Water Piping, etc.—Phila., Pa	Jan. 31
	Adv. Jan. 31 and Feb. 7.	
Feb. 27	Barrack — Puget Sound, Wash.	Jan. 31
Feb. 28	Steel Boat Hull—Huntington, W. Va.	Jan. 31
	Adv. Jan. 31 and Feb. 7.	
Feb. 28	Dump Scow—Duluth, Minn.	Jan. 31
	Adv. Jan. 31 and Feb. 7.	
Mar. 1	Turbines—Florence, Ala.	Jan. 17
	Adv. Jan. 17 to Feb. 7.	
Mar. 1	Hospital Ward—Fort Sill, Okla.	Feb. 7
	Adv. Feb. 7.	
Mar. 3	Dredging—Galveston, Tex.	Feb. 7
	Adv. Feb. 7.	
Mar. 3	Boats—Wash., D. C.	Feb. 7
	Adv. Feb. 7.	
Mar. 4	Dredging—Providence, R. I.	Feb. 7
	Adv. Feb. 7.	
Mar. 4	Switchboard Apparatus — Florence, Ala.	Feb. 7
Mar. 10	Stone—Humboldt Bay, Calif.	Jan. 24

UNCLASSIFIED

Bids Close		See Eng. News-Record
Feb. 11	Levee—Charleston, Miss.	Feb. 7
Feb. 12	Grade Separation—Springwells, Mich.	Jan. 31
	Adv. Jan. 31.	
Feb. 12	Levee—Jonesboro, Ark.	Jan. 31
Feb. 14	Tower—New Orleans, La.	Jan. 24
Feb. 19	Parking Court—San Francisco, Calif.	Jan. 31
Feb. 23	Dike, Bulkhead, etc. — Plymouth, Mass.	Feb. 7
	Adv. Feb. 7.	
Feb. 25	Sea Wall, Dock and Sewer—New Haven, Conn.	Jan. 31
	Adv. Jan. 31 and Feb. 7.	
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIALS AND EQUIPMENT

Feb. 8	Asphaltic Cement, etc.—Trenton, N. J.	Jan. 31
Feb. 8	Stone—Newark, N. J.	Jan. 31
Feb. 11	Coal Tar Pitch Filler, etc.—Cincinnati, O.	Jan. 31
Feb. 13	Pipe—Pierre, S. D.	Jan. 24
Feb. 13	Wood Block, Asphalt, etc.—St. Paul, Minn.	Feb. 7
Feb. 14	Markers—Wisconsin	Feb. 7
Feb. 14	Sand Grits—New York, N. Y.	Feb. 7
Feb. 15	Steam Rollers—New York, N. Y.	Feb. 7
Feb. 15	Borings—New York	Feb. 7
Feb. 15	Shaft Superstructure—New York, N. Y.	Feb. 7
Feb. 18	Tractors, etc.—Houston, Tex.	Feb. 7
Feb. 19	Road Maintenance Equipment—Texas	Feb. 7
Feb. 20	Portable Road Repair Outfit—Chicago, Ill.	Feb. 7
	Adv. Feb. 7.	
Feb. 25	Hoisting Machinery and Equipment—Ft. Wayne, Ind.	Feb. 7
	Adv. Feb. 7.	
Feb. 26	Supplies—Toronto, Ont.	Feb. 7
Mar. 19	Tractor—Benson, Minn.	Feb. 7

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Perrysburg—City of Buffalo plans 5 mi. c.i. pipe line and pumping station, here, will exceed $50,000. F. X. Schwab, City Hall, Buffalo, mayor.

Pa., Sharon—City having plans prepared 3 story 80 x 200 ft. brick addition to mechanical filtration plant here, 3,000,000 gal. capacity, 150,000, also plans several booster stations along distribution lines, $65,000. Burgess & Nipel, 223 East Broad St., Columbus, O., engrs.

Fla., Miami Beach—Feb. 19 to vote on $100,000 bonds extending and developing waterworks system. Van Allen Harris, city mgr.

Fla., Lake Alfred — Having plans and estimates made mains, hydrants, 75 ft. tower and 60,000 gal. tank. J. B. McCrary Co., Citizens & Southern Bank Bldg., Atlanta, Ga., engrs. Noted Jan. 24.

Tenn., Nashville—Bd. Pub. Wks. plans to purchase 1,000 water meters.

Ill., Jerseyville—Having preliminary plans prepared 8 to 10 mi. 4-in. mains. $60,000. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

Wis., Menomonee Falls—Having preliminary plans prepared new water and sewerage systems. $25,000. W. G. Caldwell, Ovitt Blk., Waukesha, engr.

Wis., Wauwatosa—Plans to install 800 g.p.m. centrifugal pump. J. E. Lowther, City Hall, engr.

Kan., Fredonia—See "Industrial Works."

Kan., Kansas City—Soon takes bids one 60 hp. horizontal motor with controls and chain drive, one 10-in. vertical pump with motor, three 2-in. and four 20-in. vertical pumps with motors and controls. G. T. Durby, purch. agt.

Kan., Sterling—Plans to install equipment incl. centrifugal pumps, tank and tower. Ruckel Eng. Co., Hutchinson, engrs.

Minn., Rochester—Plans 200,000 gal. standpipe and other waterworks improvements. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

Wyo., Casper—Making plans and takes bids in March, additional 10 m.g. storage reservoir, incl. 60,000 cu.yd. earth excav., concrete lining, $75,000; addition to pumping station on Platte River, incl. one centrifugal pump, 1,500 g.p.m., against combined static and friction head of 300 ft.; one semi-Diesel type 200 hp. internal combustion engine, etc. E. W. Fassett, city engr. Noted Nov. 8.

Mo., St. Joseph—Plans improving waterworks. $600,000. W. K. Seitz, city engr.

Mo., Seneca—Making plans new water system, well, mains, tower and pumping equipment. $30,000. H. G. Olmsted, 2230 West 18th St., Oklahoma City, Okla., engr.

Waterworks (Continued)

Mo., Thayer—Soon takes bids waterworks and ice plant. $75,000. Alexander Eng. Co., 517 Woodruff Bldg., Springfield, engrs. Noted Jan. 17.

Mo., Trenton—Election Feb. 12, $33,000 bonds waterworks and distribution system.

Tex., Brenham—Voted $25,000 bonds waterworks purification plant. A. M. Krug, city secy. Noted Jan. 17.

Okla., Apperson—Election Feb. 15, $85,000 bonds, new water system tank, well, pumping equipment and valves. R. Flood, Drumwright engr. Noted Jan. 24.

Okla., Oklahoma City—City received no bids Jan. 15, waterworks improvements. Will revise plans and readvertise. Noted Dec. 20.

Calif., Azusa—Azusa Water Co. plans distributing system in San Bernardino Rd. between Covina and Baldwin Park. $100,000.

Calif., Tracy—Had plans prepared additional unit for waterworks, incl. deep well turbine pump, 750 g.p.m., operated by 60 hp. electric motor, with compensator, switchboard, etc., also 75 hp. gas engine, etc. $8,000 or more. W. D. Harrington, city engr.

BIDS DESIRED

N. Y., Buffalo—Feb. 15, by W. F. Schwartz, Comr. Pub. Wks., Municipal Bldg., 2,364 tons 6- to 16-in. c.i. pipe, 48 tons 6- to 16-in. c.i. specials, 150 hydrants, and three hundred twelve 6, 8 and 16 in. iron body bronze mounted heavy hub end gate valves.

N. Y., Buffalo—Feb. 28, by Commissioner Pub. Wks., Municpal Bldg. centrifugal pumps, motors, also switch board and switch board apparatus for low lift pumping station. G. C. Andrews, Col. Ward Pumping Sta., engr. Fuller & McClintock, 170 Bway., New York City, consult. engrs.

N. Y., Coney Island (Brooklyn P. O.)—Feb. 9, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, high pressure fire service mains and appurtenances in Surf and Stillwater Aves., West 6th, West 8th, West 10th, and West 12th Sts., etc., here. $70,000.

N. Y., Palmyra—Feb. 21, by Bd. Village Trustees, distributing reservoir, storage reservoir, slow sand filter, pump well, etc. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. E.N.-R. Feb. 7.

N. J., Woodbury—Feb. 19, by C. S. Davis, city clk., 16 in. distribution main and reservoir connections. W. H. Boardman, 426 Walnut St., Phila., engr.; adv. E. N.-R. Feb. 7.

Pa., Phila.—Feb. 21, by Dept. Pub. Wks., Room 216, City Hall, 48 ft. steel water main to connect the West Phila. water supply system with main city system, in Girard Ave. from 31st to 40th Sts., and across Schuylkill River on new steel trusses to be erected under existing Girard Ave. Bridge, about 1 mi. long. $250,000. Private plans. Noted Jan. 31.

Minn., Faribault—Feb. 12, 108 tons 6-in. and 13 tons 8-in. Class B pipe, 12-ft. lengths; 8 tons fitting. S. M. Andrews, city recdr.

Minn., Rochester—Feb. 14, by Bd. Pub. Utilities, 395 tons c.i. pipe, 10 tons specials and fittings. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

Minn., St. Paul—Feb. 13, by H. W. Austin, city purch. agt., approximately 120 tons c.i. water pipe specials, brass water gate valves, corporation and curb cocks, one 19 x 60 ft. and one 12 x 98 ft. steel standpipes, 151 lin.ft. 60 in. O. D. steel pipe, 2 special bends for 60 in. pipe, about 2,367 lb. special iron castings, all for Water Dept.; 800 sq.yd. sandstone blocks for street repair, for Dept. Pub. Wks. G. M. Shepard, city engr.

Kan., Russell—Feb. 4, by J. W. Murphy, city clk., 820 tons 8-in. Class B, C, D, H and S c.i. pipe, 2 tons 6-in. specials, 19 valves and 15 valve boxes, two 30-in. steel or concrete cased wheels, 32 ft. deep, laying 33,000 ft. 8-in. c.i. pipe and constructing 2 brick pump houses. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs. Noted Dec. 27.

Neb., University Place (Lincoln P. O.)—Feb. 15, improving waterworks, 500,000 gal. rein.-con. reservoir, high lift pumping station, deep well pump building, 12 in. well, 160 ft. deep, two 500 g.p.m. centrifugal pumps, 81.5 tons c.i. pipe and specials, laying 3,000 ft. 8 and 10 in. pipe, etc. Grant, Fulton & Letton, Bankers Life Bldg., Lincoln, engrs. Noted Jan. 10.

Wyo., Casper—Feb. 18, 26,000 ft. 4-in., 4,000 ft. 6-in. and 6,350 ft. 8-in. Class B c.i. bell and spigot pipe; 61 tees, reducers, etc.; 74 valves, 4 to 8 in.; 25 Kennedy hydrants; 100 extension valve boxes, 25 tons pig lead, etc. E. W. Fassett, Box 1143, city engr. Noted Nov. 8.

Tex., Houston—H. L. Washburn, aud. Harris Co. Navigation Dist. taking bids one 1,000 g.p.m. fire pump underwriters stand, c.i. pipe and fittings. $25,000. E. A. Tucker, Court House, engr.

Calif., Pacific Grove—Feb. 18, by E. S. Johnston, city clk., 4,000 ft. 1⅛ in. and 500 ft. 1¼ in. Greenfield hot dipped galvanized conduit or equal.

Calif., South Pasadena (Branch of Pasadena)—See Streets and Roads.

BIDS RECEIVED

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Jan. 30, mains in Hawtree Creek, Hasbrouck, Hutton and Meyer Rds., Lefferts Blvd., Ocean Ave., Gold, North and Silver Sts., and across Dunton Canal between Hawtree Creek Rd. and Ocean Ave., here, from Beaver Eng. & Contg. Co., 51 Chambers St., New York, $68,828. Noted Jan. 24.

Wis., Milwaukee—For 100 more or less, fire hydrants, from R. D. Wood, 514 Walnut St., Phila., $80.50 each. Former bids rejected. Noted Jan. 24.

Calif., Los Angeles—Pipe, from Grinnell Co. of the Pacific, 439 East 3rd St., 750 pieces of 10 in. c.i. pipe $55.05, 500 pieces 8 in. $55.05, 5,000 pieces 6 in. $55.05, 5,000 pieces 4 in. $59.05, total $119,610. Total weight of pipe as follows: 318.75 tons Class C 10 in., 156.25 tons 8 in., 1,075 tons 6 in., 700 tons 4 in. All prices f.o.b. Los Angeles.

CONTRACTS AWARDED

O., Cincinnati—For 4, 6, 8 and 10 in. c.i. pipe and special castings, to U. S. Cast Iron Pipe & Fdry. Co., Addyston, $55,000. Engrs. est. $50,000. Noted Jan. 24.

Mo., Ava—J. E. Curry, city clk., 500 ft. deep well and pumping equipment, to Sewell Well Co., 901 Howard St., St. Louis, $5,500; 75,000 gal. tank on 80 ft. tower, to Pittsburgh-Des Moines Steel Co., Tuttle and S. W. 10th St., Des Moines, Ia., $6,459. Contracts for distribution lines will be let in Feburary. Noted Jan. 10.

Sewers

PROPOSED WORK

Fla., Miami Beach—Feb. 19, to vote on $50,000 bonds (city's share) for sanitary sewers and $20,000 (city's share) for storm sewers. Van Allen Harris, city mgr.

O., Columbus—See "Streets and Roads."

Ill., Depue—Plans sanitary sewers in various streets. $90,000. Consoer, Older & Quinlan, 140 South Dearborn St., Chicago, engrs.

Wis., Barron—Making surveys and preliminary plans new sanitary sewerage system in various streets. $25,000. Jacobson Eng. Co., 1645 Hennepin Ave., Minneapolis, engrs.

Wis., Menomonee Falls—See "Waterworks."

Neb., Hastings—Plans sewage disposal plant. $25,000. P. T. Naylor, Hastings, engr.

Neb., Howells—Soon takes bids sanitary sewerage system. $25,000. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs. Noted Sept. 20.

Mo., Lebanon—Making plans sanitary sewerage system. $100,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, engrs.

Mo., Sullivan—Making plans sanitary sewers, to exceed $25,000. Election soon to vote on bonds. Alexander Eng. Co., 517 Woodruff Bldg., Springfield, engrs.

Okla., Apperson—Election Feb. 15, $45,000 bonds, 6 mi. sewers and disposal plant. R. Flood, Drumright, engr.

Okla., Pittsburgh—City voted $26,000 bond issue for sewers and septic tank, 15,000 ft. 8- to 10-in. vitr. clay pipe. Gant-Baker Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Calif., Carmel—Having plans prepared sewers Dist. 1, from San Carlos to sea and from Santa Lucia to Ocean Ave. $100,000. H. D. Severance, Pacific Grove, engr. Noted Oct. 4.

Calif., Los Angeles—Having plans prepared rein.-con. storm drain, Figueroa St. between Santa Barbara Ave. and Manchestetr, also in portions Manchester, Moneta Aves., etc., rectangular cross section 5 ft. 3 in. to 9 in. wide x 5 ft. 3 in. high, also 30- to 66-in. rein.-con. pipe. W. L. Knowlton, city sewer engr.

Calif., San Jose—Having plans prepared for sewerage system. $450,000. C. D. Marx, Stanford University, Palo Alto, engr. Noted Nov. 8.

Calif., Santa Barbara—To vote $150,000 bonds for sewerage system. G. D. Morrison, city mgr.

Ont., Lindsay—Having plans prepared concrete sewage disposal plant, probably settling basins and sedimentation tanks. $25,000. O. Smith, city engr.

Ont., North Bay—Plans being prepared new concrete septic tank. $25,000. W. Mackie, Town Hall, engr.

BIDS DESIRED

N. Y., Long Island City—Feb. 11, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in 85th Rd., Way Ave., 115th and Palmetto Sts., etc.

N. Y., Stamford—Feb. 28, by R. S. Welch, village pres. 2,816 ft. 15 and 18 in. sewer line, 120 ft. c.i. pipe, disposal tank, sludge bed, 350 ft. 15 in. pipe, etc. $50,000, also 880 ft. 8 in. sewer in Beaver and Prospect Sts., $10,000. E. W. Moxley, Ravena, engr.

D. C., Wash.—Feb. 29, by Dist. Comrs., Room 509 District Bldg., 3,280 ft. sewers; adv. E. N.-R. Feb. 7.

Ala., Mobile—Feb. 27, City Comrs., asphaltic and concrete paving, curbing, storm sewers, etc. W. Smith, city engr.; adv. E. N.-R. Feb. 7.

O., Akron—See "Streets and Roads."

O., Lima—Feb. 23, at office of C. A. Bingham, city mgr., intercepting sewer, Contr. B. B. F. Darling, superv. engr.; adv. E. N.-R. Feb. 7.

Minn., Winona—Feb. 11, sewage pumps, etc., 1 vertical single stage centrifugal pump with 750 gal. normal capacity, 2 vertical single stage centrifugal sewage pumps, 1,200 gal. each normal capacity, three weatherproof float switches for chain operation, three 3-phase 60 cycle alternating current 220 volt vertical slip ring motors for direct connection to pump shafts. E. E. Chadwick, city engr.

Wisconsin—Feb. 16, by Metropolitan Sewerage Comn., Milwaukee, 7,855 ft. 36 in. concrete sewer in Cudahy and 557 ft. 30 in. concrete sewer in White Fish Bay.

Wis., Milwaukee—Feb. 15, by Sewerage Comn., 2,410 ft. 30 in. concrete sewer and 952 ft. 24 in. terra cotta pipe in Commerce Ave.

Kan., Arkansas City—Feb. 5, by M. N. Sinnott, city clk., 6,015 ft. 8 in. vitr. pipe sewers, manholes, flush tanks, etc., Dists. 4 and 5; 3 mi. main and lateral sewers, manholes, flush tanks, etc. Dist. 7. D. A. Lawhe, City Hall, engr. Noted Nov. 1.

BIDS RECEIVED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Jan. 30, sewers in Melville St., from M. Del Balso, 660 East 221st St., $48,151; Sedgwick Ave., from F. Gabriel, $23,365. Noted Jan. 24.

Md., Baltimore—Mayor and City Council, City Hall, vitr. sewer pipe for Highways Dept., from Baltimore Clay Products Co., 2113 West Lafayette Ave., $28,122. Noted Jan. 24.

Mo., St. Louis—See "Excavation, Drainage, Irrigation."

Tex., Houston—Storm sewers in Southmore Addition, 36- to 96-in. monolithic concrete and 12- to 24-in. concrete pipe, from City of Houston, $175,181. Engrs. est. $175,000. Noted Jan. 3.

Calif., La Jolla—See "Streets and Roads."

Calif., Long Beach—Santa Fe Storm Drain, portions Bennett, 7th, 6th Sts., est. incl. 12,495 lin.ft. 10- to 14-in. cement concrete pipe, 4,765 ft. 30- to 42-in. rein.-con. pipe, etc., from G. W. Kemper, Alhambra, $83,000.

CONTRACTS AWARDED

Ala., Tuscaloosa—City 14 blocks drainage sewers in Greensboro Ave. and 9th St., to Sullivan, Strong & Haggerty, Bessemer, $25,100.

La., Baton Rouge—Common Council, storm drains in Goose Hollow Canal, to R. J. Estep, Gravel Deere Bldg., Dallas, Tex., $63,524; St. Phillip St. Canal and Roseland Terrace Canal to C. B. Stewart, Baton Rouge, $41,064 and $14,200 respectively. Noted Jan. 3.

Ark., Ft. Smith—Sewers in Sewer Dist. 4, incl., 37,710 ft. 6- to 18-in. vitr. pipe, 1,000 cu.yd. rock excav., etc., to Benson & Farrar, 120 South 2nd St., Guthrie, Okla., $36,438. Noted Jan. 10.

Mich., Detroit—To Detroit Drainage Constr. Co., 400 Penobscot Bldg., 5,652 ft. sewer in Lateral 3981, $20,268, 865 ft. in Lateral 4073, $2,280, 890 ft. in Lateral 4074, $2,277, 1,558 ft. in Sewer Arm 4071, $19,156; to Michigan Constr. Co., Detroit, Sewer Arm 4076 in Saxon and Western Aves., $6,995. Noted Jan. 24.

Waste Disposal

PROPOSED WORK

Md., Baltimore—Mayor and City Council plan 2 salvaging plants instead of 5 incinerating plants previously planned. S. Purcell, ch. engr. Noted Jan. 10.

Bridges

PROPOSED WORK

Vermont—See "Streets and Roads."

N. Y., Central Bridge — Schoharie Co. (Schoharie) having plans prepared new iron bridge over Schoharie River, near here. $90,000. Present wooden bridge condemned. C. H. Wright, Middleburg, co. highway supt.

Fla., Jacksonville—Florida East Coast Ry., H. N. Rodenbaugh, genl. mgr., St. Augustine, soon receives bids 4,000 tons steel for superstructure of St. Johns River bridge, here, 216 ft. bascule span, three 216 ft. truss spans and plate girder approach spans. W. G. Brown, engr. Noted Sept. 13.

Fla., Miami Beach—Feb. 19 to vote on $32,000 bonds for concrete bridge over and bulkhead along Collins Canal on Meridian Ave.

Tenn., Lewisburg—Marshall Co. plans bridge over Duck River. $25,000.

Ill., Fulton—States of Illinois and Iowa also Federal Government plan replacing old toll bridge by constructing steel and rein.-con. bridge, over Mississippi River, here. $1,000,000.

Kan., Kansas City—Preparing plans steel and rein.-con. viaduct. Will probably take bids in April. $360,000. R. L. McAlphine, 1721 Orville Ave., engr.

Tex., Floresville — See "Streets and Roads."

Tex., Houston—Harris Co. having plans prepared bridges and culverts on East Montgomery Rd. incl. Spring Creek Bridge, concrete and steel, $40,000; concrete bridges on Crosby Rd., incl. San Jacinto River Bridge, $115,000. Howe & Wise, co. engrs.

Washington—Pacific Northwest Traction Co., Elk and Holly Sts., Bellingham, plans to expend $450,000 in Whatcom and Skagit Counties during 1924. Plans include steel bridge to replace wooden structure at Highbridge, (Bellingham, P. O.) $60,000, and rebuilding or filling in interurban trestle at Clayton Bay (Samish, P. O.), $160,000.

Wash., Tacoma—Pierce Co. and Northern Pacific R.R., 7th and Pacific Sts., plan overhead crossing on 6th Ave. leading into Day Island. $27,000. C. H. Votaw, co. engr., will draw plans.

Calif., Long Beach—Having preliminary plans prepared bridge, 1 mi. long, 40 ft. wide, over Long Beach harbor entrance channel, continuance of West Ocean Blvd. $2,000,000 or more. R. D. Van Alstine, city engr.

Ont., Brockville — Leeds and Glengarry Counties plan 10 concrete and steel bridges. $150,000. E. R. Blackwell, County Bldg., Brockville, engr.

Ont., Fergus—Takes bids about Mar. 15, constructing 114 ft. steel or cement bridge, St. David St. $35,000. A. W. Connor, 34 Victoria St., Toronto, engr.

BIDS DESIRED

Ga., Columbus—Feb. 13, by Muscogee Co., rein.-con. bridge over Apatoi Creek on Buena Vista Rd., 700 yd. concrete, 40 tons reinforcing bars. $30,000.

Alabama—Feb. 25, by State Hy. Dept., Montgomery, substructure of bridge over Shoal Creek, about 5 mi. from Florence, on Florence and Athens Highway, consisting of 4 piers, 3 of which are 75 ft. and one 60 ft. high, with 2 end bents, involving 1557 cu.yd. concrete, 35,250 lb. reinforcing, W. S. Keller, state highway engr.

Illinois—Feb. 15, at office of Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, one 100-ft. and one 45-ft. rein.-con. spans, Route 3, Sect. 26-B, Mercer Co., and one 100-ft. steel span, Route 3, Sect. 26-C, Mercer Co.; one 50-ft. and one 60-ft. rein.-con. span, Route 8, Sect. 21-D, Iroquois Co.; three 50-ft. and one 40-ft. rein.-con., Route 23, Sect. 4-B, LaSalle Co. C. Older, ch. highway engr.

Minn., Austin—Feb. 27, by C. M. Hubbard, aud. Mower Co., bridge over Cedar River, two 75-ft. concrete arch spans. $50,000. State Highway Dept., 1246 University Ave., St. Paul, engrs. Noted Jan. 10.

Minn., Blakeley—Feb. 19, by F. Hoppenstedt, aud. Sibley Co. (Gaylord), bridge over Minnesota River, three 140-ft. steel truss spans, concrete abutments, here, for Scott Co. (Shakopee) and Sibley Co. (Gaylord). $40,000. State Highway Dept., 1246 University Ave., St. Paul, engrs. Noted Feb. 22.

Ark., Walnut Ridge—See "Excavation, Drainage, Irrigation."

Tex., Houston—Feb. 28, by City Com., 80 ft. concrete deck girder bridge 50 ft. clearance, 70 ft wide, over Buffalo Bayou on Smith St. $80,000. J. C. McVea, city engr. Noted Dec. 20.

Tex., Rio Grande City—See "Streets and Roads."

Tex., Richmond—Feb. 15, by C. D. Myers, judge Ft. Bend Co., 1,504 ft. cantilever and truss span, concrete girders across Brazos River on State Highway 3, two 85 ft. concrete piers on pile foots with concrete seal course, steel cantilever design with main truss span of 264 ft., two 132 ft. arms, paved approach one end, fifteen 31 ft. concrete girder approaches other end. $260,000. C. H. Kendall, co. engr.

Okla., Tahlequah—Feb. 20, by Clerk Cherokee Co., 100 ft. steel truss; concrete piers, 125 cu.yd. concrete, over Barron Foch River. $25,000. T. P. Clonts, 2110 Garland St., Muskogee, engr.

BIDS RECEIVED

O., Cambridge—Dept. Highways and Pub. Wks., Columbus, Feb. 1, 500 ft. rein.-con. bridge over Wills Creek and tracks of Baltimore & Ohio R.R. and Pennsylvania R.R., on Dewey Ave., here, from Taylor & Linn, Zanesville, billet steel $160,560; Waters & Freemas, Columbus, rerolled steel $172,344. Noted Jan. 17.

Missouri—State Hy. Dept., Jefferson City, Jan. 29, bridges over tracks of Chicago & Alton R.R., Jackson Co., from Carrothers Co., 310 Walsix Bldg., Kansas City, $8,612; over overflow of Grand River, Livingston Co., from A. P. Munsen, Marion, Ia., $27,351; over Grand River, Livingston Co., from List & Weatherly Constr. Co., 416 Ry. Exch. Bldg., Kansas City, $68,331; over Eleven Points River, Oregon Co., from Missouri Bridge & Iron Co., 1000 Fullerton Bldg., St. Louis, $17,681; over Middle Fork River, Oregon Co., from Campbell Bros., 603 Kemper Bldg., Kansas City, $14,133; over Current River on Sta. 1634 plus 44, Shannon Co., from M. E. Gillioz, Monett, $62,964; over Current River, on Sta. 634 plus 65, Shannon Co., from Koss Constr. Co., 2818 5th St., Des Moines, Ia., $85,922. Noted Jan. 24.

CONTRACTS AWARDED

N. Y., Fort Edward—Delaware & Hudson R.R., foot of State St., Albany, raising 1 span I-beam bridge here, to Amer. Bridge Co., 30 Church St., New York City, $33,000.

La., New Orleans—Bd. Port Comrs., Suite 200, New Court Bldg., furnishing, delivering and erecting approach span and machinery house, incl. 213 tons steel, for Canal St. Ferry, to Virginia Bridge & Iron Co., Whitney Bldg., $43,208, furnishing machinery to Fawcus Machine Co., 2818 Smallman St., Pittsburgh, $9,542. **This corrects report in Jan. 24 issue.** Noted Jan. 24.

Ia., Muscatine—Bd. Supervs. Muscatine Co., 1 pony and 1 high truss, to H. Luedtke, Muscatine, $17,590; 29 culverts to M. McKenzie, Muscatine, $9,887, 6 culverts to S. R. Johnson, Tipton, $2,445.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, rein.-con. bridge to carry Gravois Ave. over River Des Peres, to H. A. Henske, 1504 St. Louis, Ave., $104,756. Noted Jan. 31.

Tex., Halletsville—Lavaca Co., concrete bridges on State Highway 3-B, to L. E. Sanders, Alamo Natl. Bank Bldg., San Antonio, $124,965. Noted Jan. 31.

Okla., El Reno—State Hy. Dept., Oklahoma City, four 120 ft. steel spans on concrete piers and abutments, over North Fork Canadian River, here, Federal Aid Project 113, Canadian Co., to Kansas City Bridge Co., 510 Orear Leslie Bldg., Kansas City, Mo., $75,833. Noted Dec. 27.

Wash., Newport—W. Geary, toll bridge across Pend O'Reille River, 1,325 ft. long, 200 ft. over river to be of steel, 20 ft. asphalt roadway, 4 ft. walk, to P. Young, Priest River, Idaho. Engrs. est. $70,000.

Ore., Seaside—Clatson Co. (Astoria) rein.-con. bridge three 50 ft. spans, 50 ft. wide, over Necanicum River, on Bway., here, to H. A. Webster, $30,800. This corrects report in Dec. 27 isue.

California—State Hy. Comn., Sacramento, bridge 240 ft. long, 21 ft. wide between curbs, three 50 ft. and two 30 ft. concrete girders, across San Lorenzo Creek near King City, to Rocca & Caletti, 920 Mission Rd., San Rafael, $26,415. Engrs. est. $30,825. Noted Jan. 24.

Dams

PROPOSED WORK

Calif., San Diego—See "Unclassified."

Calif., Moorpark—See Excavation, Drainage, Irrigation.

British Columbia—See "Unclassified."

BIDS DESIRED

West Indies—Jamaica, Kingston—Mar. 1, by Colonial Secretary, constructing Hermitage Dam of cyclopean masonry with contingent work in connection with Kingston and St. Andrews waterworks. Plans at office of Crown Agts. for Colonies, London, Eng.

Railways

PROPOSED WORK

Florida—See "Industrial Works" under Bowden (Phillips, P. O.).

Tennessee—Tennessee Power Co. (Chattanooga Street Ry.) Hamilton Natl. Bank Bldg., Chattanooga, will spend $160,000 for new road bed, rails, ties, 10 mi. trolley wire, etc.

Missouri—Missouri Pacific R.R. Co., Ry. Exch. Bldg., St. Louis, plans extending line from Bagnell to Springfield, 125 mi. long, probably 75 lb. rails. E. A. Hadley, ch. engr.

Texas — Houston Electric Co., Capitol Ave., Houston, plans extensions, new trackage, paving, etc. $200,000.

Texas—See "Industrial Work" under Dallas.

Nevada—Western Pacific R.R. Co., Mills Bldg., San Francisco, having plans prepared reballasting 180 mi. railroad between Winnemucca and Wells (contractor will not be required to furnish new rails or materials). J. W. Williams, ch. engr.

Ontario — Michigan Central Ry., St. Thomas, having plans prepared laying 75 mi. steel, replacing 300,000 ties and reballasting with stone 30 mi. $1,250,000. W. J. Shaw, ch. engr.

Ontario—Toronto Transportation Comn., Ryrie Bldg., Toronto, having plans prepared laying double track street railway on Davenport Rd. from Bathurst St. to Dovercourt Rd. and on Weston Rd. from St. Clair to Northland Aves. in city of Toronto, total distance 2½ mi. $500,000. H. H. Couzens, ch. engr.

British Columbia — See "Contracts Awarded."

CONTRACTS AWARDED

Texas—Houston, Beaumont & Orange Interurban, Houston, 100 mi. electric interurban, to J. D. Davis Constr. Co., Peach Tree St., Atlanta, Ga.

British Columbia—British Columbia Electric Ry., 425 Carroll St., Vancouver, will repair present tracks by day labor, and soon takes bids various small extensions. $600,000. J. H. Newell, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Tenn., Union City—North Fork D. D. sold $139,000 bonds for drainage work in Weakly and Obion Counties.

Calif., Elsinore—Ladera Irrigation Dist. plans to vote on bonds for 2 small reservoirs, pipe lines, etc., for 4,000 acre district. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, consult. engrs.

Calif., Moorpark—Moorpark—Conejo Irrigation Dist. c/o Olmsted & Gillelen, consult. engrs., 606 South Hill St., Los Angeles, had preliminary plans prepared 5 storage dams on Sespe Creek, 4 on Piru Creek, Ventura Co., total storage capacity 150,000 ac.ft.; 2 main power plant; connecting conduit and canal distributing system. $2,000,000 or more. Noted Jan. 3.

Calif., Sacramento—North Sacramento Land Co., 1019 8th St., having preliminary plans prepared reclamation project on 2,500 acres adjoining American River, incl. levees, drainage canals, etc.

BIDS DESIRED

Pa., Kingston — Feb. 25, by Young & Wintermute, engrs. for Kingston Boro., 404 Second Natl. Bank Bldg., Wilkes-Barre, and J. A. Boyle, engr. for Edwardsville Boro., 401 Bennett Bldg., Wilkes-Barre, dredging and cleaning bed of Toby's Creek; adv. E. N.-R. Feb. 7.

Fla., Bartow—Feb. 15, by C. V. Turner, city mgr., 4½ mi. canal. $35,000.

La., Shrewsbury—Canal—Feb. 12, by Bd. Comrs. 4th Jefferson Dist. of Jefferson Parish, 50 mi. canal, 8-12 ft. deep, 40-70

Excavation, Drainage, Irrigation (Continued)

ft. wide, 10 ft. high, 120 ft. base, in Sub Dist. 3, also pumping stations near Lake Pontchartrain, combined capacity 1 m.g. water per minute. Area to be drained, 30,000 acres. $1,500,000. A. T. Dusenbury, Room 407, Marine Bank Bldg., New Orleans, consult. engr.

BIDS RECEIVED

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 5,657 ft. partially lined channel, 40 ft. wide at bottom, 100 ft. at top, 20 ft. deep, closed sanitary sewer, 12- to 84-in. laterals of brick or 2 ring segmental block, etc., for Sect. A, River Des Peres, from Higgins-Wall-Dyer Co., International Life Bldg., $324,452. Noted Jan. 3.

Calif., Long Beach—City, dredging waterway between Recreation Park and Alamitos Bay, incl. 2,000,000 cu.yd., from United Dredging Co., Central Bldg., Los Angeles, $0.1683 yd.

CONTRACTS AWARDED

Tex., Angleton—San Bernard D. D. 9, 15 mi. ditch, to Howard Kenyon Dredging Co., 3603 McKinney Ave., Houston, $30,000. Noted Jan. 3.

Streets and Roads

PROPOSED WORK

Vermont — Dept. Highways, Montpelier, plans paving with bituminous macadam 8.25 mi. roads in Georgia and Guileford; 4.75 mi. concrete in Fairhaven, Berlin and South Burlington; gravel surfacing 10.65 mi. in Charleston, East Wallingford, Mount Holly, Sutton, Swanton-Sheldon and Marshfield-Cabot; Gassets grade separation, involving 0.3 mi. gravel surfacing and 300 ft. deck truss bridge; 160 ft. through truss bridge at North Pownal. T. W. Dix, ch. engr.

N. J., Princeton—Boro Council plans paving several streets, concrete or asphalt. $35,000. Engineer not selected.

Pa., Wellsboro—Boro Council having plans made paving 4,000 ft. Cranton Stand, Pearl and Charles Sts., brick on concrete. $30,000.

W. Va., Fairmont—Mannington and Lincoln Dists., Marion Co., election Mar. 4 to vote on $600,000 and $333,200 bonds respectively for roads. F. J. Wilfong, co. engr.

W. Va., Fairmont — Paw Paw Dist., Marion Co., plans election to vote on $324,000 bond issue for roads. F. T. Wilfong, Fairmont, engr.

W. Va., Wayne—Stonewall and Grant Dists., Wayne Co., election Feb. 9, to vote on $111,000 and $58,000 bonds respectively for roads. H. Adins, Clk.

Fla., Miami Beach—Feb. 19, to vote on $40,000 bonds for paving and surfacing. Van Allen Harris, city mgr.

Tenn., Woodbury—Cannon Co. voted $75,000 bond issue for 7 mi. highway from Woodbury to Warren Co.

O., Akron—W. F. Peters, dir. Pub. Serv., opens bids latter part of February, grading, laying sidewalks and cindering 3,395 ft. McKinley and Mildred Aves., $46,000; grading, laying sidewalks, sewers and cindering 430 cu.yd. Springdale St., $12,000; grading, laying sidewalks, sewers and paving 335 ft. Power St., 24 ft., vitr. brick or asphalt, $12,000; grading, laying sidewalks and paving 750 ft. Allyn St., 24 ft., vitr. brick or asphalt, $18,000; grading and paving 1,165 ft. South Arlington St., 44 ft., vitr. brick or asphalt, $34,000. E. A. Kemmler, Delaware Bldg., engr.

O., Canton—Takes bids in spring paving ½ mi. north side of Tuscarawas St., W., 20 ft., brick. $30,000. W. E. Sarver, City Hall, engr.

O., Cincinnati—Plans granite curbing and paving Vine St. and Central Ave., $91,841. F. Krug, City Hall, engr.

O., Cleveland—Cuyahoga Co. takes bids in spring paving about 3 mi. Kinsman Rd., brick, $278,600, Fitzwater Rd., brick or concrete, $114,000, Willow Rd., rein.-con., $493,200; grading about 5 mi. Wolf Rd., $47,900. F. Lander, Court House, engr.

O., Columbus—Making plans grading, laying necessary water services and sewer connections and paving with (1) brick (2) asphalt (3) concrete 1,054 ft. Atcheson St., 30 ft. (1) $27,953 (2) $23,265; 2,621 ft. alley north of Mithoff St., 18.42 ft. (1) $5,775 (3) $5,129; 719 ft. Concord Alley, 20 ft. (1) $8,513 (2) $6,547 (3) $5,969, 1,275 ft. Hanford St., 26 ft. (1) $30,109 (2) $23,870, 466 ft. alley north of Gates St., 16 ft. (1) $3,010 (3) $2,670; resurfacing, etc. 2,227 ft. Woodruff Ave., 12 ft. (2) $17,217. R. H. Simpson, city engr.

O., Dayton—Plans improving Pritz Ave., Kentucky rock asphalt on concrete $26,358, West 5th St., brick on concrete $75,795, and Superior Ave., wood block, brick or asphalt on concrete, $58,536. Work involves about 25,000 sq.yd. paving, 10,000 lin.ft. cement curb and gutter, 2,000 lin. ft. cement sidewalk. J. F. Hale, city engr.

O., Defiance—Defiance Co. plans 2 mi. road north from Jewell, 20 ft. concrete tar top or bituminous macadam. $50,000. H. L. Toberen, Defiance, engr.

O., Lisbon—Columbiana Co. plans replacing 10 ft. brick highway with 18 ft. concrete on 1 mi. Lisbon-East Liverpool Highway, south of here. $30,000-$35,000. L. C. Kirk, Court House, engr.

Ill., Algonquin — Plans paving various streets. $30,000. Consoer, Older & Quinlan, 140 South Dearborn St., Chicago, engrs.

Ill., DeKalb — Plans concrete paving West Lincoln and Normal Rd. $70,000. Consoer, Older & Quinlan, 140 South Dearborn St., Chicago, engrs.

Wis., Waukesha—Plans rein.-con. paving 30,000 sq.yd. Bethesda and Buchners Courts, West Park, Franklin, Hamilton, Hartwell, Racine, Central, Prospect and Dunbar Aves. $75,000. City will probably pave 7,000 sq.yd. Bway., with concrete, by day labor. A. P. Kuranz, City Hall, engr.

Wis., Whitefish Bay (Milwaukee P. O.)—Having preliminary plans prepared paving 37,000 sq.yd. various streets during 1924. T. F. Buckley, c/o Village Hall, engr.

Ia., Moulton—Having preliminary plans made paving 25 blocks. Hemington Eng. Co., Natl. Bldg., Omaha, Neb., engrs.

Ia., Perry—Plans paving 25 blocks Dists. 1 to 7, with concrete, vibrolithic concrete, vitr., brick, asphaltic, concrete, sheet asphalt, bitulithic or asphaltic concrete, Willite process, also resurfacing streets with sheet asphalt or asbestophalt. $100,000. R. C. Lutze, city engr.

Missouri—State Hy. Dept., Jefferson City, plans grading, etc. 83.5 mi. roads in Barton, Oregon, Osage, Camden, Grundy, Putnam, Atchison, Sullivan, Mercer, Schuyler, Lincoln, Marion, Monroe, Benton, Crawford, St. Charles and Warren Counties. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 4 mi. State Project Route 1, 30 ft., Newton Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, had preliminary plans prepared and takes bids in spring grading 3,085 cu.yd. Devlin Ave. $4,200; grading, concrete curbing and paving 2,615 sq.yd. Magnolia Ave., Kentucky rock asphalt, $13,000, 6,350 sq.yd. Margaretta and Plateau Sts., warrenite, $35,350, 2,370 sq.yd. Oleathe St., rein-con., $12,250, 2,900 sq.yd. Sulpher Ave., asphalt, $19,250. W. W. Horner, City Hall, engr.

Neb., Chadron—Soon takes bids paving 19 blocks. $500,000. Fulton & Letton, Bankers Life Bldg., Lincoln, engrs.

Neb., Nebraska City—Plans to grade and pave 35 blocks, brick, rein.-con. or asphaltic concrete. $100,000 or more.

Neb., Omaha—Douglas Co. having preliminary plans prepared paving 4½ mi. Project 48, 4½ mi. Project 52 and 4 mi. Rd. 52, concrete or brick. L. E. Adams, co. engr.

Wyo., Casper—Making plans and takes bids in March, concrete sidewalks, 5 ft. wide, 4 in. thick, 4 in. gravel cushion. $100,000. E. W. Fassett, city engr.

Ark., Pine Bluff—Having preliminary plans prepared grading and gravel surfacing 36 mi. in Rob Roy Bayou Meto Rd. Dist., 18 ft. $350,000. Parkes Eng. Co., Citizens Bank Bldg., engrs.

Ark., Walnut Ridge—Having preliminary plans prepared grading and graveling 56,899 sq.yd. various streets in Street Impvt. Dist. 2, $48,749; grading, draining and paving 9,760 sq.yd. Street Impvt. Dist. 2, 2 in. asphaltic concrete on 6 in. concrete, $48,044.

Tex., Albany—Shackleford Co. election Mar. 1, to vote on $500,000 bonds state and county roads. P. K. Clark, co. engr.

Tex., Batesville—Zavalla Co. election Feb. 23, $165,000 bonds grading and bituminous macadam surfacing roads in Precinct 4. N. P. Hunt, co. judge. Noted Dec. 27.

Tex., Childress—Childress Co. election Mar. 11, $760,000 bonds, grading and gravel surfacing Highway 4, bituminous macadam surfacing State Highway 5. J. H. Callaway, co. judge.

Tex., Coleman—Plans permanent paving 10 blocks, probably rock asphalt. $30,000.

Tex., Colorado—Having plans prepared paving 9 blocks Main, Elm, Oak and 2nd Sts., bitulithic on concrete, with white way extensions. $40,000. F. F. Du Bose, city engr.

Tex., Dallas—Making plans paving 10 blocks Terry St., 30 ft., probably Uvalde rock asphalt on concrete. $25,000-$30,000. E. A. Kingsley, city engr.

Tex., Dallas—Having plans prepared repaving Greenville Ave. from Ross to city limits, bituminous types. $50,000. E. A. Kingsley, city engr.

Tex., Floresville—Wilson Co. making plans grading, gravel base, 1 in. rock asphalt topping and bridging 15 mi. State Highway 9, 18 ft. $299,500. F. E. Hess, Medical Arts Bldg., Dallas, engr.

Tex., Ft. Worth—Making plans bituminous paving Vickery Blvd. in Highland Addition. $30,000. D. L. Lewis, city engr.

Tex., Ft. Worth—Logan Bros., 2231 Harrison St., making plans paving, walks, etc., in Logan Addition, 150 acres. $25,000. Baker & Von Zuben, Ellison Bldg., engrs.

Tex., Hereford—Voted $50,000 bonds paving various streets. Noted Jan. 11.

Tex., Houston—See "Railways."

Tex., Italy—Ellis Co. election Feb. 19, $80,000 bonds, grading and paving main business streets. Elrod Eng. Co., 3124 Main St., Dallas, engrs.

Tex., Jourdanton—Atascosa Co. election Mar. 1, $933,000 bonds highway improvements. H. H. Martin, Pleasonton, comr.

Tex., Kaufman — Kaufman Co. voted $25,000 bonds and making plans grading Greenville Ennis Rd., Scurry Rosser Road Dist., State Highway 34. C. A. Anderson, co. engr.

Tex., New Boston—Bowie Co. making plans grading and concrete surfacing 2.8 mi. New Boston-Texarkana Rd., 9 ft. $50,000. F. E. Hess, Medical Arts Bldg., Dallas, engr.

Okla., Enid—Plans grading and paving West Main St., 5,750 sq.yd. asphalt, 350 lin.ft. curbing, etc. $28,000. F. C. Magruder, Enid, engr.

Okla., McAlester—Plans grading and paving 5 blocks South 10th St., 5,200 sq.yd. concrete, 3,100 lin.ft. curbing, etc. $25,000. G. Brown, McAllister, engr.

Okla., Muskogee—Muskogee Co. preparing plans grading and graveling 10 mi. highway from Warner to Webber Falls, 100,000 sq.yd. gravel, 65,000 cu.yd. excav. $150,000. W. C. Burnham, Capitol Bldg., Oklahoma City, engr.

Okla., Oklahoma City—Plans grading and paving 7 blocks Klein, Pearl, Central and 29th Sts., 6,200 sq.yd. asphalt, 4,000 lin.ft. curbing, 2,500 cu.yd. excav., $36,000; 7 blocks Bway., B and Western Sts., 6,100 sq.yd. asphalt, 4,150 lin.ft. curbing, 2,200 cu.yd. excav., $37,500. B. M. Hart, City Hall, engr.

Okla., Pawhuska—Plans grading and paving West Main St., 5,100 sq.yd. concrete, 1,800 lin.ft. curbing, 1,800 cu.yd. excav. $25,000. J. M. Buckley, Pawhuska, engr.

Wash., Centralia—Lewis Co. making plans and takes bids about Feb. 28, concrete paving 1 mi. Centralia-Bucoda Rd. from Centralia to Thurston Co. line. $35,000. R. Greene, Centralia, engr.

Calif., Anaheim—Plans paving 5 mi. various streets during 1924.

Calif., Los Angeles — Los Angeles Co. had plans prepared improving Cedar St., etc., known as Co. Rd. Impvt. 58, 8,689 cu.yd. excav., 23,190 sq.ft. gutters, 30,779 sq.yd. of 1½ in. national pavement, 30,779 sq.yd. of 3½ in. asphaltic concrete base; Crescent St., Co. Rd. Impvt. 63, 5,323 cu.yd. excav., 7,656 sq.yd. 6- to 8-in. concrete pavement, 523 sq.yd. oil and screenings surface.

Calif., Mayfield—Plans election to vote on bonds (will exceed $25,000) for paving streets.

Calif., Monterey—Plans paving streets in district bounded by Hawthorne and Pine Sts., the Presidio and Pacific Grove city limits. $80,000. H. D. Severance, city engr.

Calif., Oakland—Had plans prepared improving Alice St., 63,730 sq.ft. grading, 61,496 sq.ft. 6 in. Portland cement concrete base with 2 in. Warrenite surface. W. W. Harmon, city engr.

Calif., Oakland—Had plans prepared improving Golf Links Rd., 27,561 sq.yd. excav., etc. $25,000. W. W. Harmon, city engr.

Calif., San Diego — Common Council plans improving 22nd St., incl. 212,811 sq. ft. 1½ in. asphaltic concrete on 2½ in. bituminous, etc.

Calif., Santa Ana—Orange Co. plans paving 17th St. west from Santa Ana city limits to Westminister, $150,000 or more. J. L. McBride, co. road comr.

Ont., Brockville—Leeds and Glengarry Counties having plans prepared roadwork

Streets and Roads (Continued)

for 1924, clay, gravel, macadam and concrete. $150,000. E. R. Blackwell, County Bldg., Brockville, engr.

Ont., Burlington—Having plans prepared cement paving James St. $35,000. MacKay & MacKay, Bank of Hamilton Bldg., Hamilton, engrs.

Ont., Kingston—Plans 18,000 sq.yd. asphalt on concrete and 3½ mi. concrete curbing and guttering. $75,000. H. E. Dick, city engr.

Ont., London — Middlesex Co. Council having plans prepared 2 mi. concrete pavement on Sarnia Rd. west of here. $210,000. Prices wanted on materials. C. Talbot, County Bldg., engr.

B. C., Burnaby—Voted $30,000 bonds 3 mi. macadam surface on Sperling Ave. and other streets. E. Smith, Municipal Hall, engr.

BIDS DESIRED

New Hampshire—Feb. 15, by State Hy. Dept., Concord, rein.-con. paving 2.415 mi. (2 sections) road in Derry, $85,000; 0.994 mi. (2 sections) road in Peterboro, $30,000. F. E. Everett, state highway comn.

N. Y., Long Island City—Feb. 11, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing and laying sidewalks on Ambrose, Edson, 80th and 85th Sts.; grading, curbing, laying sidewalks and sheet asphalt paving Chaffee St., etc.; grading, and sheet asphalt paving, etc., 39th St. and Bryce Rd.; permanent paving 50th St.

N. Y., New York—Feb. 14, by Park Bd., Municipal Bldg., repaving with asphalt mastic where directed the walks in Central Park adjacent to new music stand in the mall; grading, curbing, etc., new roadway entrance to Central Park at 6th Ave. and 59th St., both Manhattan Boro.; completing roads and paths, etc., in connection with construction of Rice Memorial in Pelham Bay Park, Bronx Boro. F. D. Gallatin, pres.

N. Y., New York—Feb. 15, by J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, regrading, curbing, recurbing, flagging, reflagging, paving, etc., unpaved portion of roadway on Riverside Dr. from point about 900 ft. north of West 165th St. to intersection of Dyckman St. and Bway., sheet asphalt on concrete.

N. Y., New York—Feb. 11, by J. Miller, pres. Manhattan Boro, Municipal Bldg., curbing, recurbing, flagging, reflagging and paving West 176th St., sheet asphalt on concrete.

N. J., Morristown—Feb. 19, by Morris Co., rein.-con. paving 47,480 sq.yd. Long Valley-Hunterton Co. Line Rd., Washington Twp. W. Hopkins, Morristown, engr.; adv. E. N.-R. Feb. 7.

Md., Baltimore—Feb. 13, by Bd. Awards, grading Contr. 249-OA, Gwynns Falls Parkway from Liberty Heights Ave. to 1,100 ft. south, 40,000 cu.yd. grading. $40,000. R. K. Compton, 214 East Lexington St., chn. and engr. paving comn.

Alabama—Feb. 25, by State Hy. Dept., Montgomery, improving 1.856 mi. Tuscaloosa-Birmingham Highway, 24,787 cu.yd. common excav., 43,116 sta. yd. overhaul on excav., 8,483 sq.yd. 6-in. and 7,997 sq.yd. 7-in. concrete paving, etc. W. S. Keller, state highway engr. Noted Nov. 15.

Ala., Mobile—See "Sewers."

W. Va., Bluefield—Feb. 26, by C. E. Ridley, city mgr., Project 1 grading, curbing, etc. 36,000 sq.yd.; Project 2, grading, curbing, and 1 course concrete paving 24,000 sq.yd.; Project 3, removing old pavements, constructing concrete foundation work, etc. 38,000 sq.yd.; Project 4, surfacing and paving Projects 1 and 3; adv. E. N.-R. Feb. 7.

O., Akron—Feb. 13, by W. F. Peters, dir. Pub. Serv., grading, laying sidewalks and cindering 3,270 ft. Bye St., Collinwood and Atwood Aves., $21,000; grading, laying sidewalks and paving 2,905 ft. Chalker and Elma Sts., 24 ft., vitr. brick or asphalt, $52,000, 2,670 ft. Emerling Ave., 26 ft., vitr. brick or asphalt, $54,000, 350 ft. Garden alley, 20 ft., vitr. brick or concrete, $5,000; grading, laying sidewalks, sewers and paving 3,560 ft. Wildwood Ave., 26 ft., vitr. brick or asphalt, $80,000; laying sidewalks and paving 700 ft. Wellesley Ave., 24 ft., vitr. brick or asphalt, $12,000. E. A. Kemmler, Delaware Bldg., engr.

Illinois—Feb. 15, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving 151.5 mi. road, grading one section and building 7 bridges. C. H. Older, ch. highway engr.

Wis., Antigo—Mar. 11, by City, c/o G. O. Palmiter, clk., paving 50,000 sq.yd. various streets, sheet asphalt, bitulithic and 2 course rein.-con. $25,000. J. Donohue Co., 606 North 8th St., Sheboygan, engr.

Wis., Waukesha—Waukesha Co. taking bids concrete surfacing, etc., 2 mi. Waukesha-Prospect Rd., 16 ft. Wisconsin Hy. Comn., Stephenson, Bldg., Milwaukee, engrs.

Ia., Atlantic—Feb. 17, by City Clerk, 17,148 sq.yd. cement or vibrolithic concrete, 10,309 lin.ft. curbing and guttering. $55,000. Noted Nov. 1.

Tex., Ballinger—Feb. 12, by P. Trimmier, judge Runnels Co., grading, etc., 9.36 mi. State Highway 30, Hatchell Rd., 18 ft. $62,500. J. E. Pirie, co. engr. Noted Dec. 20.

Tex., Beaumont—Mar. 4, by B. B. Johnson, judge Jefferson Co., grading and rein.-con. surfacing 7.35 mi. State Highway 40, Voth Rd., (Bates Sect.), 16 ft. $250,000. A. C. Love, co. engr.

Tex., Daingerfield — Feb. 25, by J. W. Cason, judge Morris Co., grading and gravel surfacing 5.08 mi. State Highway 35, Federal Aid Project 362, 12 ft. McClendon & Purnell, Daingerfield, engrs. Noted Dec. 20.

Tex., Dallas—Taking bids and will probably open same latter part of month paving Oak Cliff Blvd. in Sunset Addition, bituminous type. $25,000-$30,000. E. A. Kingsley, city engr.

Tex., Denison — Taking bids and opens same about Feb. 15, resurfacing 14 blocks Gandy St., bituminous on present concrete. $25,000. D. C. Lispcomb, city engr.

Tex., Greenville—Feb. 26, by Comrs. Hunt Co., 7,000 sq.yd. concrete and 15 mi. gravel paving on Quinlan Rd., $60,000; 12 mi. stone base on Wolf City Rd., $30,000. G. R. Burtner, co. engr.

Tex., Houston—Feb. 18, by H. L. Washburn, aud. Harris Co., graveling Harbor Blvd., incl. 16,800 cu.yd. shell. $50,000. Howe & Wise, co. engrs.

Tex., Pecos—Reeves Co. taking bids graveling 13.25 mi. State Highway 1, 18 ft. $110,000. S. S. Fosey, Box 565, co. engr.

Tex., Rio Grande City—Feb. 27, by H. Garza, Jr., judge Starr Co. grading and gravel surfacing 13.19 mi. State Highway 12, Federal Aid Project 337-B, 12 ft., $109,312; 17.58 mi. State Highway 12, Federal Aid Project 337-A, 16 ft., $197,879. P. S. Devine, co. engr. Noted Oct. 11.

Okla., Norman—Feb. 12, by J. Hair, city clk., grading and paving 6 blocks Jenkins, Monett, Elm, Trout and Symner Sts., 6,200 sq.yd. concrete, 3,750 lin.ft. curbing, 2,000 cu.yd. excav. $31,000. F. Cobb Norman, engr. Noted Dec. 6.

Okla., Oklahoma City—Feb. 11, by State Hy. Dept., paving sidewalks around State Capital Bldg., 16,000 lin.ft. expansion joints, 250 lin.ft. concrete curbing, 70,000 sq.ft. concrete sidewalk, 500 cu.yd. excav. $25,000. W. C. Burnham, Capitol Bldg., engr.

Okla., Oklahoma City—Feb. 12, by M. Peshek, city clk., improving 26 blocks 15th, 19th, Robinson, Oklahoma, Madison and Western Sts., 6,600 sq.yd. asphalt, 1,600 sq.yd. concrete, 1,800 lin.ft. curbing, 2,600 cu.yd. excav. $28,000. B. M. Hart, City Hall, engr. Noted Jan. 31.

Okla., Oklahoma City—Feb. 15, by Clerk Oklahoma Co., grading and paving 7 mi. Eastern, 23rd, Edsmond and G Sts., 71,000 sq.yd. concrete, 51,000 cu.yd. earth and 7,800 cu.yd. rock excav. R. S. James, Court House, engr.

Washington—Mar. 18, by State Hy. Comn., Olympia, grading and gravel surfacing 3 mi. Olympic Highway, Clallam Co.; 3 mi. North Bank Highway, Skamania Co., 4 mi. Ocean Beach Highway, Lewis Co.; gravel surfacing 4 mi. Natl. Park Highway, Lewis Co.; concrete paving 3.5 mi. Pacific Highway, Skagit Co. J. Allen, state highway engr.

California—Feb. 18, by State Hy. Comn., Sacramento, grading and surfacing 11.9 mi. highway between 2½ mi. east of San Hills and Colorado River, Imperial Co., crushed gravel or stone. R. M. Morton, state highway engr.

Calif., San Diego — Feb. 18, by A. H. Wright, city clk., improving San Marcos Ave., Maple St., etc., incl. 188,080 sq.ft. 1½ in. sheet asphalt on 4 in. Portland cement concrete base, 2,345 sq.ft. cement concrete sidewalk, etc. F. A. Rhodes, city engr. Noted Jan. 10.

Ont., Plantagenet—Feb. 9, by F. A. Senecal, road supt. Prescott Co., 3½ mi. waterbound macadam on Rd. 15, Caledonia Twp., 1½ mi. on Rd. 15, Plantagenet Twp., 2½ mi. on Rd. 25, Longueuil Twp., 2 mi. on Rd. 12, Russell Twp., and 600 cu.yd. gravel on Rd 22, South Plantagenet Twp. $27,000. Patterson & Byrnes, 71½ Sparks St., Ottawa, engrs.

BIDS RECEIVED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Jan. 30, grading, curbing, laying sidewalks, etc., on La Salle Ave., from F. Hanratty, 605 Beach Terrace, $24,193. Noted Jan. 24.

N. J., East Orange—Town Council, Jan. 28, grading and paving 13,500 sq.yd. McKinley Ave., from Franklin Contg. Co., 20 Washington Pl., Newark, cement grouted granite block $104,581, bituminous mastic filled granite block $109,171; repaving, etc. Main St., 4,500 lin.ft. old curb, 1,200 lin.ft. new curb, 190 lin.ft. header curb and 400 lin.ft. radius curb all in concrete, 5,000 sq.yd. warrenite bitulithic, national or sheet asphalt on 6 in. concrete, etc., from Nesto Constr. Co., 635 Broad St., Newark, $50,423.

Miss., Winona—Montgomery Co., grading and gravel surfacing 12.025 mi. Federal Aid 19, 50,489 cu.yd. common and 27,533 cu.yd. borrow excav., 65,332 lb. reinforcing, 678.1 cu.yd. concrete, 28,213 cu.yd. gravel 1 mi. haul, 46,758 unit gravel ½ mi. overhaul, etc., also bridges over 20 ft. span, from McElwrath & Rogers, Grenada, $120,522. Contract not awarded due to insufficient funds. Noted Jan. 3.

O., Akron—W. F. Peters, dir. Pub. Serv. Jan. 28, improving roads with (a) asphalt (b) brick (1) grading, laying sidewalks and paving 2,575 ft. Collingwood Ave., 22 ft. (2) repaving 3,460 ft. West Market St., 44 ft. (3) paving 2,000 ft. Aqueduct St., 30 ft. (4) grading, laying cement sidewalks and cindering 5,590 ft. Duane Ave., et al., from McAlonan Bros., 197 West Buchtel Ave. (a1) $43,037 engrs. est. $47,831 (b1) $45,518, $48,743 (a2) $74,452, $82,929 (b2) $78,084, $85,727 (a3) $28,932, $33,400; M. Kalain, 573 Wilson St., (4) 26,799, $32,332. Noted Jan. 17.

O., Cincinnati—Hamilton Co., Feb. 1, paving 10,840 ft. Mullen Rd., 16 ft., from H. Westermann, R. R. 13, Mt. Healthy, $26,556. Engrs. est. $31,726. Noted Jan. 24.

Tex., Amarillo—Potter Co. grading and gravel surfacing 6.06 mi. State Highway 33, Federal Aid Project 421, 22,830 cu.yd. roadway, 20,436 cu.yd. borrow excav., 14,210 cu.yd. gravel, from Hoffman Constr. Co., Eastland, $66,996. Engrs. est. $76,536. Noted Jan. 10.

Tex., Brady—McCulloch Co., grading and surfacing 4.64 mi. State Highway 9, Federal Aid Project 419, 7,197 cu.yd. roadway, 9,090 cu.yd. borrow, 6,775 cu.yd. loose and 12,057 cu.yd. solid rock excav., 225 sq.yd. concrete, 19,937 lb. reinforcing, 12,306 cu. yd. gravel, from McCall Eng. Co., Amicable Bldg., Waco, $48,691. Engrs. est. $47,828. Noted Jan. 3.

Tex., Rock Springs—Edwards Co. surfacing with crushed rock on sledged stone 17.13 mi. State Highway 41, Federal Aid Project 335, 59,481 cu.yd. roadway, 36,880 cu.yd. borrow, 23,862 cu.yd. solid and 5,506 cu.yd. loose rock excav., 360 cu.yd. concrete, 13, 433 cu.yd. crushed rock, 20,142 cu.yd. sledged stone, from Ashburn Bros., Mineral Wells, $133,190. Engrs. est. $154,518. Noted Dec. 27.

Wash., Seattle—Bd. Pub. Wks., Jan. 25, filling 6th Ave. S., from J. B. Stilwell, 3220 9th St. S., 114,000 cu.yd. earth excav. $0.50 per cu.yd., 150 ft. 12-in. sewer $2.50, 250 ft. 15-in. sewer $3.50, total $62,370, engrs. est. $58,875; paving Angeline St. et al., from Olympic Constr. Co., 1326 Northlake Ave., 8,640 sq.yd. 6-in. concrete $1.80, 600 ft. asphaltic concrete curbing $0.70, 5,050 ft. concrete curbing $0.50, 350 sq.yd. concrete sidewalk $1.60, 2,150 sq.yd. earth excav. $0.75, total $34,209, engrs. est. $35,398.

Wash., Seattle—King Co., Jan. 21, grading and gravel surfacing 2.52 mi. Quartermaster-Dockton Rd., 18 ft., 24,500 yd. overhaul, 4,607 cu.yd. gravel, 64,378 cu.yd. earth excav., from Houge & Espeland, Auburn, $48,750.

California—State Hy. Comn., Sacramento, grading 15.08 mi. and concrete paving 9.87 mi., between south boundary and Camarillo Ventura Co., from C. W. Wimmer, Bakersfield, $344,341. Noted Jan. 10.

Calif., La Jolla—La Jolla Properties, Inc., 655 Spreckels Bldg., San Diego, improving streets, 33,275 cu.yd. excav., 58,690 ft. 2 in. bituminous pavement, 100,350 ft. sidewalks, 23,700 ft. curb, 1,500 ft. 6-in., 6,830 ft. 4-in. c.i. pipe, 14,000 ft. 6-in. sewer with disposal plant, from C. P. Day, Boston Bldg., Los Angeles, $111,950 Noted Jan. 10.

Calif., Newport Beach—Improving Ocean Blvd., etc., in Tract 518, incl. 19,010 cu.yd. sand excav., 91,707 sq.ft. 6 in. clay and gravel surfacing incl. grading, 152,080 sq.ft. 6 in. and 201,697 sq.ft. 8 in. concrete pavement, incl. grading 18,932 lin.ft. concrete curb, 94,341 sq.ft. concrete walks, etc., from California Constr. Co., 58 2nd St., San Francisco, $249,508. Noted Jan. 10.

Streets and Roads (Continued)

Calif., Redondo Beach—Paving El Redondo St., etc., 1½ in. Willite on 2½ in. asphalt concrete, curbs, gutters and walks, from H. Wigman, Hermosa Beach, $58,501.

CONTRACTS AWARDED

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., granite block repaving Lexington Ave. and Nassau Lane, to J. Meehan & Son, 74 Cortlandt St., $45,976 and $11,860 respectively, 1st Ave., to Casper Helbock, Inc., Harlem River and 150th St., $39,526, 2nd Ave., to Burnside Contg. Co., 270 Burnside Ave., $72,323, Washington St., to P. J. Kearns Contg. Co., 2306 Creston Ave., $42,509; grading, regrading, curbing, recurbing, flagging, reflagging, etc. easterly portion of Riverside Dr., to M. Del Balso, 660 East 221st St., $27,666. Noted Jan. 31.

North Carolina—State Hy. Comn., Raleigh, grading and plain concrete paving 5.52 mi. State Project 344, between Fayetteville and Fort Bragg, to Alabama Concrete Products Co., Selma, Ala., $158,257.

Minn., Hibbing—Paving 25 streets in South Hibbing and Brooklyn, vitrolithic surface, to F. W. Coons Constr, Co., 4th Ave. at Howard St., $190,000.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 130,000 sq.yd. rein.-con. paving at Training School for Feeble Minded, to J. E. Perkinson, 3237 Carter Ave., $39,355. Noted Jan. 31.

Tex., Rock Springs—Edwards Co., gravel surfacing on crushed rock 17.13 mi. highway, to Ashburn Bros., Mineral Wells, $133,190. Noted Feb. 7.

Okla., Clinton—Grading and paving Frisco Ave., 10,000 sq.yd. asphalt, 4,700 lin.ft. curbing, 3,200 cu.yd. excav., to Western Paving Co., Tradesman Bldg., Oklahoma City, $44,318. Noted Sept. 6.

Okla., McAlester—Grading and paving 11 blocks Commanche, Seminole, Osage and 7th Sts., 9,730 sq.yd. concrete, 6,800 lin.ft. curbing, etc., to J. W. Rook, McAlester, $42,608. Noted Dec. 6.

Okla., Oklahoma City—Grading and paving 7 blocks Ave. D, Shantel and 7th Sts., 7,100 sq.yd. concrete, 4,100 lin.ft. curbing to M. A. Swatek & Co., Security Bldg., $40,762.

Arizona—State Hy. Comn., Phoenix, improving Geronimo-Solomonville Highway, Federal Aid Project 67, to El Paso Bitulithic Co., Piedras St. along tracks of Galveston, Harrisburg & San Antonio R.R., El Paso, Tex.

Washington—State Hy. Comn., Olympia, clearing 22.4 mi. Olympic Highway from Hoh River to north line of Wuinault Indian Reservation, Jefferson Co., to C. A. Strong, Perkins Bldg., Tacoma, $146,869; 10.1 mi. Olympic Highway from Lunch Creek westerly, Grays Harbor-Jefferson Co., to A. E. Knutzen, Lynden, $34,227. Jan. 10.

Washington—State Hy. Comn., Olympia, crushed rock surfacing 10 mi. Inland Empire Highway from Spangle northerly, Spokane Co., to Payne & Hewitt Co., Spokane, $21,736. Noted Jan. 10.

Wash., Montesano—Grays Harbor Co., removing old planking, widening grade and gravel surfacing North River Rd. beyond Vesta, to Peck & Einerson, Hoquiam, $26,962.

California—State Hy. Comn., Sacramento, grading 13.1 mi. and paving 11.6 mi. highway between Shoup Ave. and Westerly Boundary, Los Angeles Co., 52,000 cu.yd. unclassified excav., 21,080 cu.yd. Class A concrete pavement, 385 cu.yd. Class A concrete in structures, 37,970 sq.yd. reinforcing steel in pavement, etc., to G. H. Oswald, 366 East 58th St., Los Angeles, $388,786. Engrs. est. $415,424; grading 8.2 mi. and paving 3.5 mi. with Portland cement concrete, road between Huntington Beach and Corona Del Mar, to W. F. Beal, Brawley, $188,025. Engrs. est. $195,340. Noted Jan. 17 and 24 respectively.

Calif., Burbank—B. W. Marks, Junior Orpheum Bldg., Los Angeles, improving streets in Ben Mar Hills, incl. concrete and oil macadam pavement, curbs, gutters and walks, here, to G. A. Simpson, San Fernando Bldg., Los Angeles, $100,000.

Calif., Fresno—Grading, curbing, laying sidewalks and asphalt paving 88,562 sq.ft. Moroa and Vassar Aves., to California Road & Street Impvt. Co., Bank of Italy Bldg., $35,149. Noted Jan. 24.

Calif., Los Angeles—Improving Beverly Blvd. between Juanita and Vermont Aves., incl. 57,108 sq.ft. asphalt, 20,769 sq.ft. concrete, 960 sq.ft. oiling and rolling, etc., to Griffith Co., Railway Bldg., $32,900.

Calif., Los Angeles—Los Angeles Co., improving Las Flores Canyon and Hume Rds., Dist. 161, incl. 91,600 cu.yd. earth excav., shaping 21,418 lin.ft. roadbed, 38,075 sq.yd. oil and sand surface, etc., to Francisco & Ellington, Inc., 1232 West 5th St., $93,000. Noted Jan. 24.

Calif., San Diego—Improving 25th and Crosby Sts., to California Constr. Co., Union Bldg., $68,920; Reynard Way, State and Goldfinch Sts., to Cushing Constr. Co., 1501 Brookes Ave., $47,898; Granada, 29th, Dale and Palm Sts., to G. R. Daley, 4430 Boundary St., $41,700. Noted Jan. 10.

Industrial Works

PROPOSED WORK

Mass., New Bedford—Plant—Continental Wood Screw Co., Mt. Pleasant St., having plans prepared by Leary & Walker, archts. and engrs., Times Bldg., 2 story, 80 x 100 ft., brick and steel addition. $50,000.

R. I., North Smithfield—Wool Plant—Amadee-Prouvost Co., Roubaix, France, having plans prepared by Lockwood, Greene & Co., archts. and engrs., 24 Federal St., Boston, Mass., brick, fireproof, at Branch Village, here. $1,000,000.

R. I., Providence—Garage—Bay State Realty Co., c/o A. J. Frappier, archt., 86 Strand Bldg., having plans prepared 3 story, 94 x 150 ft., brick, steel and concrete, Cedar St. $150,000.

R. I., Providence—Mill—Dutton Lumber Co., Fields Point, plans 1 and 2 story addition. To exceed $40,000. Engineer and architect not selected.

N. Y., Horicon—H. Knoblauch, Bolton Landing, plans hydro-electric plant here, also transmission and distribution lines in Horicon, Bolton Landing and Chestertown. $95,000. Private plans.

N. Y., New York—Garage—J. Girardi, c/o Jardin, Hill & Murdock, archts., 50 East 42nd St., had plans prepared 2 story, rein.-con., brick and steel, plain foundation, Lexington Ave. $175,000. C. J. Jeppesen, 49 West 45th St., engr.

N. Y., Schenectady—Garage—J. D. Picotte, 964 State St., plans 3 story, 90 x 250 ft., brick and steel, Erie St. $325,000. Goodman, Lowenberg & Bardback, Schenectady, archts. and engrs.

Pa., Manayunk (Phila. P. O.)—Garage, etc.—H. F. Righter, 4648-4650 Umbria St., having plans prepared by F. V. Nickels, 15 South 21st St., Phila., 1 and 2 story, 50 x 91 ft., brick, steel and stone garage and service station, plain foundation, $40,000.

Pa., Phila.—Power House—Bureau Surveys, Room 216, City Hall, soon takes bids 1 story, 65 x 114 ft., brick and steel, plain foundation, at Northeast sewage disposal plant, Wheatshead Lane. Private plans.

Pa., Phila.—Garage and Service—B. Liebovitz, 4025 Baltimore Ave., having plans prepared by J. F. Canavan, 7032 Greenway Ave., 1 story, 76 x 300 ft. garage and 2 story, 50 x 300 ft. service station, Ridge and Gerhardt Sts. $175,000.

Fla., Bayboro—Power Plant—Pinellas Co. Power Co., c/o General Eng. & Management Corp., 165 Bway., New York, having plans prepared steam power plant, 6,500 kw. capacity, here. Private plans.

Fla., Bowden (Phillips, P. O.)—Shop—Florida East Coast Ry., St. Augustine, H. N. Rodenbaugh, genl. mgr., plans large shop and yard layout, here. W. G. Brown, engr. m. w.

Tenn., Chattanooga—Plant—Signal Mountain Portland Cement Co., James Bldg., plans 2 additional units, Signal Mountain. $500,000.

Tenn., Knoxville—Mill—Standard Knitting Mills, Washington Ave. and Mitchell St. plans addition. $75,000.

Tenn., Nashville—Garage—City making preliminary plans 2 story, 150 x 750 ft., 1st Ave. Plans to issue $400,000 bonds. H. E. House, mayor.

Ky., Lexington—Plant—Hughes & Co. plans 2 story, brick. $40,000.

Ky., Somerset—Southern R.R. Co., 13th St. and Pennsylvania Ave., Cincinnati, O., plans 1 story addition to repair shops, here. $60,000. A. Ritter, ch. engr.

O., East Cleveland (Cleveland P. O.)—Power House—See "Buildings."

Ind., Bedford—Ice Plant—Home Ice Co. plans plant. $50,000.

Ill., Chicago—Factory—Nelson Wiggins Piano Co., 224 Sheldon St., having plans prepared by F. V. Prather, 400 North Michigan St., 4 story, 125 x 175 ft., brick and timber, 1731 Belmont St. $250,000.

Wis., Sheboygan — Factory — Northern Furniture Co., South Water St. and New Jersey Ave., having plans prepared by W. C. Weeks, 720 Ontario Ave., 2 story, 66 x 237 ft., brick, rein.-con. and steel, plain foundation. $50,000.

Wis., Sheboygan—Foundry-Jenkins Machine Co., c/o A. Studeman, pres., 315 North 8th St., having plans prepared by E. A. Juul, Security Bldg., 1 story, 40 x 60 ft. foundry and machine shop, brick, rein-con. and steel, plain foundation. $50,000.

Wis., Sheyboygan—Plant—Press Publishing Co., 702 Center Ave., having plans prepared by E. A. Juul, Security Bldg., 1 story, 110 x 150 ft., brick, rein.-con. and steel, plain foundation. $60,000.

Wis., Watertown—Factory—Breuer & Stone, Inc., 100 West Milwaukee St., plans 1 story, brick and timber, plain foundation. $50,000. Engineer and architect not selected.

Minn., Minneapolis—Factory—Fulton Bag & Cotton Mills, Hennepin Ave. and Taft St., plans 4 story and basement, rein.-con. and brick, 2001 East Hennepin Ave. $700,000. H. W. Wilmer, local mgr. F. Kees, 246 Plymouth Bldg., archt.

Kan., Fredonia—Voted $150,000 bonds and retained A. L. Mullergren, consult. engr., Gates Bldg., Kansas City, Mo., to prepare plans and supervise construction electric light plant, distributing system and electrification of water pumping plant.

Kan., Independence—Storage and Warehouse—Crystal Ice & Storage Co. plans 1 story, 60 x 104 ft., rein.-con. and brick. $60,000. Private plans.

Neb., Walthill—Light and Ice Plant—City having plans prepared by Prince-Nixon, Eng. Co., 501 Peters Trust Bldg., Omaha, and takes bids in spring, electric light and ice plant. $45,000.

Mo., Moberly—Factory—Todd Demountable Rim Co., c/o J. W. Lynch, having preliminary plans prepared 2 story and basement, 30 x 100 ft., rein.-con. and brick. $75,000. Private plans.

Tex., Dallas—Factory—Ford Motor Co., Highland Park, Mich., had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 2 story, 150 x 200 ft., brick and concrete factory, also trackage and miscellaneous improvements. $1,000,000. Noted Sept. 27.

Okla., Miami—Concentrating—Enterprise Mining Co. soon takes bids 2 story, 50 x 120 ft., timber, plain foundation. $100,000. Private plans.

Okla., Okmulgee—Factory—W. A. Sorg, c/o Chamber of Commerce, plans 4 story, 40 x 40 ft., brick and concrete. $50,000. Private plans.

Wash., Seattle—Garage—E. Wilson, Dexter Horton Bldg., having plans prepared 6 story, fireproof, garage and stores, 2nd and Lenora Sts. $250,000. Engineers and architests names withheld.

Calif., Glendale—Garage—Kelly-Kline Motor Co., 230 North Brand St., had plans prepared by A. G. Bailey, Junior Orpheum Bldg., Los Angeles, 1 story, 50 x 135 ft., brick.

Calif., Hanford—Ice Cream Plant—Benham Ice Cream Co., 1420 H St., Fresno, plans plant, here. $40,000.

Calif., Los Angeles—Garage—W. Shortsleeve, et. al., 810 South Grand Ave., having plans prepared by Curlett & Beelman, Union Bank Bldg., 8 story and basement, 60 x 160 ft., rein.-con.

Calif., Los Angeles—Garage, etc.—J. Zoebellen, c/o S. Fossler, archt., 1616 Cahuenga Ave., had plans prepared 1 story, and mezzanine, 50 x 140 ft., garage and automobile salesroom, brick, 38th St. and Moneta Ave.

Calif., Los Angeles—Laundry—Progressive Laundry & Supply Co., California Bldg., plans 1 and 2 story, 100 x 130 ft., brick or concrete, Cordova St.

Calif., Los Angeles—Warehouse—Braun Corp., 363 New High St., had plans prepared by L. H. Hibbard, Metropolitan Bldg., 1 story, 120 x 200 ft., brick, San Pedro St.

Calif., Los Angeles—Warehouse—Los Angeles Iron & Steel Co., 820 Santa Fe Ave., had plans prepared by A. S. Heineman, San Fernando Bldg., 1 story, 120 x 120 ft., brick, Santa Fe Ave.

Calif., Moorpark—Power Plants—See Excavation, Drainage, Irrigation.

Calif., San Diego — Power Plant — See "Unclassified."

Calif., San Francisco—Warehouse—M. I. Schwartz, archt., Nevada Bank Bldg., receiving bids 3 story and basement, brick and concrete warehouse, for Redlick-Newman Furniture Co., 17th and Mission Sts. $45,000.

Ont., Hamilton—Factory—Hoover Suction Sweeper Co., Gage Ave. N., plans rein.-con., brick and steel addition, prob-

Industrial Works (Continued)

ably 2 or 3 story, plain foundation. $250,000. Engineer and architect not selected.

Ont., Hamilton — Mill — Mercury Mills, Ltd., Cumberland Ave., plans 2 or 3 story rein.-con., brick and steel addition to mills, plain foundation. $350,000. Engineer and architect not selected.

Ont., Hamilton—Sub-Station—Dominion Power & Transmission Co., Terminal Sta., plans concrete, brick and steel electric substation, to handle 10,000 hp. $250,000. Private plans.

Ont., Niagara Falls—Plant—United States Light & Heat Corp. plans to rebuild plant recently destroyed by fire. $120,000.

Ont., Queenston—Power Plant—Hydro Electric Power Comn., 110 University Ave., plans to install units 9 and 10 in Chippewa-Queenstown plant, each unit 55,000 hp. vertical turbine with electrical generator, etc. $3,000,000. F. A. Gaby, ch. engr.

Ont., Tavistock—Mill—Tavistock Milling Co., having plans prepared by Ratz & Son, new mill, 200 bbl. per day capacity. $90,000.

British Columbia—Sub-Stations, etc.—See "Unclassified."

B. C., Point Grey—Power Plant—Dept. Pub. Wks., Victoria, takes bids about Feb. 7, 50 x 60 x 120 ft., for University of British Columbia, 10th and Willow Sts., Vancouver, $100,000. Sharp & Thompson, 626 Pender St. W., Vancouver, archts.

B. C., Vancouver—Plant—British Columbia Electric Ry. Co., 425 Carrol St., having preliminary plans made by J. Kellior, engr., c/o owners, modern gas plant, 1,500,000 ft. capacity daily. $376,000.

BIDS DESIRED

N. Y., Long Island City—Housing Station—Feb. 11, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., housing station, 62nd Rd. and 94th St. $150,000.

N. Y., New York—Cold Storage—John B. Snook Sons, archts. and engrs., 52 Vesey St., taking bids and open same about Feb. 15, 16 story, 75 x 100 ft., rein.-con., brick and steel, plain foundation, Varick St., for Merchants Refrigerating Co., 161 Chamber St. $500,000.

Minn., Minneapolis — Factory — Juckem Co., 215 8th St. S., taking bids and opens same about Feb. 15, 2 story and basement, 60 x 165 ft., rein.-con., brick and stone, 217-19 9th St. S. $50,000. Liebenberg & Kaplan, 617 McKnight Bldg., archts.

Tex., Dallas—Warehouse—Sanger Bros., Elm and Lamar Sts., taking bids 3 story, 100 x 100 ft., brick and concrete, Austin and Wood Sts. $65,000. Lang & Witchell, Amer. Exch. Natl. Bank, engrs. and archts.

Tex., Dallas — Warehouse — Feb. 11, by Missouri, Kansas & Texas R.R., Railway Exch. Bldg., St. Louis, Mo., 7 story and basement, 100 x 200 ft., concrete and brick, Pacific and Market Sts., here. $750,000. K. H. Hanger, Katy Bldg., local engr. in charge.

Tex., Texas City—Refinery—Knox Process Co., Texas City, and 136 Liberty St., New York, taking bids 5,000 bbl. cracking plant; 50 x 132 ft. compressor, 40 ft. high; 15 x 80 ft. pumping plant, etc., here. $600,000. Private plans.

Calif., San Francisco—Garage—J. Palaprat, c/o O'Brien Bros., Inc., archts., 315 Montgomery St., receiving bids 1 story, rein.-con., 18th St. near Sanchez St. $40,000.

BIDS RECEIVED

N. Y., Raybrook—Cold Storage Plant—F. Erdwurn, pres. Bd. Trustees New York State Hospital for Care of Incipient Tuberculosis, Ray Brook, 2 story and basement, 44 x 109 ft., rein.-con. and steel, from Llwellyn Smith Constr. Co., Inc., Glens Falls, $78,870. Noted Jan. 10.

Md., Baltimore—Manufacturing—Bal-Mar Co., c/o Ballinger Co., engrs., 12th and Chestnut St., Phila., Pa., 1 story, 214 x 451 ft., brick, plain foundation, Homeland Ave. and Notre Dame Lane, from Consolidated Eng. Co., Calvert Bldg., $300,000.

CONTRACTS AWARDED

Conn., New Britain—Factory—American Hardware Corp., Franklin Sq., 6 story and basement, 60 x 140 ft. concrete addition, to Aberthaw Constr. Co., 27 School St., Boston. Archts. est. $175,000.

N. Y., New York—Garage—C. A. Cowen Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 2 story, rein.-con., brick and steel, plain foundation, 16 Convent Ave., by day labor. $150,000.

N. Y., New York—Garage—J. J. Tully, c/o Margon & Glaser, archts. and engrs., 2806 3rd Ave., will build 2 story, 100 x 250 ft., brick, steel and rein.-con., plain foundation, Brook Ave. and 163rd St., by day labor. $200,000.

N. J., Trenton—Pottery—Mutual Pottery Co., North Clinton Ave., brick and steel addition, to J. H. Morris, 211 North Montgomery St., and W. Burton, Mechanic Bldg., $300,000.

Pa., Ambridge — Warehouse — Central Tube Co., 1st Natl. Bank Bldg., Pittsburgh, will build three 1 story, 100 x 400 ft., 75 x 322 ft. and 100 x 150 ft. warehouse and factory buildings, 14th and Merchant Sts. Owner builds and awards separate contracts.

Pa., Latrobe — Plant — Anchor Drawn Steel Co., 1101 Farmers Bank Bldg., Pittsburgh, will build 1 story, 80 x 250 ft. and 60 x 120 ft. brick and steel plant. $250,000. Owner builds and awards separate contracts.

Pa., Phila.—Factory—P. S. Tyre, archt., 1509 Arch St., 2 story and basement, 30 x 60 ft. and 1 story and basement, 60 x 90 ft. rein.-con. and brick, plain foundation, 5th and Hamilton Sts., to Farrell-Roth Co., 1624 Spruce St., for Crescent Ink & Color Co., 408 Vine St. Noted Jan. 17.

Pa., Phila.—Factory—Corrugated Container Co., Trenton and Venango Sts., 2 story and basement, 80 x 93 ft. brick and steel, plain foundation, Venango and Sepviva Sts., to Robbins Constr. Co., 1137 North Front St. Noted Jan. 17.

Pa., Phila.—Plant—Fleu & Fetterolf, 5954 Germantown Ave., 2 story, 50 x 60 ft. brick and steel, plain foundation, Harvey and Germantown Aves., to W. C. Wright, 22 Harvey St.

Pa., Pittsburgh — Plant — Pittsburgh Brewing Co., 3340 Liberty Ave., 1 story, 100 x 140 ft. steel refrigeration plant, Charlotte and 32nd Sts., to Conley & DeMey, 127 North Hiland Ave. Archts est. $180,000.

Md., Baltimore—Garage, Sales and Service Station—Eastwick Motor Co., 120 West North Ave., 2 story, 150 x 165 ft., brick and concrete, plain foundation, Remington and 29th Sts., to Consolidated Eng. Co., Calvert Bldg., $100,000.

Md., Baltimore—Mill—Canton Co., Commerce and Water Sts., 1 story, 70 x 150 ft., brick and steel, Eastern Ave. and 37th St., to Price Constr. Co., Maryland Trust Bldg. Archts. est. $40,000. Noted Jan. 24.

Md., Baltimore—Powerhouse—Johns Hopkins Hospital, Wolfe and Monument Sts., 2 story, 139 x 152 ft., rein.-con. and brick, plain foundation, Wolfe St. between Monument and Madison Sts., to Consolidated Eng. Co., Calvert Bldg., $400,000. Archts. est. $450,000. Noted Nov. 22.

Miss., Jackson—Plant—Enochs Lumber Co. rebuilding lumber plant recently destroyed by fire, to Flagler Co., 34 Cone St., Atlanta, Ga. $250,000.

Tenn., Pulaski—Factory—Pulaski Development Co., 2 story brick, to J. Gladish & Co., Pulaski, $40,000. American Cigar Co., lessee. Noted Nov. 22.

O., Dayton — Factory — Duro Pump & Mfg. Co., 537 East Monument Ave., 4 story, 60 x 200 ft., rein.-con. and brick, plain foundation, Amelia St., to H. R. Blagg Co., 1229 East 3rd St., $150,000. Noted Dec. 27.

O., Springfield — Foundry — Wickham Piano Plate Co., 1 story, 62 x 194 ft., brick and steel, to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland, Archts. est. $60,000.

Wis., Milwaukee — Warehouse — Boston Store, 319 Grand Ave., 1 story, 162 x 170 ft., brick and steel, plain foundation, Clinton St., to A. J. Koehn, 679 32nd St.; steel to Lakeside bridge & Steel Co., North Milwaukee. Archts. est. $70,000.

Mo., St. Louis — Plant — Imse-Schilling Sash & Door Co., 2016 Papin St., 3 story, 102 x 223 ft. warehouse, 2 story and basement, 62 x 122 ft. factory, also 2 story and basement, 62 x 62 ft. office all brick and concrete, Beck St., to W. H. Cunliff, 4935 Belmar Blvd. Archts. est. $200,000.

Tex., Dallas—Factory—Silvers Box Mfg. Co., Forney Ave., will build 2 story, 60 x 124 ft., brick by day labor factory. $80,000.

Tex., Dallas—Industrial—Morton Investment Co., Jefferson Hotel, 2 story and basement, 90 x 99 ft., concrete, brick and tile, Jackson St., to Southern Constr. Co., Melba Theater Bldg., $70,000. Engrs. est. $85,000. Noted Dec. 27.

Tex., Dallas—Industrial—W. Davis, Republic Natl. Bank, 3 story, concrete, Pacific St., to Inge Constr. Co., Swiss and Hawkins Sts., $40,000.

Tex., Ft. Worth — Factory — Williamson Dickie Mfg. Co., 115 East Boaz St., 3 story, 75 x 100 ft., brick and concrete, Railroad Ave., to C. M. Davis, North Main St., $80,000.

Tex., Ft. Worth—Garage—F. H. Jones Co., 200 Commerce St., 3 story and basement, 100 x 100 ft., brick and concrete, 1st and Commerce Sts., to Southwell & Abbott, Ft. Worth Natl. Bank Bldg. $66,9[illegible] Noted Dec. 6.

Tex., Houston — Warehouse — Henke-Pillot Grocery Co., Congress and Milam Sts., 3 story and basement, 70 x 100 ft., brick and concrete, to Russell Brown Co., 2nd Natl. Bank Bldg., $87,999. Engrs. est. $95,000.

Tex., Houston — Warehouse — Cheek-Neal Coffee Co., Preston and St. Emanuel Sts., 5 story, brick and concrete addition, to G. C. Street, Jr., 2112 Main St., $60,000. Noted Nov. 29.

Okla., Oklahoma City—Garage—J. B. Rolater, Shops Bldg., will build 2 story, 100 x 140 ft. rein.-con. and brick, plain foundation, Bway., by day labor. Hawk & Parr, Magnolia Bldg., archts.

Calif., Fresno—Ice Plant and Garage—Independent Ice Co., 1423 A St., will build brick addition to ice plant, incl. tank rooms, storage rooms and garage, by day labor. $40,000.

Calif., Long Beach—Garage—F. Hoffman, 2nd and Bennett Sts., 1 story, 90 x 130 ft. brick, Anaheim Rd., to H. R. Bradley, 1350 Coronado St.

Calif., Long Beach — Garage — H. S. Wright, 1740 Lewis St., 2 story, 50 x 150 ft., brick, American Ave., to Hamble & Taylor, 12 American Ave. Noted Jan. 3.

Calif., Los Angeles—Factory—Cain Gas Radiator Co., 5215 Moneta Ave., will build 1 story, 75 x 200 ft., corrugated iron, by day labor.

Calif., Los Angeles—Factory—Detwiler Mfg. Co., 1335 Santa Fe Ave., will build 1 story, 40 x 100 ft. boiler factory, corrugated iron, by day labor.

Calif., Los Angeles — Factory — Hoyt Heater Co., 2838 East 2nd St., 1 story, 70 x 200 ft., brick, 25th St., to L. R. Armstrong, Hollingsworth Bldg. $42,000. Noted Dec. 20.

Calif., Los Angeles—Factory—Standard Welding & Mfg. Co., 1146 South Los Angeles St., 1 story, 50 x 115 ft., brick, to Alexander Constr. Co., 260 Pacific Blvd., Huntington Park.

Calif., Los Angeles—Garage—I. Eisner, 1114 South Los Angeles St., will build 1 story, 90 x 120 ft., brick, Westminister Pl., by day labor.

Calif., Los Angeles — Garage — R. P. Flanders, 743 Wall St., 1 story, 35 x 115 ft., brick, Towne Ave., to F. F. Rasche, 5652 Hollywood Blvd.

Calif., Los Angeles—Garage—H. R. Hay, 951 South Grattan St., 1 story, 45 x 130 ft., brick, West Slauson Ave., to E. H. Siuritz, 6408 Dél Valle Dr.

Calif., Los Angeles — Garage — Master Service Co., 1510 West 8th St., 1 story, 50 x 213 ft., South Hoover St., to Meyer & Holler, Wright & Callendar Bldg.

Calif., Los Angeles — Garage — J. A. Nadeau Co., 1100 East Slauson Ave., 1 story, 80 x 100 ft., brick and steel addition, to H. M. Baruch, I. W. Hellman Bldg. Noted Jan. 3.

Calif., Los Angeles—Garage—S. W. Smith Co., Inc., 1620 South Figueroa St., 1 story, 145 x 150 ft., brick, Gordon St., to Edwards, Wildey & Dixon, Black Bldg. Noted Jan. 3.

Calif., Los Angeles—Garage—F. M. Simpson, Citizens Natl. Bank Bldg., will build 1 story, 100 x 110 ft., brick, Crocker St., by day labor.

Calif., Los Angeles—Garage—Wilshire Garage Corp., 4 story and basement, 150 x 150 ft., rein.-con., 6th St. and Kenmore Ave., to Trewhitt-Shields Co., West Mutual Life Bldg., $280,000.

Calif., Los Angeles — Machine Shop — Adams-Campbell Co., 1734 South Los Angeles St., 2 story, 30 x 110 ft., to H. Nelson, 1812 West 43rd St.

Calif., Los Angeles — Machine Shop — Marbelite Corp., c/o contractors, 1 story, 50 x 150 ft. corrugated iron and steel, Long Beach Ave., to Brombacher Iron Wks., 1662 Long Beach Ave.

Calif., Los Angeles—Warehouse—Brunswick Drug Co., 501 North Main St., 5 story and basement, rein.-con., New High St., to C. A. Schweissinger, 625 Loomis St., $105,800. Noted Jan. 31.

Calif., Los Angeles—Wholesale—Western Wholesale Drug Co., 200 South Los Angeles St., 6 story and basement, 60 x 153 ft., rein.-con., Los Angeles St. between 2nd and 3rd Sts., to Clinton Constr. Co., Stock Exch. Bldg., $178,000. Noted Jan. 24.

Calif., Santa Monica — Garage — A. P. Creel, 717 Santa Monica Blvd., 1 story, 90 x 100 ft., brick, 4th Ave., to W. Eaton, 1436 4th Ave.

Buildings

PROPOSED WORK

Mass., Williamstown—School—City voted $50,000 additional bonds for 3 story, 65 x 200 ft., brick and steel, plain foundation. Total $200,000. Engineer and architect not selected.

N. Y., Binghamton—High School—Voted $450,000, bonds Junior High School, Broad Ave. T. I. Lacey & Sons, Press Bldg., archts. E. F. Prentice, city engr. Noted Sept. 6.

N. Y., Brooklyn—Laboratory—Dept. Pub. Welfare, Municipal Bldg., New York City, plans rein.-con, brick and steel, plain foundation, at Kings Co. Hospital, Clarkson St., here. $200,000. Private plans.

N. Y., Buffalo—Office—R. W. Goode & Co. plans 12 story, 150 x 250 ft., Niagara and Franklin Sts. To exceed $300,000. Engineer and architect not selected.

N. Y., Buffalo—Theater—Shea Amusement Co., 40 Court St., having preliminary plans prepared 200 x 234 ft., Main St. $1,500,000. Engineer and architects names withheld.

N. Y., Coney Island (Brooklyn, P. O.)—Theatre and Hotel—Anderson Holding Corp., c/o Shampan & Shampan, archts. and engrs., 189 Montague St., Brooklyn, having plans prepared altering and reconstructing portion of brick, steel and stone, plain foundation, Surf and Stillwell Aves., here. $250,000.

N. Y., Hudson Falls—Business Block—E. C. Rogers and others, plan 5 story, 88 x 120 ft., brick and steel, plain foundation, Main St. $165,000. Engineer and architect not selected.

N. Y., New York—Apartment Hotel, etc. —H. Schiff & Sons, Hotel Monterey, Bway. and 94th St., plans 22 story, apartment hotel, West 59th St., also 16 story, 100 x 215 ft. apartment, West End Ave., both brick, steel and stone, plain foundations. $2,500,000 each. Engineer and architect not selected.

N. Y., New York—Office—Kings Holding Co., c/o Moloney & Hallahan, archts. and engrs., 342 Madison Ave., having plans prepared brick, steel and stone, plain foundation, 43rd St. and 8th Ave. $150,000.

N. Y., New York—Office—J. Tishman & Sons, Inc., 280 Madison Ave., having plans prepared by Schwartz & Gross, archts. and engrs., 347 5th Ave., 12 story, brick, steel and stone, plain foundation, 415 Lexington Ave. $1,450,000.

N. Y., New York—School—St. Rose of Lima, c/o R. J. Reiley, archt. and engr., 50 East 41st St., having sketches made 4 story, brick and stone, St. Nicholas Ave. and 164th St. $250,000. J. R. Mahoney, pastor.

N. Y., Palmyra—School—Bd. Educ., soon takes bids brick, steel and stone, plain foundation. $325,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs.

N. Y., Yonkers — Exchange — New York Telephone Co., 15 Dey St., New York City, soon takes bids brick, steel and stone, plain foundation, Main St. $350,000. McKenzie, Voorhees & Gmelin, 342 Madison Ave., New York City, archts. and engrs.

N. J., East Somerville — Hospital — Bd. Trustees Somerset Hospital, soon takes bids 5 story, brick, steel and stone, plain foundation, here. $250,000. Crow, Lewis & Wick, 200 5th Ave., New York City, archts. and engrs.

N. J., Elizabeth — Hotel — A. Wittman, Broad St., having plans prepared by S. Campbell, archt. and engr., 36 West 40th St., New York City, brick, steel and stone, plain foundation, Broad and Union Sts. $225,000.

N. J., Hoboken—Bank and Office—Second Natl. Bank, 79 River St., soon takes bids brick, steel and stone, plain foundation, Newark Ave. $350,000. Crow, Lewis & Wick, 200 5th Ave., New York City, archts. and engrs. Noted Nov. 8.

N. J., Newark—Apartment—R. Botelli, archt. and engr., 207 Market St., preparing plans 5 story, brick, steel and stone, plain foundation, Highland and 2nd Aves. $200,000. Owners name withheld.

N. J., Newark—School—Bd. Educ., City Hall, soon takes bids 3 story, brick, steel and stone school for crippled children, Weequahic section, Maple and Goldsmith Aves. $600,000. Guilbert & Bettelle, 2 Lombardy St., archts. and engrs. Noted Nov. 29.

N. J., Roselle—High School—Bd. Educ. soon takes bids brick, steel and stone addition, plain foundation. $300,000. Rasmussen & Wayland, 252 West 46th St., New York City, archts. and engrs.

Pa., Bedford—High School—Bd. Educ. plans 3 story and basement, 100 x 120 ft. rein.-con., brick and steel. $300,000. Architect not selected.

Pa., Lancaster—Store—Watt & Shaw, 2 East King St., having plans prepared by C. Ellrban, Woolworth Bldg., 4 story and basement, 59 x 102 ft. brick and steel, plain foundation, 2 East King St. $150,000.

Pa., Phila. — Apartment — K. K. Otto, archt., 1828 Arch St., preparing plans 4 story and basement, 41 x 100 ft. brick and steel, plain foundation, 19th and Green Sts. $175,000. Owner's name withheld.

N. C., Charlotte — Office — City having plans prepared by C. C. Hook, Trust Bldg., brick, steel and stone, East Trade St. $250,000.

N. C., Durham—Auditorium—City having plans prepared by Milburn & Heister, Union Savings Bank Bldg., Wash., D. C., auditorium. $175,000.

N. C., Durham—Store—Milburn & Heister, archts., Union Savings Bank Bldg., Wash., D. C., preparing plans department store. $250,000. Owner's name withheld.

Fla., Miami—Apartment—Coral Gables Co. had plans prepared by Kiehnel & Elliott, Miami, 4 story, 94 x 172 x 182 ft., Coral Gables and Ponce de Leon Blvd. $225,000.

Miss., Columbus—Hotel—A. Gunter having plans prepared by R. A. Heavner, Jackson, Tenn., 80 room hotel. $150,000.

Miss., Meridan—Schools—Election Feb. 25, $500,000 bonds, improvements incl. new high school, 2 grade schools and repairs and improvements to existing buildings.

O., Cleveland—Academic, etc.—University School, c/o A. C. Brown, East 71st St. and Hough Ave., having plans prepared by Walker & Weeks, 1900 Euclid Ave., 72 x 240 ft. academic building, 70 x 190 ft. dormitory, 40 x 120 ft. rectory and dining hall, 50 x 96 ft. service building, and 50 x 90 ft. manual training building, brick and steel, Warrensville Center Rd. $1,000,000.

O., Cleveland—Commercial—International Wood, Wire & Metal Lathers, c/o W. J. McSorley, pres., Superior Bldg., having plans prepared by Dresser-Mintor Co., The Arcade, 3 story and basement, 64 x 75 ft., brick, steel and concrete, West 26th St. and Detroit Ave. $150,000.

O., Cleveland—Hotel—Eastern Hotel Syndicate, c/o M. H. Price, Ulmer Bldg., plans 8 story and basement, brick, steel and concrete, 510 Prospect Ave. $500,000. Engineer and architect not available.

O., Cleveland — Hotel — Euclid-Plaza Hotel, c/o M. Marmorstein, pres., Ulmer Bldg., having plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 10 story and basement, 99 x 200 ft., brick, steel and concrete, 2300 Euclid Ave. $1,500,000.

O., Cleveland—Laboratory and Administration—Psychiatric Foundation of Western Reserve, c/o O. P. Van Sweringen, Marshall Bldg., plans brick, steel and concrete, near here. $1,000,000. Engineer and architect not selected.

O., Cleveland — Orphanage — Catholic Charities Corp., c/o W. F. Lyon, pres., 704 Century Bldg., takes bids about June 1, 1st group of buildings, incl. school, dining hall, kitchen and cottages, brick, steel and concrete, State and Bean Rds. $2,000,000. G. S. Rider & Co., Century Bldg., archts.

O., Cleveland—Orphanage—Jewish Orphans Home, c/o M. Sharlitt, supt., 5000 Woodland Ave., having preliminary plans prepared by Morris & Weinberg, 3226 Euclid Ave., 1 and 2 story, brick, steel and concrete. $1,500,000.

O., Columbus—Hotel—White Cross Hospital Assn., North Park St., having plans prepared by A. Dearing, Boston, 9 story and basement, 75 x 120 ft., brick, steel and concrete addition. $350,000.

O., East Cleveland (Cleveland P. O.)—Hospital, Nurses Home and Power House—Cleveland Homeopathic Medical Society, c/o H. D. Sims, secy., 423 Erie Bldg., Cleveland, had plans prepared by A. M. Allen & Co., 7016 Euclid Ave., Cleveland, 3 story, brick, steel and concrete, Terrace Rd., here. $1,000,000.

O., Oakharbor—Church—St. Johns Lutheran Church having plans prepared by J. W. C. Corbusier, B. F. Keith Bldg., 1 story and basement, 56 x 140 ft., brick, steel and stone. $150,000.

O., Steubenville—Theatre and Store—Tri-State Amusement Co. having plans prepared by C. C. and E. A. Weber, 148 Ingalls Bldg., Cincinnati, theatre and store. $500,000. Noted June 28.

O., Youngstown—Hotel—Ohio Hotel Operating Co., having plans prepared by Stanley & Scheibel, 1301 Wicks Bldg., 4 story addition. $200,000.

Ind., Bloomington—Dormitory and Memorial—J. W. Craven, secy. Indiana University, rejected bids Jan. 29, 3 story, 40 x 280 ft., rein.-con. and stone. $330,000. Will revise plans. Lowe & Bollenbacher, 108 South La Salla St., Chicago, archts. Noted Jan. 10.

Mich., Detroit—Apartment—H. J. Goossen, 4229 Mt. Elliott Ave., having plans prepared by Van Leyen, Schilling, Keough & Reynolds, 3440 Cass Ave., 10 story and basement, 155 x 200 ft. rein.-con., brick and steel, plain foundation, Cass Ave. $2,000,000.

Mich., Detroit — Hotel — L. Kamper, archt., Kamper Bldg., preparing plans 10 story and basement, 60 x 110 ft., rein.-con., brick and steel, plain foundation, Park Blvd. Owner's name withheld.

Mich., Detroit—Lodge—Amaranth Lodge, c/o B. C. Wetzel & Co., archts., 2317 Dime Bank Bldg., having plans prepared 4 story and basement, 70 x 112 ft. rein.-con., brick and steel, plain foundation, Gratiot Ave. $150,000.

Ill., Chicago—Apartment—C. E. Anderson Constr. Co., 306 South Wabash St., plans 3 story and basement, 100 x 100 ft., fireproof, 69th and Jefferson Sts. $200,000. W. G. Kreig and J. T. and M. D. Hetherington, 105 North Clark St., archts.

Ill., Chicago — Apartment and Store — Owner, c/o C. O. Liska, archt., 35 South Dearborn St., plans 3 story, fireproof, Division and Crawford Sts. $150,000.

Ill., Chicago — Apartment — Solomon & Levin, c/o Rissman & Hirschfeld, 64 West Randolph St., plans 13 story, 100 x 150 ft., fireproof, Sheriden and Brompton Sts. $3,000,000.

Ill., Chicago—Hotel—A. I. Jordan, 111 West Washington St., having plans prepared by J. A. Armstrong, 127 North Dearborn St., 9 story, 100 x 135 ft., fireproof, Cornell and 54th Sts. $1,000,000.

Ill., Chicago—Store, Office and Theatre—Lubliner & Trinz, Van Buren and State Sts., plan 140 x 225 ft., fireproof, Madison St. near Mayfield St. $2,000,000. Engineer and architect not selected.

Ill., Chicago—Theatre—S. G. Grodson, c/o M. M. Fishman, archt., 118 North La Salle St., plans 90 x 160 ft., fireproof, State and 51st Sts. $200,000.

Ill., Chicago—Theological School—Chicago University plans 3 story, fireproof. $500,000. Coolidge & Hodgdon, 134 South LaSalle St., archts.

Ill., Chicago—Office—H. E. Bell, c/o K. M. Vitzthum & Co., archts., 605 North Michigan St., plans 23 story, 64 x 130 ft., fireproof, South Water and Michigan Sts. $3,000,000.

Ill., Chicago—Office and Hall—Plasterers Union Local 5, c/o Holabird & Roche, archts., 104 South Michigan St., plans 75 x 125 ft., fireproof, Van Buren and Marshfield Sts. $200,000.

Ill., Chicago—Store, Office and Amusement—Madison Kedzie Building Corp., c/o A. S. Alschuler archt., 28 East Jackson St., plans 150 x 190 ft., fireproof, Madison and Kedzie Sts. $1,000,000.

Ill., Decatur — Church — First Baptist Church, 124 East Prairie St., having preliminary plans prepared by S. A. Clausen, 701 Milliken Bldg., 2 story, brick, stone and rein.-con., Prairie St. $150,000.

Ill., Dixon—Bank and Office—City Natl. Bank having preliminary plans prepared 2 or 3 story, 50 x 90 ft., rein.-con., brick and stone. $150,000. Engineer and architect not selected.

Ill., Peoria—Armory—E. A. Martin, archt., 304 South Wabash St., Chicago, rejected bids 2 story and basement, 56 x 170 ft. and 56 x 161 ft., rein.-con., brick, tile and stone, here, for Dept. Pub. Wks., Springfield. $200,000. Will readvertise. Noted Nov. 22.

Ill., Peoria—Coliseum—Election in April, to vote on levy of two mill tax to provide funds for erection and maintenance of coliseum. Will issue bonds for cost and retire with tax funds. To exceed $200,000. City architect and engineer will prepare plans.

Wis., Bayfield—Hall and Community—City c/o J. B. McLucas, clk., plans to rebuild 2 story, brick and concrete, plain foundation, recently destroyed by fire. $150,000. Engineer and architect not selected.

Wis., Janesville—Hotel—E. W. Sparling, 494 Cass St., Milwaukee, plans 6 story and basement, 100 x 110 ft., brick and concrete, plain foundation, Milwaukee St., here. $450,000. Engineer and architect not selected.

Wis., Kenosha—Hospital—St. Catherine Hospital, Sisters of St. Dominic, Milwaukee

Buildings (Continued)

Ave., having plans prepared by Berlin & Swern, 19 South La Salle St., Chicago, 5 story and basement, brick and concrete, plain foundation, Milwaukee Ave. $325,000. Also plans power house and laundry.

Wis., Lancaster — High School — School Bd. rejected bids 2 story and basement, brick and tile, plain foundation. $175,000. Will revise plans and readvertise. Parkinson & Dockendorff, Linker Bldg., La Crosse, engrs. Noted Jan. 17.

Wis., Milwaukee—Business—D. Lappin, 124 West Water St., plans 2 story, 100 x 120 ft., brick and timber addition, Bway. $150,000. Engineer and architect not selected.

Wis., Milwaukee — Clubhouse — Tripoli Country Club, J. D. Bird, 596 Summit Ave., pres., had plans prepared by A. D. Koch, 120 Wisconsin St., and soon takes bids 2 story, 52 x 200 ft., brick and tile, plain foundation, Hopkins Rd. $150,000.

Wis., Milwaukee—School—E. A. Meyre, archt., 614 7th Ave., preparing plans 2 story and basement, 62 x 104 ft., brick and tile, plain foundation. $150,000. Owners name withheld.

Wis., Milwaukee—Theater and Office—E. Maxiner and F. Trottmann, 381 Grove St., having plans prepared by E. A. Meyer, 614 7th St., 2 story and basement, 55 x 150 ft., brick and concrete, plain foundation, Grove St. $150,000.

Wis., Watertown — Hotel — Local stock Company headed by E. C. Wolfram, North Water St., plans 5 story and basement, brick and concrete, plain foundation, Main St. $275,000. Engineer and architect not selected.

Ia., Ottumwa — Hospital — St. Josephs Hospital plans 3 or 4 story and basement, rein.-con., brick and stone, 181 rooms. $300,000. Architect not announced.

Minn., St. Paul—City Hall and Court House—City and Ramsey Co. having preliminary sketches made by F. X. Tewes, city archt., City Hall. 5 story and basement, 240 x 240 ft., Wabashe St. between 4th and 5th Sts. $2,500,000.

Kan., Topeka—Hospital—Amer. Hospital Assn. having preliminary plans prepared by Chandler & Emshwiller, 301 Commerce Bldg., 3 story and basement, rein.-con. and brick. $200,000.

Kan., Topeka—Hospital—Christ Hospital, c/o R. R. J. Wise, bishop, 9th and Polk Sts., having preliminary plans prepared by Schmidt, Garden & Martin, 104 South Michigan Ave., Chicago, 4 story and basement, rein.-con., brick and stone. $450,000 to $500,000.

Mo., Kansas City—Church—First Baptist Church had preliminary plans prepared by J. H. Felt & Co., 800 Grand Ave. Temple, rein.-con., brick and stone addition. $500,000.

Mo., Kirksville—College—State Teachers College plans brick, concrete and stone, to replace Baldwin and Library Halls, recently destroyed by fire. $200,000-$250,000. J. Kirk, pres. Engineer and architect not selected.

Mo., St. Louis—Apartment—J. A. Wright, Pierce City, having preliminary plans prepared by V. Proetz, A. S. Clark, and O. A. Skinner, 108 North Dearborn St., Chicago, 8 story and basement, brick, stone, marble, tile and terra cotta, Olive St., here. $750,000.

Mo., St. Louis—Art—Washington University, Skinker Rd. and Forsythe Blvd., having plans prepared by Jamieson & Spearl, Arcade Bldg., 2 story, 54 x 184 ft., rein.-con., granite, brick and stone, campus. $250,000.

Mo., St. Louis—Hall—Our Community League, c/o Poro College, 4300 St. Ferdinand St., having preliminary plans prepared 4 story and basement, 80 x 130 ft., brick, terra cotta and concrete, Ewing and Pine Sts. $350,000. Private plans.

Mo., University (St. Louis P. O.)—Church—First Presbyterian Church, Sarah and Washington Aves., plans 2 story, rein.-con., brick and stone, Delmar Blvd. $200,000.

Tex., Dallas—Hotel—J. B. Munn, 4915 Worth St., and associates, plan 19 story, brick, concrete and steel, Main and Poydras Sts. $1,000,000. Engineer and architect not announced.

Tex., Dallas—Office—Morten Investment Co., Jefferson Hotel, plans office, Commerce and Austin Sts. $150,000. Engineer and architect not announced.

Okla., Chickasha — School — Bd. Educ. having preliminary plans prepared by E. H. Eads, Chickasha, for Ward School. Election soon to vote on $150,000 bonds.

Wash., Seattle—Apartment—F. T. Sherman, c/o J. Graham, archt., Dexter-Horton Bldg., having plans prepared 10 story, 120 x 120 ft., concrete and steel, 7th and Seneca Sts. $700,000.

Wash., Seattle—Lodge—Fraternal Order Eagles Aerie No. 1, had plans prepared by H. Bittman, Securities Bldg., 6 story, 120 x 175 ft., (with foundation to provide for 10 stories), rein.-con. and steel, 7th and Union Sts. $1,000,000. Noted Oct. 4.

Calif., Alameda — Lodge — Masonic Hall Assn. of Alameda, c/o C. Werner, archt., Santa Fe Bldg., San Francisco, having plans prepared lodge, Class A construction, Alameda Ave. $150,000.

Calif., Bakersfield—Church—St. Josephs Roman Catholic Church, Oregon and Kern Sts., plans fireproof church, Baker St. $150,000.

Calif., Fresno—Office—Security Title Insurance & Guaranty Co., Brix Bldg., plans 5 or 6 story, fireproof, Fulton St. $150,000. Engineer and architect not selected.

Calif., Huntington Park—Schools—Huntington Park Grammar School Dist. and Union High School Dist. voted $250,000 and $750,000 bonds respectively for school buildings.

Ont., Kitchener—City Hall—City plans 3 story and basement, rein.-con., brick and steel, plain foundation. $300,000. S. Shupe, city engr. Architect not selected.

Calif., Long Beach—Long Beach Hotels Co., Inc., 612 West Ocean Ave., having plans prepared by M. Hunt, H. Chambers and W. Austin, 1107 Hibernian Bldg., Los Angeles, 5 story and basement, rein.-con., 300 rooms. $1,000,000.

Calif., Long Beach—Schools—Voted $4,900,000 bonds, building and equipping 5 high and 15 elementary schools. Noted Dec. 6.

Calif., Los Angeles — Club — Southern California Commercial Club, c/o E. Bergstrom, archt., Citizens Natl. Bank Bldg., having preliminary plans prepared 12 story, 100 x 175 ft., rein.-con.

Calif., Los Angeles—High School—City having plans prepared by F. J. Soper, Kerckhoff Bldg., 1 to 3 story, brick, at Foshay Junior High School site. To exceed $250,000.

Calif., Los Angeles—Hotel and Store—F. W. Byer, c/o L. A. Smith, archt., 3rd St. and Western Ave., having plans prepared 10 story and basement, 40 x 100 ft., rein.-con., Wall and 5th Sts. $200,000.

Calif., Los Angeles—Hotel—H. Genser, archt., Hibernian Bldg., preparing plans 4 story and basement, 100 x 150 ft., brick, Union Ave. $200,000. Owners name withheld.

Calif., Los Angeles—Hotel and Store—T. Quinn, et. al., c/o L. L. Jones, archt., Grosse Bldg., having plans prepared 4 story and basement, brick and concrete, Los Angéles St. $175,000.

Calif., Los Angeles—Loft and Store—L. M. Harvey, 1333 South Los Angeles St., interested, in syndicate which plans 12 story, on 100 x 150 ft. site, Hill and 10th Sts. $1,000,000.

Calif., Los Angeles—Office—E. L. Doheny, Security Bldg., plans fireproof, on 165 x 175 ft. site, 10th and Flower Sts. To exceed $150,000.

Calif., Los Angeles—Office—Shell Co. of California, Higgins Bldg., plans fireproof, vicinity 10th and Flower Sts. To exceed $150,000.

Calif., Los Angeles—Office and Theater—J. Toplitzky, et al. H. W. Hellman Bldg., plans 10 to 12 story, fireproof, on 120 x 165 ft. site, Bway. To exceed $750,000.

Calif., Monrovia — Hospital — Monrovia Community Hospital Assn., c/o C. W. Lee, plans fireproof hospital on 290 x 500 ft. site. Funds being raised. Engineer and architect not selected.

Calif., Pasadena—Theatre, Store, Apartment and Office—W. M. Patch, representing interests, c/o C. L. Jay, archt., Braley Bldg., Pasadena, and H. M. Patterson, associated archt., Johnson Bldg., Los Angeles, having plans prepared 2 and 3 story, brick, Washington St. $150,000.

Calif., Sacramento — Store — Nathan & Sons, 800 L St., having plans prepared by Hemmings & Starks, Ochsner, Bldg., 3 story and basement, rein.-con., J St. $200,000. Noted Jan. 31.

Calif., Sacramento — Temple — Ben Ali Temple of Mystic Shrine plans fireproof temple, 14th and L Sts. $500,000. Engineer and architect not selected.

Calif., San Bernardino — Theatre and Lodge—B. P. O. E., Lodge 836, having preliminary plans prepared by B. M. Pretica, Pantages Theatre Bldg., Seattle, Wash., 3 story, rein.-con., on 215 x 300 ft. site, 4th St. To exceed $150,000.

Calif., San Francisco — Lodge — Golden Gate and Mission Councils, Nos. [illegible]07 and 2519 respectively, Knights of Columbus, K. of C. Bldg., plan two fireproof lodge buildings. $100,000 each. Engineer and architect not selected.

Calif., San Mateo—Church—Methodist Episcopal Church plans church, Howard Ave. $150,000 or more.

Calif., San Pedro — Hotel and Store — Sixth & San Pedro Hotel Co., c/o C. F. Whittlesey, archt., 6533 Hollywood Blvd., Los Angeles, having plans prepared 10 story and basement, rein.-con., 6th and San Pedro Sts. To exceed $500,000.

Calif., Santa Rosa—Home—Knights of Pythias plan fireproof home for aged and orphans, here. To exceed $150,000. E. O. Jackson, Petaluma, member site selection com. Engineer and architect not selected.

Ont., Aurora—College—St. Andrews College, Rosedale, Toronto, having plans prepared by Paisley & Marani, 35 Colborne St., Toronto, 2 and 3 story and basement, rein.-con., brick and steel, plain foundation, Yonge St. $500,000.

Ont., Ford — School — Pub. School Bd. plans 2 story and basement, 20 room, rein.-con., brick and steel, plain foundation. $230,000. Engineer and architect not selected.

Ont., Mimico—School—Bd. Educ. having plans prepared by Burden & Gouinlock, 101 King St. W., Toronto, 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation. $150,000.

Ont., Ottawa — Church — St. Matthews Church plans brick and stone, plain foundation, 1st Ave. $150,000. Architect not selected.

Ont., Sandwich—Court House and Jail—Essex Co. Council having plans prepared by M. E. Brian, engr., City Hall, Windsor, and takes bids about May 1, new stone court house and jail. $300,000.

Ont., Sandwich—Office—Essex Co. Council having plans prepared by M. E. Brian, engr., City Hall, Windsor, and takes bids about May 1, brick office. $400,000. Prices wanted on materials.

Ont., Toronto—Apartment—First Mortgage Bonds Ltd., 1104 Royal Bank Bldg., plans 7 story and basement, 100 x 170 ft. rein.-con., brick and steel, plain foundation, Sherbourne St. $800,000. Engineer and architect not selected.

Ont., Toronto—High School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St. 2 story and basement, 20 room, rein.-con., brick and steel, plain foundation, Dufferin St. $250,000.

Ont., Toronto—School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 20 room addition to Alexander Muir School, rein.-con., brick and steel, plain foundation. $200,000.

B. C., Vancouver—Schools—Election in March, $523,000 bonds, 3 story, 20 room rein.-con. and brick school, Denman St., also 2 other schools, for Bd. School Trustees, Hamilton St.

BIDS DESIRED

Mass., Boston—Hotel—Feb. 18, by G. B. Post & Sons, archts. and engrs., 101 Park Ave., New York City, 12 story, brick, stone and steel, Arlington St., here. for Statler Hotel Co., 7th Ave. and 33rd St., New York City. $4,000,000. Noted June 1, 1922.

R. I., Providence—Office—Clarke & Howe, archts., 1208 Turks Head Bldg., taking bids 5 story, 60 x 129 ft., brick and steel, fireproof, Weybosset St., for Providence Gas Co., Turks Head Bldg. $200,000. Noted Feb. 1.

N. Y., Albany — Hotel — Feb. 10, by C. J. Holding, Wellington Hotel, 11 story, 40 x 70 ft., brick and steel addition, plain foundation, State St. $500,000. J. N. Nolan, Albany, archt. and engr. Noted Oct. 18.

N. Y., Bronxville — School — Bd. Educ. taking bids and opens same about Mar. 5, brick, steel and stone, plain foundation, Pondfield Rd. Guilbert & Bettelle, 2 Lombardy St., Newark, N. J., archts. and engrs. Noted June 28.

N. Y., Brooklyn—Schools—Feb. 26, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 215, Ave. S from East 2nd to East 3rd Sts., also P. S. 206, Ave. V from Elmore to Delamere Places, for Bd. Educ., 500 Park Ave., New York City. Noted Mar. 1.

N. Y., Long Island City—School—Feb. 26, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn. P. S. 125, Nelson Ave. from Carolin to Bliss Sts., here, for Bd. Educ., 500 Park Ave., New York City.

Buildings **(Continued)**

N. Y., New York—Loft—Seventh Ave. and 35th St. Corp., 47 West 34th St., will build 22 story, brick, steel and stone, plain foundation, 35th St. and 7th Ave. Work will be done by separate contracts under supervision of Buchman & Kahn, archts. and engrs., 56 West 45th St.

N. J., Atlantic City—Clubhouse—Apr. 1, by B.P.O.E. No. 276, 5 story, 75 x 140 ft., brick, steel and stone, Virginia Ave. near Beach St. $350,000. V. B. Smith, Guarantee Trust Bldg., archt.

Md., Baltimore—Store—Feb. 8, by S. Russell, archt., 11 East Lexington St., 3 story, 25 x 167 ft., brick, plain foundation, 411 North Howard St., for Excello Illuminating Co., 411 North Howard St. $150,000. Noted May 17.

W. Va., Bluefield—Municipal—Feb. 19, for city hall. W. T. Mills, 900 Atlas Bldg., Columbus, O., archt. M. J. Garry and R. A. Sheffey, both of Bluefield, associated archts. Noted Nov. 8.

W. Va., Huntington—Bank—Union Bank & Trust Co., 4th Ave. and 9th St., taking bids 15 story. $500,000. Meanor & Handloser, Robson-Prichard Bldg., archts. Noted Feb. 8, 1923.

La., Lecompte — High School — Feb. 20, by Favrot & Livaudais, archts., Hibernia Bank Bldg., New Orleans, 3 story, concrete, brick and stone, here, for Rapides Co. Bd. Educ. (Alexandria). $150,000.

Tenn., Memphis—Jail—Feb. 15, by J. A. Reichman, chn. jail comn., 5 story and basement, 55 x 250 ft., rein.-con., steel and stone, Washington Ave. $500,000. Jones & Furbringer, Porter Bldg., archts. Noted Jan. 17.

O., Akron—High School—Feb. 19, by Bd. Educ., 3 story and basement, brick, steel and concrete, Brown and Archwood Aves. $750,000. M. M. Karnoski, 102 South Union St., archt.

O., Ashland—School—Feb. 19, by Bd. Educ., 2 story and basement, brick, steel and concrete. $200,000. V. Redding and associates, Mansfield, archts.

O., Youngstown—Theater and Office—May 1, by Palace Realty Co., 4 story, 105 x 225 ft., Wick Ave. and Public Sq. $900,000. T. W. Lamb, 644 8th Ave., New York City, archt. B. F. Keith Theater Co., lessee.

Mich., Detroit—Hotel—Webster Hall Hotel Co., c/o Halpin & Jewell, archts., 1024 Hammond Bldg., taking bids and opens same about Feb. 15, 12 story and basement, 100 x 120 ft. rein.-con., brick and steel, plain foundation, Cass Ave. $1,500,000.

Ill., Beardstown—High School—Feb. 15, by C. J. White, pres. Bd. Educ., 2 story and basement, brick, stone and rein.-con. $150,000. M. J. Geise, 800½ Main St., Quincy, archt. Noted Nov. 29.

Wis., Appleton — Hotel — M. Tullgren & Sons, archts., 425 East Water St., Milwaukee, taking bids on superstructure, 6 story, 58 x 77 ft., brick and concrete addition, for John Conway Hotel Co., Oneida St. $150,000.

Wis., Milwaukee—Bank and Office—Feb. 12, by Dick & Bauer, archts., 811 State St., superstructure 2 story and basement, 67 x 69 ft. and 24 x 67 ft., brick and concrete, North Ave., for Northwestern Bank Bldg. Co., J. Reutermann, pres., 114 Grand Ave. Foundation previously let. Noted Jan. 17.

Wis., Milwaukee — Business — Herbst & Kuenzli, archts., 114 Grand Ave., taking bids and opens same about Feb 11, 2 story, 90 x 142 ft., brick and tile, plain foundation, Mitchell St., for Ninth & Mitchell Realty Co., 216 West Water St. $150,000. Noted Jan. 31.

Ia., Ft. Dodge—Hospital—Feb. 14, by St. Josephs Mercy Hospital, 3 story and basement, 45 x 143 ft., rein.-con., brick, tile and stone. $150,000. W. L. Steel, 502 United Bank Bldg., Sioux City, archt.

Ia., Sioux City—Hospital—Feb. 20, by St. Josephs Mercy Hospital, 4 story and basement, rein.-con., brick and steel addition, 21st and Court Sts. $250,000. Beuttler & Arnold, Grain Exch. Bldg., Sioux City, and J. H. Wheeler, 508 Exch. Bldg., St. Paul, Minn., archts. Noted Sept. 27.

Minn., Duluth—Community—Apr. 1, by A. N. Cook, ch. com. Duluth Jewish Center Assn., 1116 East 5th St., 2 story and basement, 100 x 140 ft., rein.-con., brick and steel, plain foundation, 2nd St. and 8th Ave. E. Ellingsen & Erickson, 306 Lonsdale Bldg., archts. and engrs.

Minn., Gilbert—School—Mar. 1, by Secretary School Dist., 2 story and basement, 75 x 200 ft., rein.-con. and brick. $250,000. W. T. Bray, 617 Torrey Bldg., Duluth, archt. and engr.

S. D., Vermilion—Auditorium—Feb. 27, by Bd. Regents University of South Dakota, 4 story and basement, 74 x 105 ft. rein.-con., brick and tile, on Campus. $250,000. Perkins & McWayne, 322 Paulton Blk., Sioux Falls, archts.

Mo., Kansas City — Office and Store — Feb. 12, by F. E. McIllvain, archt., 1001 Orear-Leslie Bldg., 7 story and basement, 87 x 115 ft., rein.-con., brick and steel, for Palace Clothing Co., 909 Main St. $500,000.

Tex., Amarillo—Club—Feb. 25, by Herbert M. Greene Co., archts., North Texas Bldg., 3 story and basement, brick and concrete, plain foundation, for Masonic Temple Assn. $175,000. Noted Dec. 6.

Tex., Tyler—Office and Bank—Feb. 18, by Citizens Natl. Bank, 7 story and basement, 54 x 103 ft., concrete, brick and stone, North Bway. Noted Nov. 15.

Calif., San Francisco — Hospital — A. I. Coffey, archt., Humboldt Bank Bldg., receiving bids 4 story and basement, rein.-con., Jackson St., for Chinese Six Companies, 843 Stockton St. $150,000. Noted Nov. 29.

Ont., Toronto — Office — Manufacturers Life Insurance Co., Victoria and King Sts., taking bids 7 or 8 story and basement, 100 x 150 ft., rein.-con., brick and steel, plain foundation, Bloor St. E. $500,000. Sproatt & Rolph, 36 North St., archts.

BIDS RECEIVED

N. J., Bordentown — Dormitory — State Bd. Educ., Trenton, Feb. 1, general contract 3 story, 55 x 175 ft., brick and steel, for Manual Training & Industrial School for Colored Youths, here, from F. Lanze, Audubon, $161,942. Noted Jan. 24.

N. J., Millville—High School—Bd. Educ., Jan. 30, general contract 2 story and basement, 150 x 220 ft., Broad and 5th Sts., from G. V. Shaver, Palmyra, $243,779; heating from J. F. Craig, 621 Communipaw Ave., Jersey City, $34,125. Noted Jan. 10.

O., Columbus — Medical Science — Bd. Trustees Ohio State University, 4 story and basement, 50 x 125 ft., brick and concrete addition, on campus, from Boyajohn & Barr, Brunson Bldg., $187,000. Noted Jan. 17.

Wis., Mayville—School, etc.—School Bd., 2 story, 70 x 157 ft. high school and 80 x 200 ft. gymnasium, brick and tile, plain foundation, from Rohde-Kapelle Co., Route 2, Mayville, $183,936. Noted Jan. 17.

Ia., Ottumwa—Y. W. C. A., converting Y. M. C. A. building into Y. W. C. A., 4 story and basement, rein.-con., brick, tile and stone, from Bracker Constr. Co., 638 Builders Exch. Bldg., Minneapolis, Minn. Archts. est. $150,000. Noted Jan. 10.

Minn., St. Paul—School—Dept. Educ., Jan. 29, general contract 3 story and basement, 150 x 250 ft. with 2 story, 48 x 90 ft. wing rein.-con., brick and tile, Albert and Pascal Aves., from W. M. Murphy & Son, 616 Endicott Bldg., $339,958. Noted Jan. 24.

Tex., San Antonio—Y. M. C. A., 6 story, 90 x 180 ft., rein.-con., brick and stone, plain foundation, Martin and Navarro Sts., from L. T. Wright & Co., City Natl. Bank Bldg., $259,029. Noted Jan. 17.

Calif., Sacramento — College — Christian Brothers College, Martinez, two 2 story and basement, hollow tile, concrete or brick, here, from W. C. Keating, Capital Natl. Bank Bldg., Sacramento, $179,450. Noted Jan. 17.

CONTRACTS AWARDED

R. I., Pawtucket—School—School Com., 3 story, brick and steel fireproof, plain foundation, Silver Springs and Hancock Sts., to Rowley Constr. Co., Central St., $291,900. Archts. est. $350,000. Noted Jan. 17.

Conn., New Haven—Apartment—C. and G. Abbadessa, 159 Winthrop Ave., 3 story, 115 x 155 ft., brick, stone and steel, plain foundation, Dwight St., to C. Abbadessa, 159 Winthrop Ave. Archts. est. $200,000. Noted Jan. 17.

N. Y., Brooklyn — Apartment — Right Constr. Co., c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 4 story, brick, steel and stone, plain foundation, Rogers Ave., by day labor. $200,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York City, P. S. 197, Elmore Pl. through to Delamere Pl., 200 ft. south of Ave. O, here, to T. A. Clarke Co., 122 Livingston St., $787,300, A deduct $14,000, B add $110,000, C add $4,000. Noted Jan. 31.

N. Y., Brooklyn—Synagogue and Community—Congregation Shaari Zadek, 124 Stuyvesant Ave., brick, steel and stone, plain foundation, Park Pl. and Kingston Ave., to John Auer, 648 Lexington Ave. Archts. est. $300,000. Noted Dec. 6.

N. Y., New York—Apartment—Five Hundred Sixty-Three West 184th St. Corp., c/o Margon & Glaser, archts. and engrs., 2806 3rd Ave., will build 6 story, 75 x 100 ft., brick, steel and stone, plain foundation, 563 West 184th St., by day labor. $150,000.

N. Y., New York—Apartment—J. Freeman, c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., will build brick, steel and stone, plain foundation, 122 East 84th St., by day labor. $250,000.

N. Y., New York—Apartment—S. Gordon, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone, plain foundation, Burnside Ave., by day labor. $275,000.

N. Y., New York—Loft—L. Adler and A. Adelsohn, 500 7th Ave., 23 story, 100 x 100 ft., brick, steel and stone, plain foundation, 39th St. and 7th Ave., to Shroeder & Koppel, 347 Madison Ave. Archts. est. $1,500,000.

N. Y., New York—Loft—S. Bonzon, c/o Buchman & Kahn, archts. and engrs., 56 West 45th St., 18 story, brick, steel and stone, plain foundation, 49 West 38th St., to S. S. Roth & Bro., 130 West 42nd St.

N. Y., New York—Office—One Hundred Thirty-Two West 31st St. Corp., 146 West 26th St., 16 story, brick, steel and stone, plain foundation, 128 West 31st St., to J. Stewart & Co., 30 Church St. Archts. est. $2,000,000.

N. Y., New York—Theater—Chanin Constr. Co., c/o Reilly & Hall, archts. and engrs., 405 Lexington Ave., will build brick, steel and stone, plain foundation, 226 West 46th St., by day labor. $500,000.

N. Y., Roslyn—School—Bd. Educ. brick, steel and stone, plain foundation, Walliston St., to K. MacKay & Co., 9 Culver St., Yonkers. Archts. est. $250,000. Noted Jan. 10.

N. Y., Schenectady—Hotel—Schenectady Hotel Co., general contract 14 story, brick and steel, plain foundation, to H. L. Stevens Co., 522 5th Ave., New York City. Archts. est. $1,100,000. Noted Nov. 15.

N. J., Hightstown—High School—Bd. Educ. 2 story, brick, steel and stone, plain foundation, to Frank Priory, 5 State St., Trenton. Archts. est. $150,000. Noted June 14.

N. J., Jersey City—Church—St. Marys Roman Catholic Church, 246 2nd St., brick and stone top addition, 3rd and Erie Sts., to Montague Constr. Co., Jersey City. Archts. est. $370,000. Noted June 14.

N. J., Newark—School—Bd. Educ., City Hall, brick, steel and stone addition, Wilson Ave., to Morgan Constr. Co., 13 Coes Pl. Noted Dec. 6.

Pa., Bryn Mawr—School—Alden & Collins, archts., 75 Hembury St., Boston, Mass., 3 story, 74 x 147 ft. with 2 story, 64 x 92 ft. wing, brick, steel and stone, plain foundation, to Roydhouse-Arey Co., Fidelity Insurance Co. Bldg., Phila., for Baldwin School, Bryn Mawr. Noted Dec. 13.

Pa., Chestnut Hill (Phila. P. O.)—Apartment—R. R. McGoodwin, archt., 1600 Walnut St., 4 story and basement, 30 x 338 ft. with 32 x 58 ft. wing, brick and iron, plain foundation, Crefeldt St. and Evergreen Ave., here, to Jacob & Sons, Witherspoon Bldg., Phila., for Chestnut Hill Apartment Co., Real Estate Trust Bldg., Phila.

Pa., Indiana—High School—Bd. Educ., 3 story and basement, 150 x 150 ft. brick and steel, to Fullman & Co., E. E. Trust Bldg., Pittsburgh, $315,000. Noted Jan. 17.

Pa., Phila.—Church and Sunday School—First Reformed Church, 50th and Locust Sts., 1 story, 75 x 88 ft. church and 2 story, 60 x 72 ft. Sunday school, 50th and Locust Sts., to T. Trafford, 1613 Sansom St., $150,000.

Md., Baltimore — Apartment — M. A. Weller Constr. Co., 816 14th St. Wash., D. C., awarded contract 4 story, 160 ft. sq., brick and steel, plain foundation, St. Paul and 32nd Sts., here. Owners name withheld.

N. C., Hickory — High School — General contract brick high school, to Jarrett & Riddle Co., Sanford, $177,791. Noted Jan. 24.

La., New Orleans—Medical Office—Dana Syndicate, J. A. Dana, pres., 4 story, 38 x 69 x 103 ft., brick and white terra cotta, Tulane Ave. and Bolivar St., to G. J. Glover, Whitney Bank Bldg, $150,000.

Tenn., Jackson—Sanitorium—J. L. Cook Sanitorium, brick and concrete sanitorium, 100 bed capacity, to E. J. Holliday Co., Natl. Bank Bldg., Nashville, $150,000. Noted Jan. 24.

Buildings (Continued)

O., Canton—Store—Stern & Mann Co., Market Ave. N., 3 story, 66 x 200 ft., iron, steel and brick, Cleveland and Tuscarawas Sts. W., to Melbourne Bros. Co., 160 Clark Bldg., $300,000. Noted Jan. 31.

O., Cleveland—Apartment—A. H. Oyer, 515 Bangor Bldg., 3 story and basement, 42 x 162 ft., brick and steel, East 79th St. and Hough Ave., to J. Miller, 10819 Drexel Ave. Archts. est. $175,000. Noted Jan. 3.

N. D., Bismarck—Office—E. A. Hughes, 8 story and basement, brick, to J. Larson, Bismarck, $200,000.

Mo., St. Charles—Hospital—Sisters of St. Mary, 2nd and Clay Sts., general contract 3 story and basement, 50 x 75 ft., brick and concrete, plain foundation, to Ratermann Building & Contg. Co., 1943 St. Louis Ave. Archts. est. $150,000. Noted July 12.

Mo., St. Louis—Bank—Soulway Realty Co., 1731 South Bway., general contract 2 story and basement, 50 x 140 ft., brick, concrete and stone, Chouteau Ave., to A. H. Haeseler Building & Contg. Co., Wainwright Bldg. Archts. est. $150,000. Noted Dec. 13.

Mo., St. Louis—Office—See "Industrial Work."

Ark., Little Rock—Hospital—Arkansas Childrens Home, c/o O. P. Christian, fireproof hospital, to Herman & McCain Co., Reigler Bldg. Archts. est. $200,000.

Tex., Galveston—Laboratory, etc.—University of Texas, Galveston, 3 story and basement, 80 x 144 ft., laboratory and power house, concrete and brick, Ave. B, general contract to Munn Constr. Co., Southwestern Life Bldg., Dallas, $319,156; heating and plumbing to West & Gutziet, Houston St., San Antonio, $26,160. Noted Dec. 27.

Okla., Tulsa—Theatre—W. M. Smith, 5 story, 80 x 140 ft., rein.-con. and brick, plain foundation, Boston St., to Buckner-Garbett Constr. Co., 341 Kennedy Bldg., $325,000.

Okla., Tulsa—Theatre—W. M. Smith, c/o Rialto Theater, 7 West 3rd St., 5 story and basement, rein.-con., brick, steel and terra cotta, concrete foundation, West 4th St., general contract to Brickney & Garbett, Kennedy Bldg. Archts. est. $760,000.

Colo., Denver — Schools — School Dist., general contract Mitchell Junior High School, 3 story, Humboldt and Franklin Sts., between 31st and 32nd Sts., to P. J. Sullivan, Barth Blk., $624,400, plumbing, to Johnson-Davis Plumbing & Heating Co., Denver $35,000, heating, to J. Pfieffer, 1140 California St., $80,000; general contract Ebert Grade School, 2 story, 80 x 250 ft., 22nd and Glenarm Sts., to A. Olson, 655 Vine St., $174,358. Noted Dec. 6 and 13.

Colo., Ft. Collins—High School—School Dist. 5, Larimer Co., general contract 3 story, 150 x 350 ft., to A. Simpson Jr. Constr. Co., Colo. Natl. Bank Bldg., Denver, $350,000; plumbing, to B. Elderman, 2046 Walton St., Denver; heating to J. Pfieffer, 1140 California St., Denver. Noted Jan. 17.

Wash., Seattle — Medical — Medical and Dental Assn., 3 story (ultimately 18 story), rein.-con., 5th and Olive Sts., to Rounds Clist Co., Walker Bldg., $500,000. Former contract rescinded. Noted Aug. 2.

Calif., Long Beach—Hotel—Long Beach Hotel Co., Inc., 612 West Ocean Ave., 12 story and basement, 150 x 190 ft., rein.-con., Ocean Blvd. and Linden Ave., to Cahill Bros., 110 Sutter St., San Francisco, $2,500,000. Noted Jan. 24.

Calif., San Francisco — Hospital — St. Marys Hospital, Hayes and Stanyan Sts., 5 story, hospital addition, steel frame and concrete, to J. L. McLaughlin, 251 Kearny St., $300,000. Noted Oct. 11.

Calif., San Francisco — Post Office — J. Kulp, 33 South La Salle St., Chicago, 5 story, 141 x 206 x 289 ft., Class A, The Embarcadero, here, to Macdonald & Kahn, 130 Montgomery St., $500,000. U. S. Government, lessee. Noted Jan. 31.

Ont., Windsor—School—Bd. Educ., 2 story and basement, 10 room, school, Assumption St., general contract to Windsor Constr. Co., Windsor, $126,440.

Federal Government Work

PROPOSED WORK

Ky., Addison—Hardwood Piles—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 1,500 piles 25 ft. long, and 100 piles 40 ft. long, for Dam 45, Ohio River.

Calif., Menlo Park—Ice Plant and Laundry—U. S. Veterans Hospital having plans prepared by W. H. Ratcliff, Jr., 1st Natl. Bank Bldg., Berkeley, 1 story, rein.-con. ice plant, $20,000, and 1 story rein.-con. laundry, $40,000.

BIDS DESIRED

Mass., Chelsea—Dredging—Feb. 25, by Dist. Engineer, Custom House, Boston, dredging at lighthouse depot, 37 Marginal St., here.

R. I., Providence—Dredging—Mar. 4, at U. S. Engineer Office, Providence, dredging in Stamford and Greenwich Harbors, Conn.; adv. E. N.-R. Feb. 7.

N. Y., Tilden Fort (Far Rockaway Sta.) —Storehouse—Feb. 14, by U. S. Engineer, Room 608 Army Bldg., New York, storehouse here; adv. E. N.-R. Feb. 7.

D. C., Wash.—Boats—Mar. 3, at office Commissioner of Lighthouses, Wash., D. C., lighthouse tender Willow, also Light Vessel 111; adv. E. N.-R. Feb. 7.

Ala., Florence—Switchboard Apparatus, etc.—Mar. 4, by U. S. Engineer, War Dept., Wash., D. C., furnishing and delivering f.o.b. cars Sheffield, 1 switchboard, 1 storage battery, 2 motor generators sets, six 500 kva. transformers, 1 high potential testing set and 1 rotary converter for power house at Wilson Dam, Tennessee River.

Ala., Florence—Steel Barges—Feb. 23, by U. S. Engineer, Florence, 6 or 8 steel barges; adv. E. N.-R. Feb. 7.

Ky., Louisville—Crib Timbers—Feb. 12, by U. S. Engineer, P. O. Box 72, furnishing 411 pieces 10 x 12 in. x 20 ft. and 200 pieces 10 x 12 in. x 30 ft. timber for cribwork. Noted Jan. 24.

Ky., Louisville—Lumber—Feb. 11, by U. S. Engineer, P. O. Box 72, 4,240 pieces 2 x 12 in., in 14, 16, 20 and 24 ft. lengths, (140,000 ft. yellow pine No. 2 common and better).

Tex., Galveston—Dredging—Mar. 3, by U. S. Engineer, dredging Sabine-Neches Waterway, here; adv. E N.-R. Feb. 7.

Okla., Fort Sill—Hospital Ward—Mar. 1, by War Dept., at office constructing Quartermaster, Fort Sill, hospital ward, here; adv. E. N.-R. Feb. 7.

BIDS REÇEIVED

Ga., Augusta—Hospital—Spec. 4922—F. T. Hines, dir. U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., Feb. 4, (1) new buildings, (2) plumbing incl. fixtures, outside sewerage, drainage and water supply systems (3) complete heating and steam distributions (4) lighting systems incl. outside electric distributing and street light systems (5) remodeling buildings incl. plumbing, lighting and heating, from Batson-Cook Co., West Point, Ga., (1) $259,300; C. J. Gleason, 1526 Walton Way, Augusta, (2) $33,157; North Eastern Constr. Co., 101 Park Ave., New York City, (3) $55,507 (2) and (3) $102,024 (3) and (4) $69,330 (2) (3) and (4) $115,851 (1) to (5) inclusive $535,103; W. P. Frances, 390 Lucile Ave., Atlanta, (1) and (5) $335,326; W. P. Thurston, Merchants Natl. Bank Bldg., Richmond, Va., (5) $49,000. Above bids are total low bids without additions and deductions. Full list of bids and bidders are filed in office of Engineering News-Record. Noted Jan. 10.

Mo., Kansas City — Extension — Treas. Dept., Wash., D. C., extension to U. S. Post Office, here, from Devault & Detrick, Canton, O., $303,935, alternate $334,864. Noted Jan. 3.

CONTRACTS AWARDED

N. Y., New York—Finding Tower—U. S. Engineer, Room 608 Army Bldg., furnishing and erecting on concrete foundation one 100 ft. range finding tower, to M. A. Hammond Constr. Co., 15 Park Row, $10,925. Noted Jan. 17.

Va., Hampton Roads — Dredging — Spec. 4935—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging Naval Operating Base, here, to Norfolk Dredging Co., 71 Compostella Rd., Norfolk, $0.188 per cu. yd. Noted Jan. 17.

Tenn., Memphis—Towboat—U. S. Engineer, 3rd Mississippi River Dist., 1006 McCall Bldg., stern wheel steel hull towboat, to Howard Shipyards & Dock Co., Jeffersonville, Ind., $119,745 (181 days). Noted Jan. 10.

Wis., Milwaukee—Scow and Barge—U. S. Engineer, Federal Bldg., 2 steel dump scows and one steel barge, to Sturgeon Bay Dry Dock Co., Sturgeon Bay, $47,500. Noted Jan. 24.

Calif., San Diego—Mooring Mast—Spec. 4916—Bureau Yards & Docks, Navy Dept., Wash., D. C., mooring mast at Naval Base, here, to DeWard & Cobham, 207 Granger Bldg., $10,997 (60 days).

Unclassified

PROPOSED WORK

Gas Mains—New York—Municipal Gas Co., 126 State St., Albany, having plans prepared extending gas mains and service to Delmar and Slingerlands by way of Delaware Ave. $95,000. Private plans.

Wading Pool, etc.—Buffalo, N. Y.—City plans improving present wading pool in Humboldt Park, by constructing new sewer and water connections, concreting present mud bottom. $45,000. J. Meahl, City Hall, comr.

Lighting System—Masonville, N. Y.—Masonville Light & Power Co. plans lighting system. $85,000.

Transmission Lines, etc. — New York—See "Industrial Work under Horicon, N. Y."

Fire Alarm System—Miami Beach, Fla.—Feb. 19 to vote on $40,000 bonds fire alarm system.

Transmission Line—Tennessee—Davidson Light & Power Co., Springfield, plans to extend transmission lines to Orlinda, Millsdale, Mitchell, Coopertown, Barren Plains, Cedar Hill, Handleytown, and to point near Keysburg (Ky.-Tenn. line.)

Automatic Signal Control — Nashville, Tenn.—Bd. Pub. Wks. plans automatic signal traffic control system at main street intersections.

Gas Mains—Nashville, Tenn.—Nashville Gas & Heating Co., 226 6th Ave. N., plans 15 mi. gas mains in Belle Meade, Englewood, and Gallatin Rd. Sect. of Nashville. $145,000. S. E. Linton, genl. mgr.

Line Extension, etc.—Nashville, Tenn.—Cumberland Telephone & Telegraph Co., Telephone Bldg., plans to spend $3,600,000 for extensions, improvements, exchange buildings, etc. K. C. Hardcastle, dist. mgr.

Distributing System—Fredonia, Kan.—See "Industrial Works."

Subway—St. Louis, Mo.—Plans X shaped subway under intersection of Grand and Washington Blvds. $25,000. C. H. Fisk, City Hall, engr.

Park Improvements—Little Rock, Ark.—Making preliminary plans park improvements, incl. new swimming pool, golf links, playgrounds, zoo, theatre and stadium. $1,000,000. Pease-Robinson, Fine Arts Bldg., Des Moines, Ia., archts.

White Way—Colorado, Tex.—See "Streets and Roads."

Grain Elevator—Gainesville, Tex.—Keel & Son plan grain elevator. $40,000. Engineer and architect not announced.

Transmission Line—Carter, Okla.—Voted $25,000 bonds, electric transmission line from here to Elk City, also distribution system here. J. D. Bomford, Enid, engr.

Subway—Fresno, Calif.—Plans to vote on $50,000 bonds for Monterey St. subway. W. Stranahan, city engr.

Lighting System — Alhambra, Calif. — Plans lighting system on portion Main St. and Garfield Ave., c.i. standards. To exceed $100,000. T. B. Downer, city engr.

Pipe Line, etc.—San Diego, Calif.—San Diego Consolidated Gas & Electric Co., Electric Bldg., had plans prepared pipe line, 13,044 lin.ft. of 18 in. wood or cement pipe; storage dam, 155 ft. high, 1,520 ft. long on top, 50 ft. long on bottom, 15 ft. wide on top, cyclopean masonry construction with spillway section, 24 in. gate valves; power plant utilizing fall of 1,770 ft. developing 2,011 hp. using 650 kw., generators driven by impulse waterwheels. H. R. Peckham, genl. supt.

High Tension, Underground Power and Feeder Lines, etc.—British Columbia—British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, plans following expenditures this year, high tension lines from Lake Buntzen and Stave Lake to Vancouver $563,000, underground power and industral feeder lines $304,000, substations and transformers $421,000, street lights $304,000, substations and transformers $421,000, street lights $70,000, high tension switches and gears $265,000, new light and power connections $266,000, work on Stave Falls plant and Brend Slough Dam $1,090,000, other miscellaneous work $116,000. G. Kedd, genl. mgr.

Coal Bunkers—Vancouver, B. C.—Harbor Comrs., 712 Pender St. W., plans to build and equip coal bunkers. $500,000. W. G. Swan, c/o owner, engr.

Tunnel — Vancouver, B. C. — British Columbia Electric Ry Co., 425 Carrol St., having plans prepared and takes bids in about 3 months, tunnel ½ mi. long from Aluette Lake to Stake Lake, also preliminary work on 12,000 hp plant. $760,000. J. I. Newell, c/o owner, engr.

Unclassified (Continued)

BIDS DESIRED

Dikes, Bulkhead, etc.—Plymouth, Mass.—Feb. 23, by Plymouth Relocation Com., at Town House, stone dikes, wooden bulkhead, coal and fish wharves, etc. Fay, Spofford & Thorndike, 200 Devonshire St., Boston, engrs.; adv. E. N.-R. Feb. 7.

Borings, etc.—New York—Feb. 15, by Transit Comn., 49 Lafayette St., New York City, land and river borings along North Jane St., Jackson Ave., Manhattan Ave., Roebling St., Bedford Ave., and in Newtown Creek, in Queens and Brooklyn Boros, Agreement "CW," Route 70. G. McAneny, chn.

Shaft Superstructure—New York, N. Y.—Feb. 15, by Transit Comn., 49 Lafayette St., superstructure over ventilating shaft and 2 connecting passageways between tubes of 14th St.-Eastern Rapid Transit R.R., Route 8, Sect. 3, Agreement "CX." G. McAneny, chn.

Levee—Charleston, Miss.—Feb. 11. by Matthews Bayou D. D., 9 mi. ditch, 108,000 cu.yd., and 5 mi. levee, 73,000 cu.yd. Elliott & Harmon Eng. Co., McCall Bldg., Memphis, Tenn., engrs.

Dock—Ashland, Wis.—Minneapolis, St. Paul & Saulte Ste Marie Ry. Co., 1st Natl.-Soo Line Bldg., Minneapolis, Minn., taking bids and opens same about Feb. 15, superstructure addition to ore docks, 900 ft. long, 300 pockets, here, bids on two types, concrete, and concrete and pre-cast steel. Bids on substructure under advisement. $1,000,000-$1,500,000. R. S. Clare, c/o owner, ch. engr.

Tractors, etc.—Houston, Tex.—Feb. 18. by H. L. Washburn, aud. Harris Co., 4 tractors and 2 graders. Howe & Wise, co. engrs.

Lamp Posts, etc.—Newport Beach, Calif.—See Streets and Roads.

BIDS RECEIVED

Heating and Ventilating Apparatus — Brooklyn, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Feb. 4, heating and ventilating apparatus in P. S. 196, Bushwick Ave. between Scholes and Meserole Sts., for Bd. Educ., 500 Park Ave., New York City, from Almirall & Co., Inc., 1 Dominick St., New York City, $111,119. Noted Jan. 31.

Heating and Ventilating Apparatus — New York, N. Y.—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Feb. 4, heating and ventilating apparatus in George Washington High School, Audubon Ave., also in P. S. 75, Faile St. north of Whitlock Ave., for Bd. Educ., 500 Park Ave., from Almirall & Co., Inc., 1 Dominick St., $287,425 and $111,633 respectively. Noted Jan. 31.

CONTRACTS AWARDED

Pier—Baltimore, Md.—Baltimore & Ohio R.R., B & O Bldg., 2 story, 185 x 1,046 ft., concrete and brick, Locust Point, to Frainie Bros. & Haigley, 19 West Franklin St., $1,000,000. Noted Jan. 17.

Golf Course—Louisville, Ky.—Louisville Country Club, Upper River Rd., 18 hole golf course, to W. T. Travis, Garden City, Long Island, N. Y. Est. cost $50,000. Noted Oct. 4.

Park Improvements—Houston, Tex.—Park Improvements incl. pergola, walks and band stand with shelter house, brick and concrete, Root Sq., to M. C. Parker, West Bldg., $24,000.

Electric Light and Power System—Toronto, Ont.—Toronto Hydro Electric Comrs., 225 Yonge St., will extend electric light and power distribution systems, by day labor. $1,940,000.

Materials and Equipment .

PROPOSED WORK

Oil and Tar—Trenton, N. J.—Mercer Co. soon takes bids oil and tar for coming year. $60,000. H. F. Harris, Court House, engr.

Street Grader, Sweeper, etc.—Nashville, Tenn.—City plans to purchase street grader, excavator and loader, rooter plow and sweeper. W. H. Peebles, supt. streets.

Road Grader—Madera, Calif.—City Trustees plan to purchase road grader.

BIDS DESIRED

Sand Grits—New York, N. Y.—Feb. 14, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., 7,500 cu.yd. sand grits.

Steam Rollers—New York, N. Y.—Feb. 15, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., two 10 ton macadam steam rollers.

ROAD WORK—CALIFORNIA

Following are lowest three bids opened by State Highway Comn., Sacramento, Jan. 14, for highway from Huntington Beach to Corona Del Mar, Orange Co., (A) W. F. Beal, Brawley; H. H. Peterson, San Diego; (C) Kaiser Paving Co., Oakland. The unit bids were as follows:

	A	B	C
111,100 cu.yd. roadway embankment without classification	$0.59	$0.58	$0.74
187,000 sta.yd. overhaul (two stations or less)	.02	.02	.02
746,900 sta.yd. overhaul (greater than two stations)	.01	.01	.01
135 cu.yd. structure excavation without classification	1.10	2.00	1.50
18,585 lin.ft. repairing and shaping subgrade pavement	.18	.25	.20
7,920 cu.yd. class "A" portland cement concrete (pavement)	12.96	13.20	14.00
90 cu.yd. class "A" portland cement concrete (structures)	24.00	27.00	30.00
55 cwt. bar reinforcing steel in place structures	7.00	6.50	7.00
723 lin.ft. 18 in. reinforced concrete pipe	2.05	2.10	3.00
372 lin.ft. 24 in. reinforced concrete pipe	2.60	3.15	4.00
136 monuments, hauling and setting	1.00	2.50	2.00
Extended totals	$188,025	$190,925	$215,237

HIGHWAY—CALIFORNIA

Following are lowest three bids opened by State Hy. Comn., Forum Bldg., Sacramento, Jan. 21, for constructing highway in Ventura Co., Div. 7, Route 2, Sect. A-B, (A) C. W. Wimmer, Bakersfield; (B) Wells & Bressler, Santa Ana; (C) S. Hunter, Santa Barbara. The unit bids were as follows:

	A	B	C
32,000 cu.yd. roadway excavation without classification	$0.70	$1.00	$0.75
6,100 sta.yd. overhaul (two sta. or less)	0.02	0.02	0.02
211,500 sta.yd. overhaul (greater than two stations)	0.01	0.01	0.01
1,000 cu.yd. structure excavation without classification	1.26	2.00	1.20
21,750 cu.yd. class "A" portland cement concrete (pavement and shoulders)	13.50	14.10	14.75
400 cu.yd. class "A" portland cement concrete (structures)	26.25	30.00	30.00
357 cwt. bar reinforcing steel in place (structure)	6.10	7.00	6.00
45,680 sq.yd. reinforcing steel in place (pavement)	0.23	0.36	0.30
90 lin.ft. 12 in. corrugated metal pipe	1.00	2.00	1.00
282 lin.ft. 18 in. corrugated metal pipe	2.10	2.50	1.50
208 lin.ft. 24 in. corrugated metal pipe	2.70	3.00	2.00
26 lin.ft. 36 in. corrugated metal pipe	3.50	5.00	2.50
150 cu.yd. removal of broken concrete in existing base	2.00	5.00	3.00
Extended totals	$344,341	$376,245	$377,540

Hoisting Machinery and Equipment—Ft. Wayne, Ind.—Feb. 25, by Bd. Pub. Wks., City Hall, furnishing, constructing and installing hoisting machinery and equipment for movable dam across Maunee River. A. W. Grosvener, 122 East Washington St., Ft. Wayne, and C. Brossman, 1503 Merchants Bank Bldg., Indianapolis, designing engrs.; adv. E. N.-R. Feb. 7.

Portable Road Repair Outfit—Chicago, Ill.—Feb. 20, by South Park Comrs., 57th St. and Cottage Grove Ave., portable road repair outfit. J. F. Neil, secy.; adv. E. N.-R. Feb. 7.

Markers—Wisconsin—Feb. 14, by State Hy. Comn., Madison, 20,000-30,000 metal highway markers. A. R. Hirst, state highway engr.

Cement—Sheboygan, Wis. — Bd. Pub. Wks., c/o A. Bailey, pres., City Hall, taking bids 20,000-30,000 bbl. cement for 1924 paving. Private plans.

Rock Crushing Outfit—Waukesha, Wis.—C. J. Hahn, comr. Waukesha Co., taking bids one portable rock crushing outfit.

Tractor—Benson, Minn.—Mar. 19, by D. P. Carney, aud. Swift Co., 1 gas tractor, crawler type, 40- to 60-hp.

Wood Block, Asphalt, etc.—St. Paul, Minn.—Feb. 13, by H. W. Austin, city purch. agt., 1,200 sq.yd., more or less, 3½-in. creosoted wood blocks; 200 tons asphalt for street repairs; 170 tons limestone dust for street repairs; manhole frames and covers for Dept. Pub. Wks. G. M. Shepard, city engr.

Concrete Mixer, etc. — Baxter Springs, Kan.—J. W. McAndrews in market for concrete mixer and electric hoist.

Road Maintenance Equipment—Texas—Feb. 19, by State Bd. Control, Purchasing Div., c/o R. B. Walthall, Austin, maintenance equipment for use by State Hy. Dept., incl. eight 10 ton and fifteen 5 ton crawler type tractors with or without cabs; forty 2 ton tractors; thirty 1 man operated power maintainers with or without traction wheels, rubber tires; ten 300 gal. asphalt heaters, mounted on rubber tired auto trailers and equipped with 2 pouring pots, 2 hot tampers, 2 asphalt rakes and 2 asphalt smoothing irons; ten 110 gal. asphalt heaters mounted on steel-wheeled auto trailer and equipped with 2 pouring pots, 2 tampers, 2 asphalt rakes and 2 asphalt smoothing irons; ten gasoline pavement heaters; forty 7 ft. graders with extension blades, engine hitch complete and 2 extra bits; forty 6- to 6½-ft. graders, 2 horse patrol, with 2 extra bits; twenty 8 ft. and eight 12 ft. graders with scarifier attachment, extension blades, back sloper, engine hitch complete and 2 extra bits; thirty 1 ton trucks with cab, pneumatic tires, bids to be made on chassis, one cu. yd. steel gravity dump body and cargo body; one hundred 4 ft. 3 horse Fresnos complete; one hundred 5- to 7-cu.ft. slip scrapers with runners; fifty 4 horse all steel road plows complete, 4 heavy duty plows with tractor hitch; eight 5 ton low suspension, rubber tires, 4 wheel auto trailers. L. Ehlinger, maintenance engr.

Crushing Machinery, etc.—Miami, Okla.—Enterprise Mining Co. in market for complete machinery for heavy crushing and separating plant, engines, compressors, etc. R. E. Weaver, purch. agt.

Road Machinery—Ottawa, Ont.—Suburban Rds. Comn., 1 Findlay Ave., taking bids road machinery. $8,000.

Supplies—Toronto, Ont.—Feb. 26, by S. L. Squire, deputy minister of highways, Parliament Bldg., furnishing supplies for 1924, incl. calcium chloride, tar, road oil, paint, crushed stone, portland cement, pipe, expansion joint material, wire rope, babbitt, waste, and steel reinforcement, etc. $250,000 to $500,000. G. Hogarth, ch. engr.

BIDS RECEIVED

Asphaltic Cement, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Jan. 30, (1) 950 tons asphaltic cement in tight containers (2) 600,000 gal. road oil (cold application) (3) 100,000 gal. asphaltic road oil (hot application) (4) 150,000 gal. asphaltic macadam binder (5) 25,000 gal. asphalt for patching (cold application) (6) 45,000 gal. fuel oil, from Standard Oil Co., 26 Bway., New York, (1) $18,212 (4) $8,475; Texas Co., 17 Battery Pl., New York, (2) $29,100; Warner Quinlan Co., 79 Wall St., New York, (3) $5,386 (5) $3,900 (6) $24,300. Noted Jan. 24.

Steam Rollers—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Jan. 28, 1 tandem steam roller, from Buffalo Springfield Roller Co., 150 Nassau St., New York City, $2,900. Noted Jan. 24.

Lumber—Milwaukee, Wis.—For 113,000 ft. yellow pine and 65,000 ft. oak lumber for use of Dept. Bridges & Buildings, from J. Schroeder Lumber Co., foot of Walnut St., for all untreated material, $11,667; Jennison-Wright Co., 2462 Bway., Toledo, O., for creosoted material. $8,561. Noted Jan. 24.

CONTRACTS AWARDED

Road Oil—Urbana, Ill.—Champaign Co., furnishing 598,125 gal. road oil, to Standard Oil Co., Woodriver, $0.0563 per gal., total $33,675; 704,625 gal. to Indian Refining Co., Lawrenceville, $0.0563, $43,612; 190,000 gal. to Roxana Refining Co., Arcade Bldg., St. Louis, Mo., $0.0568, $10,792; 290,000 gal. to Independent Oil Co., Paris, $.0542, $15,718; 60,000 gal. to Amer. Mexican Refining Co., 11 South LaSalle St., Chicago, $0.0542, $3,252; 50,000 gal. to H. H. Cross Co., 122 South Michigan St., Chicago, $0.0544, $2,720; spreading oil to J. Bateman, Fisher, $19,800.

Steel—Milwaukee, Wis.—See "Industrial Works" under Warehouse.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: Mar. 3.

Robert Street Bridge at St. Paul, Minnesota, for Ramsey County

St. Paul, Minn.

Sealed proposals will be received by the Board of County Commissioners of Ramsey County, Minnesota, at their offices in the Court House, in the City of St. Paul, until ten o'clock a.m., March 3, 1924, at which place and time the proposals will be publicly opened and read aloud.

The work to be done includes the bridge complete, together with street paving, curbs and sidewalks from 3rd Street to Fillmore Street, and miscellaneous building and sewer changes. The bridge will consist of 8 arch spans ranging in length from about 72 feet to 244 feet and having an aggregate length of about 1,086 feet; and approaches having a combined length of some 449 feet. The street improvements at both ends add a total length of about 403 feet. A number of retaining and supporting walls are included, especially in the portion between the end of the south approach proper and Fillmore Street. The bridge and approaches provide for a 56 foot roadway and two sidewalks.

Proposals shall be made in the form of the Proposal Blank prepared for this work. Each proposal shall be accompanied by a certified check or Bidder's Bond made payable to the Treasurer of Ramsey County, for an amount equal to ten per cent (10%) of the bid to be forfeited to the County as liquidated damages (not penalty) by any bidder who is awarded a contract and who fails to execute the contract and bond promptly. Certified checks will be returned to bidders upon execution of contract and bond or sooner upon action of the Board of County Commissioners. Proposals shall be placed in a sealed envelope with a statement thereon showing the work covered by the proposal and addressed and delivered to the County Auditor on or before the said date.

Plans, specifications and proposal blanks are on file at the office of the County Auditor and in the offices of Toltz, King and Day, Inc., Engineers and Architects, St. Paul, Minnesota. Copies of the plans, specifications and proposal blanks will be furnished upon payment to Toltz, King and Day, Inc., of $50.00 for each complete set, &25.00 of which will be refunded upon the return of plans and specifications in good condition within two (2) weeks after bids are received.

A bond satisfactory to the Board of County Commissioners for the full amount of the Contract price will be required.

This work will be paid for in cash. Monthly estimates equal to 85 per cent of the work done, and approved materials for construction delivered on the job during the month, will be paid to the contractor within fifteen (15) days after the allowing of same and a final estimate on the completed work will be paid within thirty (30) days after the same is accepted and approved by the Engineers and the Board.

Work is to begin within thirty (30) days after the signing of the contract, and must be completed by April 1st, 1926.

The Board reserves the right to reject any and all bids and to waive any informalities.

By Order of the County Board:
Dated at St. Paul, Minnesota.
January 14, 1924.
GEORGE J. RIES,
County Auditor of Ramsey County.

OFFICIAL PROPOSALS

Bids: Feb. 25.

Movable Dam

Department of Public Works,
Office of the Board,
Room 2, City Hall.
Fort Wayne, Ind., Jan. 28, 1924.

Notice is hereby given by the Board of Public Works of the City Hall of Fort Wayne, Indiana, that sealed proposals will be received by them at their office until Monday, February 25, 1924, at 10:00 o'clock a.m., for the furnishing, construction and installation of hoisting machinery and equipment for a movable dam across the Maumee River at Fort Wayne, Indiana.

The principal items included in the proposed work will consist of a main hoist located on a river pier to operate separately; two (2) steel rollers, each ten (10) feet in diameter, and ninety-nine (99) feet in length weighing one hundred (100) tons each; also a secondary hoist to operate separately or altogether three (3) vertical gates and one (1) Tainter gate.

The estimated cost of the proposed improvement is Nineteen Thousand ($19,000.00) Dollars.

Bidding forms, non-collusion affidavit, and envelopes must be obtained from the undersigned Board of Public Works.

All work done, material and equipment furnished, shall be in accordance with plans and specifications therefor, which are now on file and may be seen in the office of the Department of Public Works of said city, and also at the office of the designing engineer, A. S. Grosvenor, 122 East Washington Street, Fort Wayne, Indiana, and Charles Drossman, 1503 Merchants Bank Building, Indianapolis, Indiana.

The bidder in submitting a proposal for the furnishing, construction and installation of hoisting machinery and equipment as called for and mentioned in aforementioned plans and specifications must accompany his proposal with a certified check in the sum of Five Hundred ($500.00) Dollars, made payable to the City of Fort Wayne, Indiana, as an evidence of good faith that he will execute within five (5) days from the acceptance of his proposal a contract and bond signed by a surety company satisfactory to said Board of Public Works of the City of Fort Wayne, Indiana.

A failure of the successful bidder to enter into such a contract and bond upon the acceptance of his proposal will forfeit the check and sum of money payable thereon to the City of Fort Wayne, Indiana, as agreed and liquidated damages for such failure.

The Board reserves the right to reject any or all proposals submitted.

JOHN B. KOCES,
OTTO F. BENGS,
JESSIE BROSIUS,
BOARD OF PUBLIC WORKS
Attest: ANDREW J. APP,
Secretary Board of Public Works.

Bids: Feb. 21.

Water Works Improvements

Palmyra, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Palmyra, N. Y., until 8 o'clock, p.m., on the 21st day of February, 1924, for the construction of improvements to its water works system, consisting in general of a distributing reservoir, a storage reservoir, slow sand filter, pump well, pump house and connecting piping.

Plans and specifications may be seen at the office of the Board at Palmyra, N. Y., or at the office of Hopkins and Field, Engineers, 349 Cutler Building, Rochester, N. Y. Plans will be sent by the engineers upon a deposit of ten dollars.

OFFICIAL PROPOSALS

Bids will be received and considered for the entire work as a whole. Also bids will be received and considered, separately.

(a) For the construction of the storage reservoir and pipe laying.
(b) For the filter, pump well and pump house.
(c) For the distributing reservoir.

The Board reserves and has the right to reject any or all bids or to accept those that in its judgment will be for the best interests of the Village.

A bond satisfactory to the Board in amount and surety will be required of any one to whom a contract may be awarded.

A certified check, made payable to the order of the Board of Trustees, Palmyra, N. Y., to the amount of $1,000, must be deposited by each bidder and accompany his bid as a guarantee that, in case a contract is awarded him, he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Palmyra, N. Y., and marked on the outside of the envelopes "Proposal for Water Works Improvements."

Village of Palmyra, N. Y.
By LOUIS C. ZIEGLER, President.
RALPH H. MORHOUS,
CLARENCE C. NESBITT,
CHARLES LEBRECHT,
ANDREY Y. EARL, Trustees.
SANFORD M. YOUNG, Clerk.
Dated: January 25, 1924.

Bids: Feb. 11.

Cast Iron Pipe and Castings

Springfield, Mass.

Sealed proposals will be received by the Board of Water Commissioners of Springfield, Mass., at its office in the Municipal Building, on or before 10 a.m., Monday, February 11, 1924, for the furnishing of cast iron water pipe and special castings.

The proposal shall state price per ton of 2,000 lbs., f.o.b. Armory, Mass., for each size of pipe and each size and kind of special casting, in accordance with the following schedule.

200 lengths Class E. 4" cast iron pipe.
300 lengths Class E. 6" cast iron pipe.
2,200 lengths Class E. 8" cast iron pipe.
2 Class F. 24" to 30" Increasers, both ends spigot.
2 Class F. 30" to 36" Increasers, spigot and bell.
10 Class I. 6" Offsets, bell and spigot.
15 Class H. 12" Sleeves.
10 Class H. 16" Sleeves.
2 Class F. 30" Sleeves.
3 Class F. 36" Sleeves.
10 Class I. 8" Ys, bell and spigot.
1 Class H. 10" Y, bell and spigot.
1 Class H. 12" Y, bell and spigot.

All pipe and special castings to be manufactured in accordance with N. E. W. W. A. specifications.

A bond may be required of the successful bidder on this contract.

Proposal shall be in a sealed envelope marked "Proposal for Cast Iron Pipe." It shall also contain a statement as to the dates and rate of delivery for the pipe and special castings.

The right is reserved to eliminate any size from the proposal or to accept the proposal for any sizes without the acceptance of the entire bid. The right is also reserved to reject any or all bids or to accept any bid or any portion of any bid which it may be deemed to the interest of the City of Springfield so to do.

H. M. KING,
Superintendent.

Springfield, Mass.
January 24. 1924.

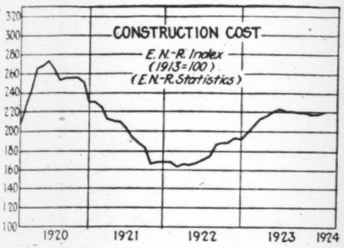
CONSTRUCTION NEWS

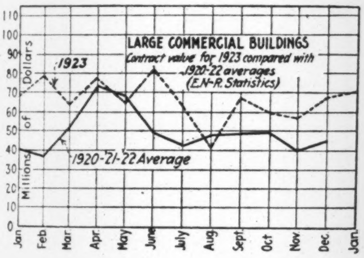
Engineering News-Record, February 14, 1924

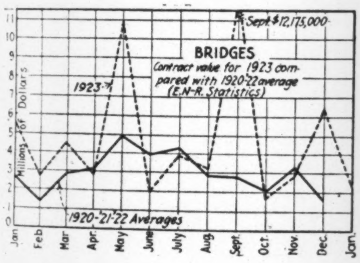
The Construction Barometer

Construction Cost Back to October, 1923, Level—Lower December Prices Stimulated Winter Building

THE decline in construction cost, in evidence at the beginning of the winter months, had its effect in a stimulated January building program. The actual physical volume of January construction, as shown by the Engineering News-Record Volume Index Number, was 3 per cent heavier than that for the preceding month. Construction cost, however, as shown by the E. N.-R. Cost Index Number, is now at precisely the same level as obtained in October, 1923, indicating that buying for early spring delivery, though conservative, is exerting a firming effect upon the materials market. The E. N.-R. Cost Index Number for October was 220.3, rising to 220.9 in November and dropping to 217.3 in December, 1923. The new year started with a rise of six-tenths of a point to 217.9 for January, with the February number returning to the 220.3 level.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Jan. 24	$12,455,000	$13,457,000	$25,912,000
Jan. 31	8,013,000	25,998,000	34,011,000
Feb. 7	7,708,000	20,266,000	27,974,000
3 weeks	$28,176,000	$59,721,000	$87,897,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

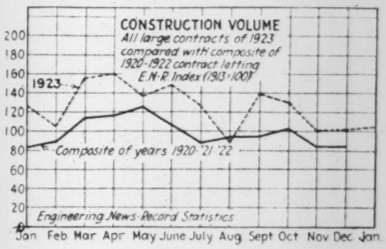
Week Ended	No.	Public Work	No.	Private Work
Jan. 24	12	$5,710,000	26	$6,476,000
Jan. 31	5	1,704,000	35	16,119,000
Feb. 7	13	4,530,000	27	12,4[illegible],000
3 weeks	30	$11,944,000	88	$35,090,000

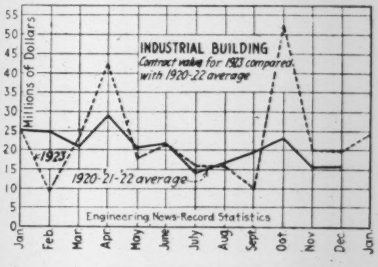
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

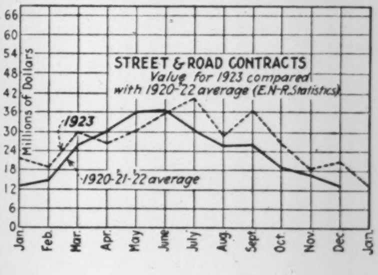
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Jan. 24	39	205	55	31	66
Jan. 31	44	195	46	37	63
Feb. 7	40	192	42	40	56

PINE, CEMENT AND STEEL FIRMER DURING LAST THREE WEEKS

	Quoted on Feb. 14 at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.40 @2.50	$2.35 @2.50	Feb. 7
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	61.00	60.00	Jan. 24
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.54	.53	June 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb. 16	Wilmington, N. C.	Feb. 14
Feb. 18	Bedford, Ind.	Jan. 31
Feb. 18	Casper, Wyo.	Feb. 7
Feb. 18	Festus, Mo.	Feb. 14
Feb. 18	Minneapolis, Minn.	Feb. 14
Feb. 19	Bloomington, Ind.	Jan. 24
Feb. 19	Corsicana, Tex.	Jan. 24
Feb. 19	Woodbury, N. J.	Feb. 7
Feb. 19	Brooklyn, N. Y.	Feb. 14
Feb. 20	San Francisco, Calif.	Jan. 24
Feb. 20	Goldsboro, N. C.	Jan. 31
Feb. 20	Phillip, Wis.	Jan. 31
Feb. 20	Hammond, Ind.	Jan. 31
Feb. 20	San Francisco, Calif.	Feb. 14
Feb. 20	Dayton, O.	Feb. 14
Feb. 21	Phila., Pa.	Feb. 7
Feb. 21	Palmyra, N. Y.	Feb. 7
Feb. 22	Smithfield, N. C.	Jan. 31
Feb. 25	Springfield, Mass. Adv. Feb. 14.	Feb. 14
Feb. 28	Buffalo, N. Y.	Feb. 7
Mar. 3	Wanaque, N. J. Adv. Feb. 14.	Feb. 14
Mar. 4	Gloversville, N. Y.	Jan. 31
Mar. 18	Mount Prospect, Ill. Adv. Feb. 14.	Feb. 14

SEWERS

Bids Close		See Eng. News-Record
Feb. 19	Lyndonville, N. Y.	Jan. 31
Feb. 19	Phila., Pa.	Feb. 14
Feb. 19	Edenton, Tex.	Feb. 14
Feb. 20	Russellville, Ala.	Feb. 14
Feb. 20	Brooklyn, N. Y.	Feb. 14
Feb. 21	Ashtabula, O. Adv. Feb. 14.	Feb. 14
Feb. 23	Lima, O. Adv. Feb. 7 and 14.	Feb. 7
Feb. 25	Richmond, Va.	Feb. 14
Feb. 27	Mobile, Ala. Adv. Jan. 31 to Feb. 14.	Feb. 7
Feb. 28	Milwaukee, Wis.	Feb. 14
Feb. 29	Wash., D. C.	Feb. 7
Mar. 3	Syracuse, N. Y. Adv. Feb. 7 and 14.	Feb. 14

BRIDGES

Bids Close		See Eng. News-Record
Feb. 19	Phila., Pa.	Feb. 14
Feb. 20	New York Adv. Jan. 17 to Feb. 14.	Jan. 17
Feb. 20	Tahlequah, Okla.	Feb. 7
Feb. 21	Missouri	Feb. 14
Feb. 25	Alabama	Feb. 7
Feb. 26	Nebraska	Feb. 14
Feb. 26	Florida	Feb. 14
Feb. 27	Austin, Minn.	Feb. 7
Feb. 28	Houston, Tex.	Feb. 7

Bids Close		See Eng. News-Record
Mar. 3	St. Paul, Minn. Adv. Jan. 24 to Feb. 14.	Jan. 24
Mar. 10	St. Anne de Bellevue, Que.	Jan. 31
May 1	**Tientsen, North China**	**Oct. 11**

DAMS

Mar. 1	Kingston, Jamaica — West Indies	Feb. 7
Mar. 6	Newark, N. J. Adv. Feb. 14.	Feb. 14

RAILWAYS

Mar. 18	**New Zealand**	**Sept. 20**
Apr. 1	Indiana	Jan. 24

EXCAVATION, DRAINAGE IRRIGATION

Feb. 18	Tampa, Fla. Adv. Jan. 24 to Feb. 14.	Jan. 24
Feb. 19	Gormer, Ia.	Feb. 14
Feb. 25	Kingston, Pa.	Feb. 7
Feb. 26	Redwood Falls, Minn.	Feb. 14
Mar. 11	Glens Falls, N. Y. Adv. Feb. 14.	Feb. 14

STREETS AND ROADS

Feb. 15	New York, N. Y.	Feb. 7
Feb. 18	New Philadelphia, O.	Jan. 24
Feb. 18	Phila., Pa.	Feb. 14
Feb. 18	Oklahoma City, Okla.	Feb. 14
Feb. 19	St. Louis, Mo.	Jan. 24
Feb. 19	Morristown, N. J.	Feb. 7
Feb. 19	Chickasha, Okla.	Feb. 14
Feb. 19	Omaha, Neb.	Feb. 14
Feb. 20	Brooklyn, N. Y.	Feb. 14
Feb. 20	Green Bay, Wis.	Feb. 14
Feb. 21	Louisiana	Feb. 14
Feb. 21	Bishopville, S. C.	Feb. 14
Feb. 21	Missouri	Feb. 14
Feb. 25	Daingerfield, Tex.	Feb. 7
Feb. 25	Verona, Pa.	Feb. 14
Feb. 25	Alabama	Feb. 14
Feb. 25	Los Angeles, Calif.	Feb. 14
Feb. 25	Electra, Tex.	Feb. 14
Feb. 25	Akron, O.	Feb. 14
Feb. 25	Williamson, W. Va.	Feb. 14
Feb. 26	Plymouth, Wis.	Jan. 31
Feb. 26	Greenville, Tex.	Feb. 7
Feb. 26	Bluefield, W. Va. Adv. Feb. 7 and 14.	Feb. 7
Feb. 26	Nebraska	Feb. 14
Feb. 26	Bay St. Louis, Miss.	Feb. 14
Feb. 26	Greenville, Wis.	Feb. 14
Feb. 27	Rio Grande, Tex.	Feb. 7
Feb. 27	Nebraska	Feb. 14
Feb. 28	Kenosha, Wis.	Jan. 17
Feb. 28	Nebraska	Feb. 14
Mar. 1	Tuscaloosa, Ala.	Jan. 31
Mar. 3	Alabama	Feb. 14
Mar. 4	Beaumont, Tex.	Feb. 7
Mar. 4	St. Louis, Mo.	Feb. 14
Mar. 6	Pennsylvania Adv. Feb. 14.	Feb. 14
Mar. 11	**Washington**	Jan. 10
Mar. 11	Antigo, Wis.	Feb. 7
Mar. 11	Fairport, N. Y. Adv. Feb. 14.	Feb. 14
Mar. 11	Corsicana, Tex.	Feb. 14
Mar. 18	Washington	Feb. 7

INDUSTRIAL WORKS

May 21	**Wellington, New Zealand**	**Jan. 10**

BUILDINGS

Bids Close		See Eng. News-Record
Feb. 15	Phila., Pa.	Feb. 14
Feb. 16	Baltimore, Md.	Jan. 31
Feb. 18	Wheaton, Ill.	Jan. 31
Feb. 18	Boston, Mass.	Feb. 7
Feb. 18	Davidson, N. C.	Feb. 14
Feb. 18	Columbus, O.	Feb. 14
Feb. 18	Richmond Hill, Ont.	Feb. 14
Feb. 19	Appleton, Wis.	Jan. 31
Feb. 19	Milwaukee, Wis.	Jan. 31
Feb. 19	Bluefield, W. Va.	Feb. 7
Feb. 19	Ashland, O.	Feb. 7
Feb. 19	Akron, O.	Feb. 7
Feb. 19	Highland Park (Detroit P. O.) Mich.	Feb. 14
Feb. 19	Brookline (Boston P. O.), Mass.	Feb. 14
Feb. 19	Mamaroneck, N. Y.	Feb. 14
Feb. 20	Irvington (branch of Newark), N. J.	Jan. 24
Feb. 20	Huntington, W. Va. Adv. Jan. 24 to Feb. 14.	Jan. 24
Feb. 20	Lecompte, La.	Feb. 7
Feb. 20	Bad Axe, Mich.	Feb. 14
Feb. 22	Smithfield, N. C.	Feb. 14
Feb. 25	Rome, N. Y. Adv. Jan. 31 and Feb. 14.	Jan. 31
Feb. 25	Amarillo, Tex.	Feb. 7
Feb. 25	Harrison, N. Y.	Feb. 14
Feb. 25	Brooklyn, N. Y.	Feb. 14
Feb. 25	Huntington, W. Va.	Feb. 14
Feb. 26	Brooklyn, N. Y.	Feb. 7
Feb. 26	Long Island City, N. Y.	Feb. 7
Feb. 26	Pawhuska, Okla.	Feb. 14
Feb. 27	Vermilion, S. D.	Feb. 7
Feb. 27	Redwood Falls, Minn.	Feb. 14
Feb. 27	Phila., Pa.	Feb. 14
Feb. 28	Phila., Pa.	Jan. 31
Feb. 29	Morris Plains, N. J.	Feb. 14
Mar. 1	Gilbert, Minn.	Feb. 7
Mar. 1	Akron, O.	Jan. 24
Mar. 1	Chattanooga, Tenn.	Jan. 31
Mar. 1	Annandale-on-Hudson, N. Y.	Feb. 14
Mar. 3	Rhinelander, Wis.	Jan. 31
Mar. 6	Elkhart Lake, Wis.	Feb. 14
Mar. 7	Brooklyn, N. Y.	Feb. 14
Mar. 7	New York, N. Y.	Feb. 14
Apr. 1	Duluth, Minn.	Feb. 7
Apr. 1	Atlantic City, N. J.	Feb. 7
May 1	Youngstown, O.	Feb. 7

FEDERAL GOVERNMENT WORK

Feb. 18	Steel Form and Coffer Rods—Addison, Ky.	Feb. 14
Feb. 19	Soft Steel Bars—Owensboro, Ky.	Feb. 14
Feb. 20	Cement—Milwaukee, Wis. Adv. Jan. 24 to Feb. 14.	Jan. 24
Feb. 20	Steel Bars — Milwaukee, Wis. Adv. Jan. 24 to Feb. 14.	Jan. 24
Feb. 23	Steel Barges—Florence, Ala. Adv. Feb. 7 and 14.	Feb. 7
Feb. 25	Laundry—American Lake, Wash.	Jan. 24
Feb. 25	Dredging—Plymouth, Mass. Adv. Jan. 31 to Feb. 14.	Jan. 31
Feb. 25	Dredging—Chelsea, Mass.	Feb. 7
Feb. 26	Water Piping, etc.—Phila., Pa	Jan. 31
Feb. 27	Barrack — Puget Sound, Wash.	Jan. 31
Feb. 28	Steel Boat Hull—Huntington, W. Va. Adv. Jan. 31 to Feb. 14.	Jan. 31
Feb. 28	Dump Scow—Duluth, Minn. Adv. Jan. 31 to Feb. 14.	Jan. 31
Mar. 1	Turbines—Florence, Ala. Adv. Jan. 17 to Feb. 14.	Jan. 17
Mar. 1	Hospital Ward—Fort Sill, Okla. Adv. Feb. 7 and 14.	Feb. 7
Mar. 3	Dredging—Galveston, Tex. Adv. Feb. 7 and 14.	Feb. 7
Mar. 3	Boats—Wash., D. C. Adv. Feb. 7 and 14.	Feb. 7
Mar. 4	Dredging—Providence, R. I. Adv. Feb. 7 and 14.	Feb. 7
Mar. 4	Switchboard Apparatus — Florence, Ala.	Feb. 7
Mar. 10	Stone—Humboldt Bay, Calif.	Jan. 24
Mar. 22	Generators—Florence, Ala.	Feb. 14
Mar. 28	Ice and Refrigerating Plant —Livermore, Calif. Adv. Feb. 14.	Feb. 14

UNCLASSIFIED

Feb. 15	Borings—New York	Feb. 7
Feb. 15	Shaft Superstructure—New York, N. Y.	Feb. 7
Feb. 21	Bulkhead—Bayonne, N. J. Adv. Feb. 14.	Feb. 14
Feb. 21	Retards—Missouri	Feb. 14
Feb. 23	Dike, Bulkhead, etc. — Plymouth, Mass. Adv. Feb. 7 and 14.	Feb. 7
Feb. 25	Sea Wall, Dock and Sewer—New Haven, Conn.	Jan. 31
Feb. 28	Stadium—Erie, Pa.	Feb. 14
Mar. 11	Rip Rap—Scotia, N. Y. Adv. Feb. 14.	Feb. 14
Mar. 15	Steel Hull, etc.—Portland, Ore. Adv. Feb. 14.	Feb. 14
Mar. 31	**Hopper Dredge — Brisbane, Queensland, Australia**	**Nov. 1**
Apr. 30	**Headworks—Wellington, New Zealand**	**Dec. 13**

MATERIAL AND EQUIPMENT

Feb. 15	Steam Rollers—New York, N. Y.	Feb. 7
Feb. 18	Curbstone—Detroit, Mich.	Feb. 14
Feb. 19	Road Maintenance Equipment —Texas	Feb. 7
Feb. 19	Ladders, Fir, Valves, etc.—St. Paul, Minn.	Feb. 14
Feb. 20	Portable Road Repair Outfit —Chicago, Ill.	Feb. 7
Feb. 20	Pipe—Harrisburg, Pa.	Feb. 14
Feb. 20	Fibre Conduit—Baltimore, Md.	Feb. 14
Feb. 20	Steam Roller—West New Brighton, N. Y.	Feb. 14
Feb. 21	Lumber and Steel—Sac City, Ia.	Feb. 14
Feb. 25	Hoisting Machinery and Equipment—Ft. Wayne, Ind.	Feb. 7
Feb. 25	Road Graders—Houston, Tex.	Feb. 14
Feb. 26	Supplies—Toronto, Ont.	Feb. 7
Mar. 3	Gravel Pit Machines — Manitowoc, Wis.	Feb. 14
Mar. 11	Freight Handling Equipment —Tampa, Fla.	Feb. 14
Mar. 19	Tractor—Benson, Minn.	Feb. 7

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Fla., Daytona—See "Sewers."

Mich., Detroit—G. H. Fenkell, W. C. Hoad, C. W. Hubbell, T. A. Leisen and G. S. Williams, submitted a report to Bd. Water Comrs., East Jefferson Ave., recommending immediate development of new supply of 300 m.g. per day, to be taken from American channel of Detroit River at head of Belle Isle, then carried by gravity tunnels through city, at first to one, and finally to two new distributing stations, one in western and one in northwestern section of city, there to be filtered and delivered into mains. The Commission further recommends certain alterations at Jefferson Ave. Sta. to bring its output up to maximum point consistent with economical and effective operation, together with additions to distribution system required to deliver this increased output. Estimated cost of construction recommended $33,584,000.

Wis., Fond du Lac—Bd. Pub. Wks. soon takes bids 10,500 lin.ft. c.i. water pipe. G. H. Stanchfield, City Hall, engr.

Wis., Hurley—Rejected bids opened Nov. 13, water purification plant and pumping station at Lake Lavina. Now studying feasibility of deep wells as water supply source and will take new bids about Mar. 2. $60,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, engr. Noted Nov. 29.

Wis., Lancaster—See "Sewers."

Wis., Wauwatosa — See "Streets and Roads."

Ia., Des Moines — Plans extension to water plant, about 5,000 lin.ft. increase in galleries, feeder mains, pipe extension, meters, tools, etc. $350,000. K. C. Kostberg, city engr.

Minn., International Falls—Plans filtration plant. $25,000. J. Crossdale, clk.

Tex., Dennison—Plans dam at Waterloo Lake, settling basin at Randall and main extensions. $50,000. C. E. Hayden, city engr.

Tex., Irving—Making plans complete system. $25,000. Eng. Service Co., 1813½ Main St., Dallas, engrs.

Tex., Howe—Voted $17,500 bonds waterworks additions. Noted Jan. 10.

Okla., Guymon — Having surveys made new water plant on Beaver Creek, incl. pumping equipment, and 10,000 ft. 8 in. c.i. pipe. $25,000. Engineer not selected.

Okla., Heavener—Election soon to vote on $150,000 bonds new water supply, incl. filtering and pumping plants, storage reservoir and pipe line. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 6.

Okla., Nowata—Voted $75,000 bonds new filter plant, pumping equipment, pipe line and fire trench. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., engrs. Noted Feb. 7.

Calif., Los Angeles — See "Industrial Works."

Ont., Ottawa — Bd. Control soon takes bids new pumping plant at Lemieux Island Sta. $15,000. A. F. Macallum, city engr.

Ont., Ottawa—Plans 4 mi., new mains and services, 20,000 ft. mostly 6 in. c.i. pipe, c.i. specials, hydrants, etc. $70,000. A. F. Macallum, city engr.

Ont., Toronto — Plans to extend water distribution system, 70,000 ft. 6 in. c.i. mains, hydrants, meters, etc. $274,300. R. C. Harris, city engr.

Ont., Toronto—Plans to install two 20 m.g. electric pumps at filtration plant. $31,580. R. C. Harris, city engr.

Ont., Welland — Had preliminary plans prepared waterworks systems, incl. c.i. mains, steel pipe, electric pump, filters, reservoir, elevated tank, etc. $600,000 to $700,000. Wells-Chipman, Mail Bldg., Toronto, engrs.

Ont., Woodstock—Plans to connect waterworks system with newly acquired springs at Sweaburg, incl. 6,000 ft. c.i. mains, 6 in. up, etc. $25,000. F. J. Ure & Sons, Woodstock, engrs.

BIDS DESIRED

Mass., Armory (Springfield P. O.)—Feb. 25, by Bd. Water Comrs. of Springfield. Municipal Water Wks., Municipal Bldg., one hundred and twenty-five 8-in. and fifteen 12-in. valves, double bell. H. M. King, supt.; adv. E. N.-R. Feb. 14.

Waterworks (Continued)

N. Y., Brooklyn—Feb. 19, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Stillwell and Warehouse Aves., West 5th, 6th, 8th, 10th, 12th, 15th, 16th, 19th, 21st, 23rd to 33rd inclusive, 35th, 36th and 37th Sts., here.

N. J., Wanaque—Mar. 3, by Boro Council, Boro Hall, water distribution system and reservoir. Runyon & Carey, 845 Broad St., Newark, engrs.; adv. E. N.-R. Feb. 14.

N. C., Wilmington — Feb. 16, at City Hall, approximately 108 tons 6 in. and 96 tons 8 in. Class C standard c.i. bell and spigot pipe, 6 tons 6- and 8-in. Class C, standard c.i. fittings, thirty 6 in. and four 8 in. iron body, bronze mounted, hub end single wedge gate valves, 17 fire hydrants with 6 in. connection, 4 ½ in. valve opening, 3 ft. depth bury, one 4 in. and two 2½ in. nozzles with Wilmington thread, for Water & Sewerage Dept. R. C. Cantwell, comr. Pub. Wks.

O., Dayton—Feb. 20, by Comrs. Montgomery Co., water supply system to be constructed in Overlook Sanitary Sewer Dist., 49,445 ft. 4- to 12-in. Class B c.i. pipe, 48,995 ft. 0-6 ft., 6-8 ft. and 8-10 ft. trench, etc.; in Belmont Sanitary Sewer Dist., section south of Watervliet Ave., 48,040 ft. 4- to 12-in. Class B c.i. pipe, 48,040 ft. 0-6 ft., 6-8 ft., 8-10 ft. and 10-12 ft. trench, etc.; in Belmont Sanitary Sewer Dist., section north of Watervliet Ave., 47,575 ft. Class B c.i. pipe, 44,575 ft. 0-6 ft., 6-8 ft., 8-10 ft. and 10-12 ft. trench, etc. $250,000. K. B. Allen, 401 Keith Bldg., engr.

Ill., Mt. Prospect—Mar. 18, by village, water mains, H. Ehart, clk. Consoer, Older & Quinlan, Inc., Marquette Bldg., Chicago, consult. engrs.; adv. E. N.-R. Feb. 14. Noted Dec. 13.

Minn., Minneapolis—Feb. 18, by F. S. Gram, city purch. agt., furnishing approximately 126 tons reinforcing steel for Water Dept. N. W. Elsberg, city engr.

Mo., Festus—Feb. 18, by C. W. Griffin, city clk., drilling 2 wells. This is first step toward construction of $175,000 waterworks and distribution system. J. P. Davis, Jefferson City, engr. Noted Dec. 6.

Wis., Tomah—Making plans 50,000 gal. steel water tank, 100 ft. steel tower, 460 ft. well, centrifugal pump, 300 g.p.m., engine and motor driven. $15,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Tex., Dublin—D. H. Kiker, city secy., taking bids several miles mains, miscellaneous ditching, etc. $15,000. G. Anderson, Dublin, engr. Noted Sept. 13.

Calif., San Francisco—Feb. 20, by Bd. Pub. Wks., two 42-in., one 36-in. and four 20-in. gate valves for Hetch Hetchy Water Supply, for City and San Francisco Co. Bids will be taken for any one or all items. M. M. O'Shaughnessy, city engr.

Ont., Goderich—W. T. Murney, chn. com., extending intake pipe, 1,200 ft. c.i. and 1,300 ft. steel pipe, to Federal Constr. Co., Toronto, $52,750. Noted Jan. 24.

BIDS RECEIVED

O., Lorain—For 3 filter beds and clear water basin, from Ohio Eng. Co., 647 Bway., $30,342.

Tex., Dallas—Pumps in Oak Cliff Pumping Station from Amer. Well Works, 703 Jackson St., $11,014 and $13,219, Smith & Whitney, 2507 Commerce St., $11,575 and $12,280; motors from Westinghouse Electric Co., Magnolia Bldg., $2,462, $2,587, $2,628 and $2,768. Noted Jan. 31.

CONTRACTS AWARDED

N. J., Beach Haven—A. P. King, boro clk., 1 air compressor, to Sullivan Mchy. Co., 30 Church St., New York City, $1,918; 2 horizontal motor driven centrifugal water lift units and 2 vertical motor driven centrifugal sewage lift units, to W. H. Eagan & Co., Stephan Girard Bldg., Phila., $1,789 and $1,723 respectively; pipe lines, sewage pump pit and building, to F. H. Crammer, Beach Haven, $4,461. Noted Jan. 24.

Pa., Shamokin — Roaring Creek Water Co., addition to No. 6 reservoir increasing capacity from 600 m.g. to 1,400,000,000 gal. also 5 m.g. rein.-con. reservoir, to Gannett, Seelye & Fleming, 204 Locust St., Harrisburg, $300,000.

N. C., Wilkesboro—Water supply system, to W. A. Ebert, Latta Arcade, Charlotte, $35,716.

O., Cleveland—Stange—Walsh Co., (contractors), 2315 Fairmount Rd., sub let contract for superstructure of 1 story, 130 x 790 ft., brick and steel filtration plant, Baldwin Rd., to Hunkin-Conkey Constr. Co., Hunkin-Conkey Bldg., for City of Cleveland. Noted Nov. 15.

Minn., Little Falls—Elevated steel water tank, 200,000 gal. capacity, to Chicago Bridge & Iron Wks., 37 West Van Buren St., Chicago, $20,850; 1,600 ft. 6-in., 1,000 lin.ft. 8-in. and 2,000 lin.ft. 12-in. c.i. pipe, 7 gatevalves to U. S. Cast Iron Pipe Co., 122 South Michigan Ave., Chicago, $3,382; electric-driven pump to Allis-Chalmers Mfg. Co., 122 South Michigan Ave., Chicago, $1,515.

Minn., St. Peter—Steel tank, 75 ft. high, 51 ft. diam., to Chicago Bridge & Iron Wks., 37 West Van Buren St., Chicago, $23,450. Noted Dec. 6.

Ark., Clarksville—Waterworks improvements, to Woodward Constr. Co., Ponca City, Okla., $14,977.

Colo., Denver—For 22,000 ft. 36 in. Class B c.i. main from Federal Blvd. and West 2nd Ave. to Ashland Ave. Reservoir, to J. Everett Young Constr. Service, 1267 South Race St., $2.37 per lin.ft., additional for loose rock $2 for solid rock $5, total $52,140 (date completion May 1, 1924). Noted Jan. 17.

California, Nevada and Utah—Western Pacific R.R. Co., Mills Bldg., San Francisco, appropriated $6,000,000 for 1924 improvements, portion of which will finance reballasting and laying new tracks on lines between Oakland, Calif. and Salt Lake City, Utah, replacing track on Loyalton branch with 70 lb. rail, depots, shops, yards, etc., at various points in California, Nevada and Utah; steel and concrete bridges to replace present wooden structures at Oroville, Calif., to exceed $25,000. J. W. Williams, ch. engr.

Sewers

PROPOSED WORK

Fla., Daytona—Having surveys made extension to sewers, water mains, paving and new sea wall. $600,000. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs.

Ky., Mayfield—Plans new sewerage system. To exceed $25,000. W. H. Brizendine, mayor.

O., Massillon—Stark Co. (Canton) plans sanitary sewerage system in large area southwest of here. $150,000 or more. Engineer not selected.

Mich., Flint—Election in spring to vote on $2,000,000 bonds for completion intercepting sewer, disposal plant, pumping station and force mains.

Wis., Lancaster—Making plans rebuilding 2 disposal plants and installing 500 g.p.m. motor and high speed industrial engine in waterworks plant. $25,000. W. G. Kirchogger, Dean Bldg., Madison, engr.

Wis., Wauwatosa — See "Streets and Roads."

Kan., Scandia—Soon takes bids grading and installing 12,175 ft. 8-in., 340 ft. 10-in. and 1,648 ft. 12-in. vitr. clay sewer, inlets, etc. $25,000. E. T. Archer & Co., New England Bldg., Kansas City, engr.

Kan., Hays—Having preliminary plans prepared 4,230 ft. cement block storm sewer. $54,000. A. W. Seng, city mgr.

Mo., St. Louis—Plans repairing and reconstructing worn out sewers $140,000, constructing Sect. B of River Des Peres sewer, $485,000. W. W. Horner, city engr.

Tex., Dallas—Election in April, $100,000 bonds, sanitary sewer extensions. E. A. Kingsley, city engr.

Okla., Newkirk—Plans 18,000 ft. sanitary lateral sewers. $25,000. H. E. Musson, Grain Exch. Bldg., Oklahoma City, engr.

California — Cities of Anaheim, Brea, Fullerton, Orange and Santa Ana plan joint outfall sewer. City of Brea's cost will run about $100,000. R. W. Phelps, engr. for city of Brea.

Calif., Claremont—Plans to vote on $30,000 bonds sewerage system and disposal plant.

Calif., La Habra—La Habra Sanitary Dist. having plans prepared Elrod process sewerage system and treatment plant. To exceed $75,000. Elrod Eng. Co., Mills-Fraser Bldg., Santa Monica, engrs.

Ont., Toronto—Plans to expend $59,903 for sewers, $11,316 for penstock gales, $27,738 for low level interceptor, $7,526 for new Humus tanks for North Toronto and balance for alterations to various plants. R. C. Harris, city engr.

Ont., Toronto—Plans to expend $1,625,150 for sewers this year, incl. new sanitary and storm sewers of tile, brick, concrete and blocks; also $104,000 for sewage disposal and pumping stations and several new pumps. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—Feb. 20, by E. Riegelmann, boro pres., Boro Hall, manhole heads to Bureau of Sewers, also sewers in Empire Blvd., New Utrecht, Vandevoort and Hegeman Aves., East 9th, East 18th, East 7th, West 4th, 69th, Douglass and Junius Sts.

N. Y., Syracuse—Mar. 3, at office of Syracuse Intercepting Bd., 104 City Hall, bar screens and raking equipment, Contr. 41; machinery and equipment for sludge pumping station, Contr. 42; exterior wiring and lighting for sewage pumping works, Contr. 43; transformer sub-station Contr. 44; adv. E. N.-R. Feb. 14.

Pa., Phila.—Feb. 19, by Dept. Pub. Wks., Bureau Surveys, removing old sewer and building new sewer in Courtland St., 40,000 cu.yd. excav., 1,268.35 ft. of 15 ft. brick sewer, 11,000 ft. yellow pine piles in place, etc. $300,000. G. H. Biles, dir. pub. wks.

Va., Richmond—Feb. 25, at office A. J. Saville, dir. Pub. Wks., segment block, terra cotta pipe and precast rein.-con. sewers. $725,000.

N. C., Edenton—Feb. 19, by E. I. Warren, mayor, 4,400 ft. storm swer and appurtenances, 12-36 in. terra cotta and concrete pipe. $25,000. Blair & Drane, Commercial Bldg., Charlotte, engrs.

Ala., Russellville—Feb. 20, by W. R. Ramsay, mayor, 9 mi. 8- to 15-in. sanitary sewers, etc. R. L. Totten, B-M Bldg., Birmingham, consult. engr.

O., Akron—See "Streets and Roads."

O., Ashtabula—Feb. 21, at office of W. M. Cotton, city mgr., submerged outfall and river crossing, Contr. L. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.; adv. E. N.-R. Feb. 14.

Wis., Milwaukee — Feb. 23, by J. H. Fowles, secy. Metropolitan Sewerage Comn., of Milwaukee Co., sewer extensions in Lake St. from 35th to 27th Sts. incl. 2,719 lin.ft. 15- to 18-in. terra cotta pipe, etc.; in Jackson Dr., Oklahoma, 26th and Western Aves. and in right-of-way to Pabst Ave., 3,717 lin.ft. 42 in. concrete sewer in tunnel, 3,102 lin.ft. 36 in. concrete sewer (1,405 ft. in tunnel), 2,666 lin.ft. 30 in. concrete sewer (1,600 ft. in tunnel), 608 vertical ft. standard manholes, 22 vertical ft. drop man holes. T. C. Hatton, c/o owner, engr.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co., Jan. 30, trunk sewer in State Rd. Impvt. 10, from Gantose Constr. Co., Columbia Bldg., $297,767 (250 days). Noted Jan. 31.

Minn., St. Paul — H. W. Austin, city purch agt., Jan. 29, sewers in West 7th St. from Palmer St. to Albion Ave., 789 ft. 4-ft. and 75 ft. 36-in. sewer, 1,364 ft. 15- to 21-in. vitr. sewer pipe, 135 ft. Sect. A sandrock tunnel, manholes, drop shaft and catchbasins, from O'Neil & Preston, 608 Exch. Bank Bldg., $28,350. Noted Jan. 24.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, Feb. 5, 505 ft. 10 and 12 in. vitr. clay sewer in Clifton Heights Sewer 4, from Riley Bros. Contg. Co., International Life Bldg., $2,251, engrs. est. $3,000; 6,505 ft. 8- to 27-in. vitr. clay and 1,725 ft. 36- to 66-in. brick in concrete or 2 ring segmental block sewer in Glaise Creek Sewer Dist. 19, also 1,065 ft. 8- to 21-in. vitr. clay sewer in Glaise Creek 23, from Higgins-Wall-Dyer Constr. Co., International Life Bldg., $46,943 and 3,725 respectively, engrs. est. $47,510 and $3,920 respectively; 2,100 ft. 12- to 24-in. vitr. clay sewer in Glaise Creek 24, from Hogan Constr. Co., 2120 Harris Ave., $7,789, $9,400. Noted Jan. 10.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers across Queens Blvd. intersecting various streets, to F. L. Paino, 572 1st St., Brooklyn, $224,543; Patterson Ave., to Necaro Co., Inc., 97 Court St., Brooklyn, $756,404; Astoria Ave., to J. Gallo, 203 Division St., Brooklyn, $19,800. Noted Jan. 17.

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Melville St., to M. Del Balso, 660 East 221st St., $48,151; Sedwick Ave., to F. Gabriel, $23,365. Noted Feb. 7.

Minn., Hibbing — Additions to sanitary sewers in South Hibbing, to Schirmer Bros., Hibbing, $50,707.

Ark., Clarksville — See "Streets and Roads."

Ark., Ft. Smith — Sanitary sewers in Impvt. Dist. 4, to Benson & Farrar, Ft. Smith, $36,438. Noted Feb. 7.

Calif., Long Beach — Santa Fe Storm Drain, portions Bennett, 7th, 6th, 10th Sts., etc., rein.con., to G. W. Kemper, Alhambra, $83,000. Noted Feb. 7.

Bridges

PROPOSED WORK

Fla., Jacksonville — Having plans prepared two rein.-con. bridges, steel draw spans, about 1,600 ft. long. $450,000. Harrington, Howard & Ash, 1000 Orear Leslie Bldg., Kansas City, Mo., engrs. Noted Jan. 3.

Kentucky—State Hy. Dept., Frankfort, plans 220 ft., 3 span steel superstructure, concrete substructure, over Licking River, and 80 ft. steel span, concrete substructure, over White Oak Creek, State Project 28, Morgan Co. J. S. Boggs, state highway engr.

Kan., Parsons—See 'Streets and Roads."

S. D., Chamberlain — State Hy. Dept., Pierre, plans 1,472 ft. high truss bridge over Missouri River, here, Federal Aid Project 165.

Tex., Cameron—Milam Co. making plans bridges over Little River ¼ mi. north of present McCown Bridge, 2 concrete piers, 2 structural steel spans, etc. $100,000. A. F. Mitchell, co. engr.

Tex., Greenville — See "Streets and Roads."

Tex., Houston — Making plans bridge over Brays Bayou in Hannann Park. $25,000. J. C. McVea, city engr.

Wash., Tacoma — City and Pierce Co. having plans prepared and soon take bids 11th St. Bridge over Hylebos Waterway. $120,000. Strauss Bascule Bridge Co., 225 North Michigan Ave., Chicago, engrs. Noted Dec. 6.

California — State Hy. Comn., Sacramento, having plans prepared bridge over San Joaquin River to replace present Mossdale Bridge. Work includes elimination grade crossings under Southern Pacific R.R. tracks. To exceed $175,000. R. M. Morton, state highway engr.

Calif., Oroville—See "Railways" under California, Nevada and Utah.

Calif., San Jose—Having plans prepared rein.-con. bridge over Los Gatos Creek. $45,000 to $50,000. H. J. Brunnier, Sharon Bldg., San Francisco, consult. engr.

Ont., Lambton Mills—York Co., 57 Adelaide St. E., Toronto, plans 750 ft. steel bridge with 4 arches, 48 ft. roadway, and two 6 ft. sidewalks, over Humber River, here. $430,000. E. A. James, 57 Adelaide St. E., Toronto, engr.

BIDS DESIRED

Pa., Phila.—Feb. 19, by Dir. Pub. Wks., 216 City Hall, completing bridge at 40th St. over Pennsylvania R.R. tracks, floor and approaches. $110,000.

Florida—Feb. 26, by State Rd. Dept., Tallahassee, constructing bridges on following: Project 35 A, Rd. 4, three 24 ft. rein.-con. spans; Project 620, Rd. 4, two 24 ft. rein.-con. spans, or three 15 ft. treated timber spans, foregoing in St. Lucie Co.; Project 608, Rd. 4, Brevard Co., one 24 ft. and one 20 ft. rein.-con. spans, or two 15 ft. treated timber spans. J. L. Cresap, state highway engr.

Miss., Bay St. Louis—See "Streets and Roads."

Nebraska—See "Streets and Roads."

Nebraska—Feb. 26, by State Dept. Pub. Wks., Lincoln, 40 ft. through girder span bridge, 20 ft. roadway, at Sta. 510 plus 00 near Elmwood, on Federal Aid Project 153-C, Cass Co., 22,800 lb. reinforcing, 261 yd. concrete, etc., $28,000, also one 100 ft. and two 50 ft. pony trusses on Federal Aid Project 161, Saline Co., $64,000. R. L. Cochrane, Brownell Bldg., Lincoln, state engr.

Missouri—Feb. 21, by State Hy. Dept., Jefferson City 20 ft. rein.-con. slab span, etc. over stream, Wright Co.; three 25 ft. rein.-con. deck girder spans, etc., over Elk Fork, Randolph Co.; three 20 ft. rein.-con. slab spans, 2 concrete piers, etc., over Little Loose Creek, Osage Co.; one 40 ft. and two 30 ft. rein.-con. deck girder spans, 2 concrete piers, etc. over Macks Creek, and three 20 ft. rein.-con. slab spans and 4 rein.-con. bents, over Holder Branch, Camden Co. B. H. Piepmeier, state highway engr.

Tex., Greenville — See "Streets and Roads."

BIDS RECEIVED

North Carolina — State Hy. Dept., Raleigh, **(S. P. means State Project)**, rein.-con. bridges and culverts on S. P. 472-B, Vance Co., from J. A. Marrow, Clarksville, Va., $38,973; S. P. 720, Caldwell Co., from H. H. Sherrill, Winston-Salem, $35,572; over Yadkin River on S. P. 610, Anson and Richmond Counties, from Hardaway Contg. Co., 909 Elizabeth Ave., Charlotte, $286,660; over Deep River on S. P. 404-C, Chatham Co., from Yadkin Constr. C.., Albemarle, $66,989. Noted Jan. 31, under "Buildings."

CONTRACTS AWARDED

Pa., Phila. — Philadelphia & Reading R.R., Reading Terminal, 324 ft. concrete trestle, Richmond St., Pier 18, to Snare Corp., 1524 Chestnut St. Noted Jan. 24.

Minn., Duluth—St. Louis Co., Bridge O.-2-26-1 on Shagawa Lake Rd., 75 ft. truss with standard abutments, 18 ft., to W. Gianati, Ely, $6.152; Bridge M. Y.-M.-6-26-1 on Pike River Rd., 165 ft. truss, 18 ft. wide, to Guaranty Constr. Co., 305 Essex Bldg., Minneapolis, $12,770; Bridge D. T. 5-16-1 on Roy Rd., 250 ft. long, and Bridge L.I-28-1 on Sturgeon Lake Rd., 60 ft. truss, to Chernus Constr. Co., 714 Plymouth Bldg., Minneapolis, $14,870 and $6,841 respectively. Noted Jan. 24.

Wyoming—State Hy. Comrs., Cheyenne, 21 small timber trestle bridges, small spans, (timber furnished by state), on Kemmerer-Marbleton Rd., to J. F. Turpin, Wheatland, $19,304. Total cost $60,000. Noted Jan. 31.

Idaho—Bureau of Highways, Boise City, 110 ft. concrete arch and 110 ft. concrete trestle (states design), across Coeur d'Alene River, Federal Aid Project 64-C, to Ryberg, McHugh & Cowley, Wallace, $19.473 and $9,154 respectively.

Calif., Los Angeles — See "Streets and Roads."

Calif., Weitchpec—Humboldt Co. (Eureka), reconstructing cable suspension bridge over Klamath River, here, incl. steel truss span, 385 ft. long, steel towers, to Padgett & Kelly, Eureka, $24.379. Noted Jan. 31.

Ont., Pembroke—Town Council, bridge over Muskrat River on St. Marys St., to Ontario Bridge Co., Crown Office Bldg., Toronto, $29,680.

Ont., Toronto—City will repair and maintain bridges and level crossings, incl. concrete work, paving, painting, etc., by day labor. $129,845. R. C. Harris, city engr.

Dam

PROPOSED WORK

Tex., Dennison—See "Waterworks."

Calif., Los Angeles — See "Industrial Works."

Que., Metis Lake — Quebec Streams Comn., Montreal, plans reservoir dam, here. $150,000. O. Lefebvre, 59 Notre Dame St., Montreal, engr.

BIDS DESIRED

N. J., Newark—Mar. 6, by North Jersey Dist. Water Supply Comn. of New Jersey, 20 Clinton St., Wanaque Dam. A. H. Pratt, ch. engr. M. R. Sherrerd, consult. engr.; adv. E. N.-R. Feb. 14.

Railways

PROPOSED WORK

West Virginia—See "Industrial Work" under Bluefield.

Kentucky—See "Industrial Works" under Whitesburg.

Kansas and Nebraska—Golden Belt R.R. Co., Hays, Kan., having preliminary plans prepared standard gauge railroad, using 60-lb. rails, macadam and gravel ballasted roadbed, first section, from Great Bend to Plainville, 70 mi.; second section from Plainville, Kan., to Republican Junction, Neb., 80 mi. $300,000 up. H. Freese Hays, Kan., engr.

Texas — See "Industrial Works" under Jacksonville.

Texas—Houston & Texas Central R.R. operated by Southern Pacific Lines, Southern Pacific Bldg., Houston, had plans prepared creating industrial district over area of 40 blocks, 16 mi. industrial trackage, at Dallas. $3,000,000. H. M. Lull, Houston, ch. engr. Texas lines.

California—See "Unclassified" under San Francisco.

Ontario—Toronto Transportation Comn., Ryrie Bldg., Toronto, plans double track electric street railway loops at Sherbourne and Parliament Sts., Toronto, 100 lb. rails, etc. $150,000. H. H. Couzens, ch. engr.

CONTRACTS AWARDED

North Carolina—Atlantic Coast Line Ry., Atlantic Coast Line Bldg., double tracking 27 mi. from Pembroke to Lotta, to Cornell-Young Co., 4th Natl. Bank, Macon, Ga.

Oregon—Southern Pacific R.R. Co., 65 Market St., San Francisco, Calif., grading approximately 11 mi. section of Natron-Cut-Off from Summitt to Oakridge, and constructing 2,000 ft. tunnel, to Utah Constr. Co., Phelan Bldg., San Francisco. Noted Jan. 31.

Ontario—Canadian Natl. Ry., New Union Sta., Toronto, will lay 64 mi. new 100 lb. rails, 39,000 cu.yd. ballast and 100,000 new ties between Glencoe and Windsor, by day labor. $500,000. A. F. Stewart, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Ga., Albany—Dougherty Co. voted $100,000 bonds for drainage work.

BIDS DESIRED

Ia., Garner—Feb. 19, by Supervs. Hancock Co., cleaning out D. D. 6, Sect. 1 cleanout main ditch 55,000 cu.yd., Lateral 4, 9,200 cu.yd.; Sect. 2, 1,890 ft. 8- to 30-in. corrugated pipe, fifty-seven 6- to 15-in. intakes, 3 brick manholes, etc. J. D. Madison, aud.

Minn., Redwood Falls—Feb. 26, by L. P. Larson, aud. Redwood Co., County Ditch 64, Sect. 1, 21,500 lin.ft. main open ditch, 11,601 cu.yd. excav., $13,392; Sect. 2, 282,821 cu.yd. excav., $33,938; Sect. 3, 211,183 cu.yd. excav., $25,341; Sect. 4, 80,535 cu.yd. excav., $9,664; Sect. 5, 40,655 lin.ft. 6- to 32-in. drain tile, 27 concrete box inlets, 448 lin.ft. 12-in. corrugated iron pipe, etc., $32,443. F. H. Anthony, Redwood Falls, engr

BIDS RECEIVED

Calif., Long Beach — City, dredging waterway between Recreation Park and Alamitos Bay, incl. 2,000,000 cu.yd., from United Dredging Co., Centrol Bldg., Los Angeles, $0.1683 yd.

CONTRACTS AWARDED

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 5,657 ft. partially lined open channel, 40 ft. wide at bottom, 100 ft. at top, 20 ft. deep, closed sanitary sewer, 12- to 84-in. laterals, etc., for Sect. A, River Des Peres, to Higgins-Wall-Dyer Co., International Life Bldg., $324,452. Noted Feb. 7.

Ont., St. Catharines — J. W. Pugsley, secy. Dept. Rys. & Canals, Parliament Bldg., Ottawa, constructing Sect. 8, Welland Ship Canal, near Port Colborne, to A. W. Robertson Ltd. 260 St. James St., Montreal, Que., $10,528,215. Noted Jan. 17.

Streets and Roads

PROPOSED WORK

New York — State Hy. Dept., Albany, plans during 1924: 239.35 mi. new highways in 41 counties; reconstructing and resurfacing 297.19 mi. roads in 44 counties; surface treating 1,875.46 mi. roads in 57 counties. L. Grossman, highway comr.

N. Y., Syracuse—Sedgwick Farm Land Co., 401 Sunset Ave., making plans paving several streets, concrete or asphalt. A. G Card, civil engr.

N. Y., Tonawanda—Town Bd. at Village Hall, Kenmore, rejected bids Jan. 19, concrete paving, etc., Elmwood Ave. Will readvertise. G. C. Diehl, 577 Ellicott Sq. Bldg., Buffalo, town engr. Noted Jan. 10.

Pa., Clearfield—Plans 4,500 ft. concrete paving and curbing on Cherry, Front, 4th, Market Sts. and Gulich Ave., 20, 26 and 28 ft. wide, also 1,700 lin.ft. 8 in. terra cotta sewer in Witmer St. $40,000. E. W. Hess, boro. engr.

W. Va., Huntington—Plans grading and paving Vernon, Court, Vinson, Wayne, 5th, 19th and Elm Sts., 14th Ave., Bradley and 5th St. Rds. and various alleys. A. R. Hunt, city clk.

North Carolina — State Hy. Dept., Raleigh, received no bids grading concrete or asphaltic paving 6.85 mi. State Project 111, 9 ft., Camden Co. $144,200. Will readvertise soon. C. M. Upham, highway comr Noted Jan. 17.

Fla., Daytona—See "Sewers."

Fla., Jacksonville — Plans paving and curbing South West 6th St. from 5th to 6th and 16th Aves., 36 ft., $45,832; South West 6th St. from 2nd to 5th and 12th to 16th Aves., 36 ft., $34,178; North West 3rd Ave. from 11th Terrace to 20th St., 36 ft., $38,112; North West 3rd Ave. from 12th to 17th Ave. and North West 20th Ave. from Miami to 2nd Ave., 36 ft. and 43 ft., $33,526; North West 2nd Ave. from 20th to 36th Sts., 136 ft., $56,408; South West 4th and South West 5th Sts. from 12th to 17th Aves., 25 ft., $37,712; South West 2nd and South West 7th Sts. from 12th to 17th Aves.. 25 ft., $37,380; South West 13th Ave. from 8th to 13th Sts., South West 14th Ave., Flagler to 8th St., 22 and 25 ft., $28,252; South West 13th Ave. from 8th to 13th Sts. and South West 13th Ave. from Flagler to 8th Sts., 22 and 31 ft., $30,861; portion South West 16th, South West 17th, South West 6th and 17th Aves. W. E. Sheddon, Jacksonville, engr.

Ala., Birmingham—Alabama State Bond Comn. will sell $7,000,000 bonds Mar. 17, giving total sum incl. Federal funds of $9,105,000 to be used for state highway work during next 12 months. W. S. Keller, state highway engr.

Streets and Roads (Continued)

Miss., Belonzi—Making plans and takes bids in March, paving 36,000 sq.yd. with concrete, sheet asphalt, brick or rein.-con.; 30,000 lin.ft. curb and gutter and 4½ mi. gravel surfacing. $150,000. D. M. Forester, city engr.

Miss., Greenwood — Carroll Co. having preliminary plans prepared grading and gravel surfacing 8 mi. Rd. Dist. 4, 18 ft. $85,000. Abbott Eng. Co., Greenwood, engrs.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, plans surfacing, probably concrete (cement) 15 mi. Manchester-Beach Grove Rd., 9 ft. Coffee Co.; having surveys made grading and structures on 4 mi. road from Bridgeport Rd. to Federal Aid Project 23, 18 ft., Cocke Co., probably limestone base 10.5 mi. Shelbyville-Lincoln Co. Line Rd., 16 ft. Bedford Co., 7 mi. Woodburg-Warren Co. Line Rd., 18 ft., Cannon Co.; constructing 4 mi. Morristown-Grainger Co. Line Rd., 18 ft., Hamblen Co., probably cement concrete base with bituminous concrete surface 3.7 mi. road from Nashville City limits toward Gallatin, 24 ft., Davidson Co.; soon takes bids grading and constructing probably cement concrete 8.5 mi. Blountsville-Bristol Rd., 18 ft., Sullivan Co., grading 8 mi. Clinton-Knox Co. Line Rd., 18 ft., Anderson Co. J. G. Creveling, highway comr. Noted Jan. 17.

Kentucky—State Hy. Dept., Frankfort, plans grading 10.16 mi. Frenchburg-Mt. Sterling Rd., 24 and 28 ft., State Project 28, Menifee Co. J. S. Boggs, state highway engr.

O., Akron — W. F. Peters, dir. Pub. Serv., rejected bids Jan. 28, grading and paving 2,000 ft. Aqueduct St., 30 ft., $28,932. Will readvertise. E. A. Kemmler, Delaware Bldg., engr. Noted Feb. 7.

O., Alliance — Making plans improving about 1 mi. West Main St., 40 ft. $50,000-$75,000.

O., Cleveland—Cuyahoga Co. takes bids in spring paving Wallings, Minor and York Bennet Rds., $421,846; brick paving Highland Rd., $39,460. F. Lander, Court House, engr.

O., Lakewood—Plans grading, curbing and paving Lakewood Heights Blvd., Edgewater, Woodward, Athens, Waverly, Victoria and Belle Aves. $200,000. E. A. Fisher, City Hall, engr.

O., Lakewood — Takes bids in spring grading, curbing and paving Alger Rd., West Adams, Esther, Northwood, Cannon, Shaw, Phelps and Maite Aves. $175,000. F. A. Fisher, City Hall, engr.

O., Lisbon—Columbiana Co. plans surfacing 4 mi. Wellsville-Salineville Rd., 18 ft., $80,000; rebuilding 1 mi. Kensington-Hanover Rd., 20 ft., macadam or concrete, $30,000. L. C. Kirk, Lisbon, engr.

O., Lisbon—Columbiana Co. takes bids about Mar. 1, improving 1 mi. East Liverpool-Youngstown State Highway, Fairfield Twp., $81,749 for concrete and $80,081 bituminous macadam; resurfacing 1 mi. road in Liverpool Twp., bituminous macadam, $35,000. J. A. George, East Liverpool, engr.

O., Warren—Plans brick paving 1 mi. Locust and McKinley Aves., 50 ft., $85,000; improving ⅞ mi. Kinsman Ave., 50 ft., $60,000.

Ill., Belleville—Soon takes bids grading and surfacing with rein.-con., brick on concrete, or asphaltic concrete, 44,000 ft. various streets, 28 ft. average width. $429,667. C. A. Heinzelmann, City Hall, engr.

Ill., Berwyn—Plans grading and paving with concrete, asphaltic concrete or brick on concrete, 16,000 ft. various streets. $165,000. J. J. Kearney, City Hall, engr.

Ill., Freeport—Plans grading and rein.-con. surfacing Bailey Park Dist. $40,000. A. F. Stanley, City Hall, engr.

Ill., Woodriver—Soon takes bids 152,500 sq.ft. cement concrete sidewalks on cinders in West Central Sidewalk Dist., $29,104; also watermains, $9,703. Address city engineer.

Wis., Wauwatosa — Making plans concrete paving, concrete walks, grading, watermains and sewers in subdivision, 61st St. and Blue Mound Rd. $25,000. R. H. Smith, 410 Berlin Arcade, Milwaukee, engr.

Kan., Ft. Scott—Bourbon Co. preparing plans and takes bids soon brick, concrete or bituminous macadam paving 3.9015 mi. Federal Aid Project 208, 18 ft. B. Boyle, Ft. Scott, engr.

Kan., Kansas City—Wyandotte Co. plans grading and concrete surfacing 1.72 mi. Wolcott Rd., Sect. B, 16 ft. O. K. Williams, co. engr.

Kan., Marion—Marion Co. plans 8.75 mi. Federal Aid Project 218, Sect. A, 29½ ft. To exceed $25,000. E. C. L. Wagoner, 608 Kemper Bldg., Kansas City, Mo., engr.

Kan., Parsons — Making preliminary plans grading and gravel surfacing 2 mi. North 21st and East Main Sts., 18 ft., also for steel and concrete bridge over Neosho River. $180,000. J. Shidler, Chanute, engr.

Kan., Troy — Doniphan Co. preparing plans concrete or brick paving 1.03 mi. Federal Aid Project 169, Sect. H. T. Parker, co. engr.

Kan., Washington—Washington Co. completed plans and soon takes bids grading 11.5 mi. Federal Aid Project 211, 30 ft. E. C. L. Wagoner, 609 Kemper Bldg., Kansas City, Mo., engr. Noted Sept. 13.

Nebraska—State Hy. Dept., Lincoln, soon takes bids grading and gravel surfacing Federal Aid Project 216, Merrick Co., $60,000, Federal Aid Project 208, Nemaha and Richardson Counties, $56,000, and Federal Aid Project 225, Lancaster Co., $22,000. R. Cochrane, state engr.

Neb., Hastings — Plans 2 mi. paving, various types. $58,000. P. T. Naylor, city engr.

South Dakota—State Hy. Dept., Pierre, plans to grade 29 mi. Federal Aid Project 95, from Faulkton to Zell, Faulk Co., 12 mi. Federal Aid Project 176, from Watertown to Hetland, and 14 mi. Federal Aid Project 171, from Sisseton to Browns Valley, Roberts Co. F. D. Hudgins, ch. engr.

Mo., St. Louis—Plans grading and concrete paving 9,000 sq.yd. Delor St. $41,700. W. W. Horner, City Hall, engr.

Ark., Little Rock—Pulaski Co. soon takes bids grading and hard surfacing 95 mi. roads, 18 ft. average. $3,000,000. G. H. Sykes, Little Rock, engr.

Tex., Anson—Jones Co. election Mar. 1, $200,000 bonds bituminous macadam surfacing Highway 83. Another election in northern part of county ordered Mar. 8. $600,000 bonds. J. F. Lindsey, co. judge. Noted Dec. 6.

Tex., Corsicana—Making plans paving 10 blocks 10th, East 6th and 9th Sts., various types. $35,000. W. W. McClendon, city engr.

Tex., Graham—Young Co. election Mar. 1, $650,000 bonds hard surfacing in Rd. Dist. 1. W. H. Reeves, co. judge. Noted Jan. 24.

Tex., Grandview—Making plans permanent paving 5 blocks, brick or bituminous. $25,000. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Tex., Greenville—Hunt Co. had plans prepared soon takes bids gravel surfacing on macadam, and bituminous topping 5.3 mi. State Highway 39, 15 ft. $75 000; grading, gravel surfacing and bridging 2.6 mi. State Highway 1, 15 ft., $40,000. J. D. Metcalfe, resident engr.

Tex., Huntsville—Making plans paving 1 mi. Burton and Tyler Sts., bituminous. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs. Noted Jan. 10.

Tex., Jasper—Jasper Co. making plans grading, gravel surfacing, etc. 5.34 mi. State Highway 45, 16 ft. $45,000. C. D. Hunter, co. engr.

Tex., Kountze—Hardin Co. election Feb. 9, $125,000 bonds hard surfacing 25 mi. in Road Dist. 1, 16 ft. G. C. Brown, co. engr.

Tex., Seguin—Guadalupe Co. plans election to vote on over $150,000 bonds highway improvement. Address Co. Comrs.

Tex., Sinton—San Patricio Co. election Feb. 16, $25,000 bonds hard surfacing Aransas Pass to connect with Rd. Dist. 1 leading into Gregory. Address Co. Comrs.

Tex., Vernon—Wilbarger Co. voted $150,000 bonds improving Colorado Gulf Highway and laterals in Harold Rd. Precinct. $150,000. J. B. Nabers, co. engr. Noted Jan. 17.

Okla., Ada—Plans grading and paving South Rennie and South Constant Sts., 5,200 sq.yd. concrete, 4,100 lin.ft. curbing, etc. $27,500. H. S. Darlington, Ada, engr.

Okla., Lindsey—Soon takes bids grading and rein.-con. surfacing 3,500 ft. streets, 26 ft. $32,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 13.

Okla., Oklahoma City — Oklahoma Co. soon takes bids concrete paving 3 mi. road south west of city, 18 ft.; 3½ mi. Edmond Rd., 18 ft. R. S. James, co. engr.

Colo., Denver—Plans asphalt paving 12 blocks West 33rd Ave. Paving Dist., $45,064; 12 blocks North Denver Paving Dist. 6, $49,555; 14 blocks North Denver Paving Dist. 5, $46,435. A. K. Vickery, City Hall, engr.

California—State Hy. Comn., Sacramento, plans improving highway between Redwood City and Palo Alto, San Mateo Co., incl. widening and paving. To exceed $100,000. R. M. Morton, state highway engr.

California — State Hy. Comn.; Sacramento, having plans prepared paving with asphalt concrete surface and shoulders, 3.7 mi. between Milpitas and Coyote Creek, Santa Clara Co. R. M. Morton, state highway engr.

California — State Hy. Comn., Sacramento, plans grading and paving 5 mi. Elk Grove and Comsumnes River Rds., to exceed $100,000; 4 mi. between Manteca and Turner, to exceed $100,000; 7 mi. highway between French Camp and Mossdale, $150,000; 4.7 mi., 20 ft. wide, between south boundary of San Joaquin Co. and Calia, to exceed $100,000, all foregoing in San Joaquin Co.; paving through Corning, Tehama Co., to exceed $50,000. R. M. Morton, state highway engr.

Calif., Alhambra—Plans improving Hellman Ave. between east and west city limits, 6 in. concrete, curbs and gutters. To exceed $25,000. T. B. Downer, city engr.

Calif., Covina—Plans paving all unpaved portion streets in city limits. To exceed $25,000. F. G. Dessery, city engr.

Calif., Fresno — City Council will take new bids improving portion Lewis Ave., 118,194 sq.ft. grading, 86,824 sq.ft. asphalt, 5,281 lin.ft. concrete curb, 8,973 sq.ft. concrete gutter, 24,814 sq.ft. cement walks, etc. Former bids rejected. W. Stranahan, city engr. Noted Nov. 8.

Calif., Huntington Beach — Had plans prepared grading, surfacing, curbing, walks and lighting system on portion 5th St., 4 in. asphaltic concrete with 2 in. Willite surface, portion 15th and 10th Sts., 3 in. asphaltic concrete with 2 in. Willite surface.

Calif., Monterey—Having plans prepared improving Laine, Prescott, Bilden, Spencer Sts., etc., grading, paving, 5 in. waste quarry rock, concrete curbs and gutters, etc. To exceed $25,000. H. D. Severance, city engr.

Calif., Oakland — Had plans prepared improving Park Blvd. Rd., redressing and oiling 35,915 sq.ft. existing macadam, 29,932 ft. of 8 in. vitr. pipe conduit. W. W. Harmon, city engr.

Calif., Oakland—F. T. Wood & Co., 417 15th St., having plans prepared improving 25 acre tract, oil macadam, concrete curbs, gutters, sidewalks, 8 in. sewers, etc. To exceed $50,000. Private plans.

Calif., Oroville—Butte Co. had plans prepared improving Oroville-Gridley Rd., 28,500 sq.ft. Portland concrete shoulders, 1,080 tons broken stone surfacing, 50 tons asphaltic oil, Grade E. County will furnish broken stone, stone screenings, concrete, sand and asphalt oil, Grade E. H. H. Hume, co. rd. engr.

Calif., Oroville—Butte Co. had plans prepared improving 3.46 mi. Biggs-Princeton Rd., 6,500 tons broken stone, 236 tons E asphalt road oil; 7.87 mi. Gridley-Colusa Rd., Sta. 40x09 to Sta 456x00, 15,500 tons broken stone, 470 tons E asphalt. County will furnish stone and asphalt for both. H. H. Hume, co. rd. engr.

Calif., Richmond—Plans to expend $500,000 for street improvements during current year. H. Chapman, city engr.

Calif., Santa Ana—Orange Co. had plans prepared improving 3 mi. Chapman Ave., Rd. Impvt. Dist. 27, 3,000 cu.yd. excav., 6,637 cu.yd. concrete pavement.

Calif., Turlock—Had plans prepared improving 5th St. and Mitchell Ave., 85,000 sq.ft. 3 in. black base with 1½ in. Warrenite surface, curbs, etc. H. Hall, city engr.

Ontario—Dept. Provincial Highway, 110 University Ave., Toronto, plans 20 mi. macadam and concrete road construction and maintenance on provincial highways in Simcoe Co., $169,980, also 40 mi. macadam asphalt and concrete road on highways in Perth Co., $362,360. G. Hogarth, ch. engr.

Ont., Chatham—Kent Co. plans 35,000 sq.yd. concrete on Creek Rd., Raleigh Twp., and Chatham-Dover town line. $100,000. W. G. McGeorge, Chatham, co. engr.

Ont., Ingersoll—Plans concrete pavement on Charles St. E. $40,000. Prices wanted on all materials.

Ont., Ottawa—Suburban Rds. Comn., 1 Findlay Ave., plans 3 mi. bituminous macadam on Richmond Rd., 5 mi. grading and 3 mi. gravel resurfacing on Merivale Rd., 1½ mi. asphalt on River Rd., bituminous surface and grading on Metcalfe Rd., 1½ mi. macadam surface on Russell Rd., and 1 mi. asphalt on Montreal Rd. $170,000. A. K. Hay, 1 Findlay Ave., engr.

Ont., Ottawa—Bd. Control soon takes bids reconstructing asphalt pavement on Laurier Ave. W. $30,000. A. F. Macallum, city engr.

Ont., Pembroke—Plans concrete curbing, guttering and paving ½ mi. Miller St., bitulithic on concrete. $30,000. J. P. Howe, Town engr.

Ont., St. Thomas—Plans 5,500 sq.yd. asphalt or concrete pavement on Moore St. $25,000. W. C. Miller, city engr.

Ont., St. Thomas—Elgin Co. plans to expend $145,430 for 7-8 mi. road, mostly macadam and concrete. J. Bell, Court House, engr.

Ont., Toronto—Dept. Pub. Wks., City Hall, plans to expend $743,216 for repairing and maintaining city pavements and sidewalks and renewals to brick, stone, asphalt, macadam, bituminous concrete and

Streets and Roads (Continued)

dirt roads, also $672,356 for new pavements, 150,000 sq.yd., mostly asphalt and bituminous. R. C. Harris, city engr.

Ont., Toronto—Plans asphalt pavements on Queen St. $7,626, granite block pavement in subway on King St. $4,951, asphalt surface on Queen St. and Don Valley Bridge $7,430, concrete platforms at trolley stops $10,000, retaining walls on Davenport Rd. $2,075, Keele St. $7,766, and widening King St. at Sunnyside Ave. $2,517. R. C. Harris, city engr.

Ont., Toronto—Plans to widen pavements on various streets, incl. 50,000 sq.yd. granite block, asphalt, concrete or bituminous concrete. $500,000. R. C. Harris, city engr.

Ont., Toronto—Toronto and York Co. Rds. Comn., 57 Adelaide St. E., plans permanent pavements on 3 mi. Queen St., Etobicoke Twp., 2½ mi. Dawes Rd., East York Twp., 2½ mi. Fifth Concession, North York Twp., 1½ mi. Bathurst St., York Twp. $300,000 to $400,000. E. A. James, 57 Adelaide St. E., engr.

BIDS DESIRED

N. Y., Brooklyn—Feb. 20, by E. Riegelmann, boro pres., Boro Hall, permanent asphalt paving East 38th St., Rutherford Pl., Sheffield and Brooklyn Aves.; curbing and flagging Ave. M, Ovington Ave., and Rutherford Pl.; curbing and asphalt paving West 10th St.; grading and flagging 79th St., etc.

N. Y., Fairport—Mar. 11, by R. S. Fuller, comr. Canals & Waterways, Albany, widening roadway of West Ave. approach on lift bridge at Main St., here, Contr. 216; adv. E. N.-R. Feb. 14.

Pennsylvania—Mar. 6, by Dept. Highways, Harrisburg, constructing 48 mi. road in 24 counties. P. D. Wright, secy.; adv. E. N.-R. Feb. 14.

Pa., Phila.—Feb. 18, by Dept. Pub. Wks., Bureau Highways, asphalt pavement on Luzerne St., Schedule A, asphalt repaving on Chelten, Sprague, Wharton and 54th Sts., Schedule B, redressed granite block repaving on Callowhill, Frankford, Front, Germantown, 7th and 60th Sts., Schedule C. G. H. Biles, dir. pub. wks.

Pa., Verona—Feb. 25, by Boro Council, improving 1st Ave., 3,500 cu.yd. grading, 5,300 sq.yd. paving and 2,600 lin.ft. curb, Spruce St., 2,150 sq.yd. paving, 2nd St., 2,700 cu.yd. grading, 5,400 sq.yd. paving, 2,700 lin.ft. curb. Douglass & McKnight, 912 Columbia Bank Bldg., Pittsburgh, boro engrs.

W. Va., Williamson—Feb. 25, by Mingo Co., improving 6 mi. Rockhouse Fork Rd. and 0.76 mi. Williamson-Burch Rd., 31,400 lin.ft. clearing and grubbing, 20,000 cu.yd. excav., 12,000 cu.yd. channel change, 8,000 cu.yd. excav. borrow, 40 cu.yd. concrete, 2,100 cu.yd. creek gravel, etc. L. G. Gray, pres. Court.

Alabama—Mar. 3, by State Hy. Dept., Montgomery, grading and surfacing 5.399 mi. Decatur-Moulton Rd., Project 119, Sect. A and C, Lawrence Co., 22,841 cu.yd. earth and 322 cu.yd. rock excav., 346.5 cu.yd. concrete, 50,682 sq.yd. 2½ in. bituminous macadam, penetration method, 12,800 cu. yd. crushed stone base. W. S. Keller, state highway engr.

Miss., Bay St. Louis—Feb. 26, at Office Chancery Clerk Hancock Co., grading, gravel surfacing and bridging 11.931 mi. roads, 18 ft. $176,433. H. C. Dietzer, c/o State Highway Dept., Jackson, engr.

Louisiana—Feb. 21, by State Hy. Comn., Reymond Bldg., Baton Rouge, 7.37 mi. State Project 387-B, Opelousas-Kinder Highway, 3.19 mi. State Project 387-A, Opelousas-Kinder Highway, and 2.65 mi. State Project 388, Eunice-Mamou Highway. J. M. Fourmy, ch. engr.

S. C., Bishopville—Feb. 21, by Comrs. Lee Co., 2.6 mi. State Route 34, Federal Aid Project 67-C, 44,206 cu.yd. excav., 6,110 cu.yd. clay surfacing; also 3 bridges over Lynches River, involving 175 cu.yd. dry and 460 cu.yd. wet excav., 3,540 lin.ft. untreated and 1,500 lin.ft. treated piling.

O., Akron—Feb. 25, by W. F. Peters, dir. Pub. Serv., grading, laying sidewalks, sewers and cindering 2,850 cu.yd. Spring St. and McKinley Ave., $44,000; grading, laying sidewalks and cindering 825 cu.yd. Mildred Ave., $14,000; grading, laying sidewalks and paving 3,305 ft. Big Falls Ave., Allyn and Power Sts., 24 ft., vitr. brick or asphalt, $74,000; grading and paving 1,165 ft. South Arlington St., 44 ft., vitr. brick or asphalt, $34,000. Noted Feb. 7.

Wis., Green Bay—Feb. 20, by Brown Co. Road & Bridge Com., 4 mi. Upper De Pere Rd., 18 ft., concrete; 3½ mi. Old State Rd., 3 mi. Dixon Rd., 4½ mi. Greenleaf-Lark Rd., all 16 ft. concrete. G. J. Cormier, comr.

Nebraska—Feb. 26, by State Dept. Pub. Wks., Lincoln, 21.6 mi. Federal Aid Project 7-C, Adams Co., 278,823 sq.yd. 2 in. gravel, $61,300; 6.542 mi. road, Federal Aid Project 169, Adams Co., 28,200 cu.yd. excav., $21,000; Federal Aid Project 210, Saline Co., 16,067 sq.yd. 7 in. concrete, 36,400 cu.yd. excav., also one 32 ft. and two 20 ft. I-beam bridges, one 40 ft. transverse girder bridge; Federal Aid Projects 98-B and 98-C, Saline Co., 17,640 yd. gravel; 4.03 mi. Federal Aid Project 55 B, Saline Co. 52,200 sq.yd. 2 in. gravel; 13.8 mi. Federal Aid Project 7-B, Clay Co., 178,992 sq.yd. 2 in. gravel, $35,800; 5.218 mi. earth road, Federal Aid Project 164-D, Thayer Co., 52,100 cu.yd. excav., and one 22 ft. and one 16 ft. I-beam bridges, $31,000; 4.022 mi. earth road, Federal Aid Project 164-C, Nuckolls Co., 33,000 cu.yd. excav., $17,000. R. L. Cochrane, state engr.

Nebraska—Feb. 27, by State Hy. Dept., Lincoln, 6.43 mi. Federal Aid Project 139-G, 41,300 cu.yd. excav., etc., Antelope Co.; 4.9 mi. Federal Aid Project 110-A, 56,813 sq.yd. 4 in. and 59,653 sq.yd. 2 in. gravel, one 100 ft. steel truss with one 32 ft. and one 22 ft. approaches, Boyd Co.; 13.37 mi. Federal Aid Project 172, 156,551 sq.yd. 4 in. gravel surface, Cummings Co.; 8.23 mi. Federal Aid Project 213, 19,000 cu.yd. excav., 96,270 sq.yd. gravel, etc., Dawes Co.; 9.44 mi. Federal Aid Project 139-H, 71,000 cu.yd. excav., etc., Madison Co.; 3.59 mi. Federal Aid Project 50-D, 33,600 cu.yd. excav., etc., Nance Co.; Federal Aid Project 87-B, 23,522 sq.yd. 4 in. gravel surface, Stanton Co.; 7.31 mi. Federal Aid Project 49-F, 85,000 cu.yd. excav., etc., Thurston Co.; Federal Aid Project 70-C, 22,200 cu.yd. excav., etc., Wayne Co. R. L. Cochrane, state engr.

Nebraska—Feb. 28, by State Hy. Dept., Lincoln, 7.638 mi. Federal Aid Project 206, 37,700 cu.yd. excav., 98,600 sq.yd. gravel surface, etc., Chase Co.; 17.14 mi., Federal Aid Project 198-A, 85,400 cu.yd. excav., and one 20 ft. I beam bridge, etc., Box Butte Co.; 4.33 mi. Federal Aid Project 149-A, 27,800 cu.yd. excav., 10,770 sq.yd. gravel, and one 24 ft. I beam bridge, Cheyenne Co.; 9 mi. Federal Aid Project 186-A, 107,724 sq.yd. 3 in. gravel, Kimball Co.; 3.22 mi. Federal Aid Project 174, 37,640 sq.yd. 4 in. gravel, Buffalo Co.; Federal Aid Project 121-A, 143,314 sq.yd. 2 in. gravel, Perkins Co.; 7.0145 mi. Federal Aid Project 79-B, 40,200 cu.yd. excav., 47,153 sq.yd. 4 in. and 35,151 sq. yd. 2 in. gravel surface, Morrill Co.; Federal Aid Project 68-C, 8,700 cu.yd. earth and 400 cu.yd. rock excav., one 40 ft. steel truss bridge, etc., Hitchcock Co.; 7.939 mi. Federal Aid Project 68-B, 43,600 cu.yd. excav., 2,576 sq.yd. concrete pavement 7 in. thick, 43,988 sq.yd. gravel surface 4 in., Red Willow Co.; 3.705 mi. Federal Aid Project 117-B, 15,800 cu.yd. excav., 26,753 sq.yd. 2 in. and 18,000 sq. yd. 4 in. gravel surface, also 2.08 mi. Federal Aid Project 117-A, 24,445 sq.yd. 4 in. gravel, Garden Co. R. L. Cochrane, Brownell Bldg., Lincoln, Engr.

Neb., Omaha—Feb. 19, by City Clerk, City Hall, grading, paving and curbing, etc. 150,000 sq.yd. streets and alleys, various materials. $300,000. H. Beal, City Hall, engr. Noted Feb. 7.

Missouri—Feb. 21, by State Hy. Dept., Jefferson City, gravel surfacing 190,040 sq. yd. roads in Newton, Montgomery, Osage, Callaway and Monroe Counties. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Mar. 4, by Bd. Pub. Serv., 208 City Hall, paving twelve 15 ft. alleys, 14,735 sq.yd. 7 in. concrete. $45,170. W. W. Horner, city engr.

Tex., Corsicana—Mar. 11, paving 50 blocks. W. McClendon, city engr.

Tex., Electra—Feb. 25, paving 40 blocks, various types. $100,000. Elrod Eng. Co., 312 Elm St., Dallas, engrs.

Tex., Galveston—Mar. 1, raising city grade in West End in area from 40th to 48th Sts. south of Bway. $1,250,000. C. A. Holt, Jr., city engr.

Tex., Greenville—Feb. 26, by O. P. McWhirter, judge Hunt Co., gravel sub-base, waterbound macadam base and inverted penetration top on 5.3 mi. State Highway 39, State Aid Project 379, 15 ft., $73,000; grading, gravel surfacing and 1,200 ft. creosoted timber trestle on 2.6 mi. State Highway 1, 16 ft., $68,000. J. D. Metcalfe. resident engr.

Okla., Chickasha—Feb. 19, by J. R. Wellborn, city clk., grading and paving 8 blocks Kansas Ave., 8,600 sq.yd. concrete, 4,800 lin.ft. curbing, 2,750 cu.yd. excav. $33,000 J. C. Milliken, Chickasha, engr.

Okla., Oklahoma City—Feb. 18, by W. A Jackson, clk. Oklahoma Co., paving 3 mi Eastern Ave., 2 mi. G Ave., 52,000 sq.yd. asphalt, brick or concrete. R. S. James, Court House, engr.

Calif., Los Angeles—Feb. 25, by Supervs. Los Angeles Co., improving 2½ mi. Baker Ave., 7,800 cu.yd. excav., removing 3,500 cu.yd. old macadam, shaping 55,300 sq.yd. roadbed, 35,700 sq.yd. 6- to 8-in. concrete, 34,000 sq.yd. subbase.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Feb. 6, asphalt paving (1) Bay 28th St. (2) Bay 38th St. (3) Blake Ave. (4) East 7th St. (5) East 34th St. (6) Highland Ave. (7) Homecrest Ave. (8) Lefferts Ave. (9) Union St. (10) West 8th St. (11) 12th Ave. (12) 40th St. (13) 57th St. (14) 70th St. (15) 81st St., curbing and asphalt paving (16) Elmore Pl. (17) Ave. I (18) West 7th St., grading, curbing and flagging (19) East 7th St. (20) East 18th St. (21) East 34th St. (22) East 37th St. (23) Lenox Rd. (24) Ave. M (25) Montgomery St. (26) West 3rd St. (27) West 8th St. (28) West 13th St. (29) 12th Ave. (30) 57th St. (31) 70th St. (32) 76th St. (33) 82nd St., paving with 2nd hand granite (34) Jerome Ave., curbing and laying sidewalks on (35) Liberty Ave., grading, curbing and laying sidewalks on (36) Ave. S, paving and laying sidewalks, etc., on (37) 70th St., sodding malls and spaces on (38) Kings Highway, from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (1) $8,181 (2) $5,477 (4) $9,247 (6) $14,079 (7) $9,935 (10) $8,474 (11) $3,395 (12) $8,146 (13) $8,357 (14) $10,863 (15) $8,745 (16) $10,660 (17) $16,259 (18) $9,767; Borough Asphalt Co., 1301 Metropolitan Ave., (3) $4,048 (5) $8,331 (8) $23,444 (9) $4,724; T. B. Scott, 671 Halsey St., (19) $3,963 (20) $7,853 (21) $4,356 (27) $4,571; A. E. Castle, 3313 Tilden Ave., (22) $7,056 (37) $1,338; W. G. Grimm, (23) $3,335 (24) $1,916 (26) $1,340 (35) $1,108; C. Bennett Contg. Co., 414 Rutland Rd., (25) $16,969; F. G. M. Mandatto, 129 29th St., (28) $4,436 (36) $7,113; F. Persicano, 350 Fulton St., (29) $1,846 (33) $5,371; Galecor Contg. Co., 507 Greenwich St., New York, (30) $3,755 (31) $5,121; L. Mangieri, 190 31st St., (32) $5,482; F. T. McMillan Contg. Co., (34) $7,220; P. Deichler, (38) $6,198. Noted Jan. 31.

North Carolina—State Hy. Dept., Raleigh, improving roads (**S. P. means State Project**) grading and concrete paving 10 mi. S. P. 222, Duplin Co., from Pub. Serv. Production Co., Terminal Bldg., Newark, N. J., $333,903, 8.07 mi. S. P. 732-B, Davie Co., from Hardaway Contg. Co., 909 Elizabeth Ave., Charlotte, $282,750, 5.15 mi. S. P. 536, Guilford Co., from Hagedorn Contg. Co., Greensboro, $17,994, 12.5 mi. S. P. 720, Caldwell Co., from J. M. Gregory & Co., Pittsboro, $453,528; grading and waterbound macadam paving 11.5 mi. S. P. 106-B, Bertie Co., from S. G. Lossiter, Citizens Bank Bldg., Raleigh, $151,721; grading and gravel surfacing 5.33 mi. S. P. 714, Ashe Co., from J. F. Mulligan Constr. Co., North Wilkesboro, $98,762; grading 8.5 mi. S. P. 912 A, Cherokee Co., from Wilson Constr. Co., Rutherfordton, $81,007, 8.4 mi. S. P. 812-B, Cherokee Co., from W. T. Moore, Andrews, $32,981, 1.57 mi. S. P. 922, Transylvania Co., from W. H. Anderson, Spruceline, $45,432, 4.66 mi. S. P. 472-B, Vance Co. and 6.19 mi. S. P. 662-A, Richmond Co., from T. W. Chandler, Virginia, $38,253 and $41,606 respectively; grading and paving with waterbound macadam or asphaltic concrete 2.31 mi. S. P. 352, New Hanover and Brunswick Counties, from F. J. McGuire, Paul-Gale-G Bldg., Norfolk, Va., $93,160, 9.51 mi. S. P. 836-B; Henderson Co., from J. M. Gregory & Co., Pittsboro, $280,580; grading and sand asphalt paving 11.98 mi. S. P. 381, Pender Co., from Highway Eng. & Constr. Co., Selbyville, Del., $240,274. Noted Jan. 17.

Missouri—State Hy. Dept., Jefferson City, Jan. 29, cement concrete paving 20,544 sq. yd. Joplin-Carthage Rd., Jasper Co., 17,924 sq.yd. Belton-Harrisonville Rd., Cass Co., also grading 1.669 mi. Belton-Harrisonville Rd., Cass Co., from V. E. Koch, 14th and Texas Sts., Joplin, $30,405, $23,302 and $9,452 respectively; grading 4.969 mi. road, 24 ft., Dent Co., from Muskogee Constr. Co., Tulsa, Okla., $25,141, 4.35 mi. road 26 ft., Laclede Co., from Pioneer Constr. Co., Springfield, $17,697, 0.995 mi. road, 24 ft., Putnam Co., from R. L. Thompson, Carrollton, $7,009, 2.717 mi. Joplin Carthage Rd., Jasper Co., from Highway Constr. Co., Webb City, $5,883; grading and graveling 31,802 sq.yd. Memphis-Edina Rd., Knox Co., from Kerby Rainer & Co., Fayette, $12,602, 23,466 sq.yd. road from New London west, Ralls Co., and 13,617 sq.yd. road from Curryville west, Pipe Co., from F. T. O'Dell, 1004 Center St., Hannibal, $16,105 and $13,653 respectively, 46,032 sq. yd. Potosi-De Soto Rd., Washington Co., from W. A. Reynolds, Marble Hill, $31,059, 46,132 sq.yd. Buffalo-Bolivar Rd., Dallas Co., and 10,453 sq.yd. road from Tipton west, Moniteau Co., from N. A. Christy, Warsaw, $19,741 and $11,249 respectively, 21,848 sq.yd. road from California east, Moniteau Co., from E. C. Johnson, Carrollton, $13,242, 29,335 sq.yd. road from Branson east, Taney Co., from Cox & Chaney, Branson, $7,981. Noted Jan. 24.

Streets and Roads (Continued)

Tex., Houston—Paving Bissonett St. from Graustark to High Sts., rock asphalt, from Uvalde Rock Asphalt Co., Carter Bldg., $37,113; bitulithic, from Gulf Bitulithic Co., Kress Bldg., $37,923.

Tex., Palo Pinto—Palo Pinto Co. grading and surfacing with crushed stone base 4.97 mi. State Highway 28, 18 ft., Federal Aid Project 414, 427.7 cu.yd. concrete, 15,485 cu.yd. roadway, 18,148 cu.yd. borrow, 4,501 cu.yd. loose and 4,789 cu.yd. solid rock excav., 41,490 lb. reinforcing, 12,954 cu.yd. crushed stone, from McClung Constr. Co., Cleburne, $63,714. Engrs. est. $100,250. Noted Jan. 17. Bids for bituminous topping to be received later.

Calif., San Diego—Improving Redwood, Palm, Bancroft, 33rd, Felton and 31st Sts., incl. **(1)** 10,230 cu.yd. earth excav. **(2)** 10,912 cu.yd. earth embankment **(3)** 7,942 lin.ft. cement concrete curb **(4)** 38,253 sq. ft. cement concrete sidewalk, etc. from Pioneer Truck Co., 954 3rd St. **(1)** $1.45 **(2)** $0.25 **(3)** $0.65 **(4)** $0.21, total $39,957; Alameda Dr., Sheridan Ave., Alameda Pl., Henry, California, Puterbaugh, Guy and Linwood Sts., from California Constr. Co., Union Bldg., 74,847 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete $0.244, 11,270 sq.ft. 4 in. cement concrete $0 235, 110,885 sq.ft. 5 in. cement concrete $0.258, 2,802 sq.ft. cement concrete sidewalk $0.25, 1,221 lin.ft. cement concrete curb $0.75, total $55,182.

CONTRACTS AWARDED

New York—L. Grossman, comr. State Hy. Dept., Albany, constructing and reconstructing 4.75 mi. Repair Contr. 3077, Oswego Co., to Brayer Bros., North St. Rd., Auburn, $101,848; 1.18 mi. Repair Contr. 3076, Allegany Co., to W. J. Fox, Oramel, $79,097; 1.19 mi. Repair Contr. 3075, Dutchess Co., to Mascetti & Holley, 60 Main St., Torrington, Conn., $67,240; 3.82 mi. Highway 8166, Orange Co., to Gould, Kranz & Mandel, 101 Reade St., New York City, $167,636; 5.3 mi. Highway 5697, Orleans Co., to J. M. Murray, Rochester, $184,009; 4.85 mi. Highway 8165, Madison Co., to G. B. Dickinson, Union Bldg., Syracuse, $187,452; 4.34 mi. Highway 8164, Wyoming Co., to C. A. Foote & Sons, Mt. Morris, $199,733; 8.79 mi. Highway 8156, Ontario Co., to Valerio Constr. Co., New Milford, Conn., $287,243. Noted Jan. 17.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sheet asphalt paving 77th St., to Cranford Co., 52 9th St., Brooklyn, $24,1[illegible]3. Noted Jan. 17.

N. Y. Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sheet asphalt paving 103rd Ave., to Borough Asphalt Co., 1301 Metropolitan Ave., Brooklyn, $22,958 Noted Jan. 31.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, etc., on La Salle Ave., to F. Hanratty, 605 Beach Terrace, $24,193. Noted Feb. 7.

N. Y., Waterloo—Bd. Village Trustees paving 18,500 sq.yd., bituminous macadam, penetration, to F. Callahan Owasco Rd., Auburn, $1.33 per sq.yd. Noted Jan. 10.

W. Va., Logan—Logan Co., 3.4 mi. road from Chapmansville to Big Creek, to Langhorne & Langhorn, Huntington, $67,735.

Fla., Tampa—Grading, paving and curbing 26th Ave., Cayuga, Buffalo, Jefferson Sts., 16,260 sq.yd. 2½ asphalt blocks, 11,550 lin.ft. granite curbing, to Cone Bros., Tampa, $42,000. Noted Jan. 10.

O., Akron — W. F. Peters, dir. Pub. Serv., to McAlonan Bros., 197 West Buchtel Ave., improving West Market St., 1,300 lin.ft. 6 x 18 in. curb $1.60 per lin.ft., 12,900 sq.ft. concrete sidewalk $0.25, 3,750 cu.yd. earth excav. $1, 10,020 sq.yd. vitr. brick $2.35, total $78,084, engrs. est. $85,727, also Collinwood Ave., 5,000 lin.ft. 6 x 18 in. curb $1.50, 25,600 sq.ft. concrete sidewalk $0.22, 4,800 cu.yd. earth excav. $0.75, 6,390 sq.yd. vitr. brick $2.40, $45,518, engrs. est. $48,743; to M. Kalain, 573 Wilson St., Duane St. et al., 53,650 sq.ft. concrete sidewalk $0.22, 8,700 cu.yd. earth excav. $0.55, 2,525 cu.yd. cinders $0.95, engrs. est. $32,332. Noted Feb. 7.

Ind., Greencastle — Putnam Co., constructing 15,337 ft. C. H. Crosby Rd., Franklin Twp., to Pigg & Son, Terre Haute, $50,000.

Minn., Hibbing — Paving 33 blocks in South Hibbing and Brooklyn, 47,000 sq.yd. vibrolithic paving, concrete curbs and gutters, to E. W. Coons Constr. Co., 4th Ave. and Howard St., $3.64 per sq.yd., total $190,000. Noted Feb. 7.

Wyoming—State Hy. Comrs., Cheyenne, improving 5 mi., 20 and 24 ft., Cody-Yellowstone Park Rd., Park Co., Federal Aid Project 129, incl. grading, excav., embankment, retaining walls, c.i. culverts, to Taggart Constr. Co., Cowley, $165,853, incl. engineering and overhead, (culverts furnished by state); 1.3 mi. Cody-Yellowstone Highway, Part 3, to M. J. Kinney, 512 Bank Blk., Denver, Colo., $15,560. Noted Jan. 31.

Ark., Clarksville—Paving with plain concrete, curbing, guttering, storm sewers, etc., various streets, to P. Huggler, Rushville, $45,239.

Ark., Clarksville—Paving various streets, 2 in. asphaltic concrete on 4 in. concrete, to Moreno-Burkham, Syndicate Trust Bldg., St. Louis, Mo., $50,499.

Tex., Amarillo—Potter Co. grading and gravel surfacing 6.06 mi. State Highway 33, Federal Aid Project 421, 12.4 cu.yd. concrete, 22,830 cu.yd. borrow, 20,436 cu. yd. borrow excav., 14,210 cu.yd. gravel surfacing, to Hoffman Constr. Co., Eastland, $66,996. Engrs. est. $76,536.

Tex., Brady—McCulloch Co. grading and gravel surfacing 4.64 mi. State Highway 9, Federal Aid Project 419, 16 ft., to McCall Eng. Co., Amicable Bldg., Waco, $48,691. Noted Feb. 7.

Tex., Dallas—Paving Young St. from Harwood to Houston Sts., 1½ in. Willite asphaltic concrete, to Fuller Constr. Co., Southland Life Bldg., $56,536. Noted Jan. 31.

Tex., Hern—Robertson Co. grading and graveling 9.74 mi. Hearn-Franklin Rd., to Thomas & Ratliff, Rogers, $36,536.

Tex., Uvalde—Uvalde Co. hard surfacing 5.88 mi. Highway 3, to Peterman & Robinson, Laredo, $50,965. Noted Jan. 10.

Oklahoma—State Hy. Dept., Oklahoma City, grading and graveling 6 mi. McAlester-Quinton Rd. from Krebs north, 61,000 sq.yd. gravel, 43,000 cu.yd. earth, 6,600 cu.yd. rock excav., to Altman Rogers Co., McAlester, $45,936.

Okla., Tulsa—Improving 6 blocks Lewis Ave., 36 ft., 7 in. concrete, 1 block Boston Ave. and 1 block 17th Pl., both 26 ft., vibrolithic concrete, 2 blocks 20th St., 24 ft., vibrolithic concrete, to Western Paving Co., Daniels Bldg., $73,706, $9,885, $4,261 and $3,974 respectively; 2 blocks Wheeling Ave., and 5 blocks 12th Pl. and Zunis Ave., 26 ft., asphaltic concrete, to H. L. Cannady Co., 1104 South Lewis St., $15,846 and $31,482 respectively; two alleys, 20 ft., to C. M. Brown, 1315 South Trenton St., $4,005; 3½ blocks Utica Ave. and Easton St., 26 ft., asphaltic concrete, to Standard Paving Co., 1742 East 6th St., $20,931. Noted Jan. 17.

Arizona—State Hy. Dept., Phoenix, improving Phoenix-Wickenburg Hy., Federal Aid Project 76, to L. C. Lashmet, Prescott, 16,149 cu.yd. roadway excav. $0.25, 15,685 cu.yd. excav. borrow $0.25, 769 cu.yd. excav. structures $1.50, 8,720 cu.yd. excav. ditches, etc., $0.25, 324 cu.yd. Class A concrete $14, 144 cu.yd. Class B and 93 cu.yd. Class C concrete $13, total $27,381, state furnished material $10,202.40, engineering and contingencies, $3,758.36, grand total $41,342.

Calif., Hawthorne—Improving 2 portions Miramar Ave., 2½ in. asphalt concrete base with 1½ in. Willite surface, to G. R. Curtis, 2440 East 26th St., Los Angeles, $126,020 and $61,602 respectively.

Calif., Los Angeles—Improving Leesdale St., to G. H. Oswald, 366 East 58th St., grading $10,000, 766 ft. concrete curb $0.70, 240,015 sq.ft. concrete paving $0.255, wooden trestle bridge $37,886, total $109,825. Noted Jan. 3.

Calif., Los Angeles—Improving Sunset Dr. between Myra St. and Sunset Blvd. incl. 79,485 sq.ft. concrete, 2,760 sq.ft. bituminous, 2,066 curb, 8,730 sq.ft. walks, etc., to G. A. Constantine, Haas Bldg., $28,775.

Calif., Newport Beach—Improving Ocean Blvd., etc., incl. 19,010 cu.yd. sand excav., 91,708 sq.ft. of 6 in. clay and gravel surface, grading, 152,080 sq.ft. 6 in. and 201,697 sq.ft. 8 in. concrete pavement, 18,932 lin ft. concrete curb, 94,341 sq.ft. concrete walks, etc., to California Constr. Co., Union Bldg., San Diego, $249,508. Noted Feb. 7.

Calif., San Bernardino—San Bernardino Co., improving Big Bear Blvd., Rd. Dist. Impvt. 25, incl. 26,885 ft. of 8 in. macadam, 18 ft. wide, 41,000 cu.yd. earthwork, etc., to H. H. Lineau, San Bernardino, $149,500.

Calif., San Diego — Improving Fir St. between 6th and California Sts., incl. 93,818 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, 20,310 sq.ft. 4 in. concrete, 6,145 sq.ft. cement concrete sidewalk, 1,610 lin.ft. cement concrete curb, to Griffith Co., 25 14th St., $22,499.

Calif., San Jose—Improving portion 4th, 5th and 6th Sts., grading and paving 1½ in warrenite-bituminous surface on 3½ in. bitulithic cement, curbs, gutters, walks, etc., to H. Crummey, 121 Pearl St. To exceed $25,000.

Calif., Santa Monica—Improving Washington Blvd. between Strand and city limits, bitulithic pavement, curbs, walks, etc., to Keen Paving Co., Dudley Blk., $27,375.

Calif., Santa Ana—Orange Co., improving 6 mi. Bolsa-Chica Rd., 12,500 cu.yd excav., 11,500 cu.yd. gravel, etc., to H. H. Peterson, Spreckels Bldg., San Diego, $53,000.

Quebec—Provincial Government, Quebec, 3¾ mi. macadam road from Gatineau Point easterly on Hull-Montreal Highway, to M. Bucciarelli & Co., Hull, $42,121.

Ont., Toronto — Will round 38 street corners incl. changing sidewalks, filling out pavements, etc., by day labor. $49,505. R. C. Harris, city engr.

Industrial Works

PROPOSED WORK

Mass., Brookline (Boston P. O.)—Storehouse—S. S. Pierce Co., 69 Tremont St., Boston, plans 115 x 535 ft., rein.con., Brookline St., here. $150,000-$200,000.

N. Y., Albany — Storehouse — Albany Hardware & Iron Co., soon takes bids 7 story, 112 x 200 ft., rein.-con., Bway. and Arch St. $500,000. A. W. Fuller, 95 State St., archt. Noted Dec. 6.

N. Y., Long Island City—Warehouse—Ludwig Baumann & Co., 500 8th Ave., New York, having plans prepared by Buchman & Kahn, archts. and engrs., 49 West 45th St., New York, 15 story, 200 x 300 ft., rein.-con. and steel, plain foundation, Anable St., here. $1,500,000.

D. C., Wash.—Warehouse—Dist. Comrs. plan to rebuild warehouse and steamship office recently destroyed by fire, 7th St. wharf. $100,000. Washington & Norfolk Steamship Co., lessee.

W. Va., Bluefield—Freight Station—Norfolk & Western R.R. Co., Roanoke, Va., plans freight station and yards, here. $500,000. W. P. Wiltse, acting ch. engr.

La., Shreveport—Gas Plant, etc.—J. S. Cullinan and associates, Capitol Ave., Houston, Tex., having plans prepared large gas production plant, here, also pipe line from Monroe Fields to Shreveport. $1,000,000. Private plans.

Ky., Louisville — Warehouse — Monarch Automobile Co., 741 South 8th St., plans warehouse. $40,000.

Ky., Louisville — Garage — Lee Tire & Rubber Co., 3rd St., plans 2 story, 53 x 140 ft. garage and service station, 551 South 1st St. $75,000.

Ky., Whitesburg — Roundhouse, etc. — Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville plans roundhouse and extension of yards, here. $50,000. W. H. Courtnay, ch. engr.

O., Alliance—Plant—Alliance Clay Products Co. plans 2 story plant, State Rd. $75,000-$100,000. Will mature in spring.

O., Canton —Factory—Gilliam Mfg. Co., 1919 Navarre Rd. S. W., plans 2 story, brick factory addition, along tracks of Pennsylvania R.R. B. T. Steiner, pres.

O., Cleveland—Garage—Eagle Impvt. Co., c/o H. D. Hughes, archt., 920 Citizens Bldg., having plans prepared 2 story and basement, 100 x 115 ft., brick, rein.-con. and steel, Eagle Ave. $100,000.

O., Cleveland—Garage—J. Bassichis & Son, 309 Society for Savings Bldg., having plans prepared by A. Sharowsky, 2045 Marlowe Ave., Lakewood, 2 story, 25 x 92 ft., brick and steel, 1532 Lakeside Ave. $40,000. Red Top Cab Co., 1532 Lakeside Ave., lessee.

O., Toledo—Plant—Lockwood, Greene & Co., engrs., 24 Federal St., Boston, takes bids within 2 weeks new plant on 100 acre site along tracks of New York Central R.R. and Hocking Valley R.R., here, for Libbey-Owens Sheet Glass Co., Nicholas Bldg. $1,000,000-$1,500,000. Noted Jan. 17.

Ind., Greencastle—Crushing Plant—Mid West Crushed Stone Quarries Co. plans stone crushing plant to replace one recently destroyed by fire. $40,000.

Ind., Michigan City — Repair Shop and Service Station—Prince Motor Co., 1103 Jackson St., having plans prepared by Nicol, Scholer & Hoffman, Ross Bldg., Lafayette, 2 story, 100 x 125 ft., Jefferson St. $75,000.

Ill., Belvidere—Distillery—Local syndicate, c/o Chamber Commerce, having preliminary plans prepared distillery, daily capacity 100 bbl. $250,000. Private plans.

Ill., Chicago—Factory—Peters Mchy. Co., 231 West Illinois St., having plans prepared by C. A. Eckstorm, 5 North La Salle St., 1 story, 90 x 144 ft., brick and timber, 4700 West Ravenswood St. $40,000.

Ill., Macomb—Power Plant—Bd. Trustees State Teachers College plans 1 story and basement, 65 x 100 ft. $40,000.

Wis., Eau Claire—Warehouse—Wisconsin-Minnesota Light & Power Co., 2 South Barstow St., 2 story and basement, brick and concrete, plain foundation, Railroad St., by day labor. $75,000. Private plans. Noted Dec. 13.

Wis., Hartland—Garage—Hornberg Motor Co. having plans prepared by Esch-

Industrial Works (Continued)

weiler & Eschweiler, 210 Mason St., Milwaukee, 1 story, 60 x 70 ft. and 30 x 50 ft. additions, brick and timber, plain foundation. $40,000.

Wis., Milwaukee—Service—H. E. Weber, Inc., 583 Jefferson St., having revised plans prepared by Van Ryn & DeGelleke, 114 Grand Ave., 1 story and basement, 122 x 130 ft., brick and concrete, plain foundation, Martin St. $150,000. Former bids rejected.

Wis., Milwaukee — Plant — Milwaukee Gas Light Co., 182 Wisconsin St., plans brick and steel, plain foundation, on west side. $5,000,000-$6,000,000. R. B. Brown, pres. Engineer and architect not selected.

Wis., Wisconsin Rapids—Garage—Zeaman Motor Co., 212 Oak St., having plans prepared by M. C. Jacobson, Wisconsin Rapids, 2 story, 48 x 185 ft., garage and repair shop, brick and rein.-con., plain foundation.

Wis., Wausau—Electric Power Plants—Wisconsin Valley Electric Co., 306 3rd St., denies they will build 3 hydro electric power plants along Wisconsin River, as noted in Jan. 17 issue.

Minn., Mankato—Storage Stations, etc.—Standard Oil Co., Davidson and Lord Sts., Indianapolis, Ind., plans group of buildings incl. warehouses, shops, garage, storage stations and offices, here. $150,000. J. J. Meyer, Mankato, representative.

Kan., Fredonia — Voted $150,000 bonds electric light plant, distribution system, and electrification pumping station. A. L. Mullergren, 555 Gates Bldg., Kansas City, Mo., engr.

Kan., Salina—Warehouse—Salina Supply Co. having plans prepared by C. W. Sawyer, Salina, 4 story and basement, 91 x 121 ft., concrete, brick and stone, Santa Fe St. $150,000.

S. D., Watertown—Garage—Holt Motor Co., 226 East Kamp Ave., having plans prepared 1 story, 57 x 100 ft. brick garage. $90,000. Private plans.

Mo., St. Louis—Garage—Local Syndicate, c/o B. Altheimer & Bro. Realty Co., Wainwright Bldg., soon takes bids 3 story, 147 x 188 ft., rein.-con. and brick, Lucas Ave. $175,000.

Tex., Athens—Garage—Tri County Motor Co. plans 1 story, 50 x 115 ft., brick and concrete, Market St. $45,000. Engineer and architect not announced.

Tex., Brady — Cold Storage — Mayhew Produce Co. plans cold storage plant with 15 ton ice plant and 5 cold storage rooms, along tracks Atchison, Topeka & Santa Fe R.R. $40,000.

Tex., Cleburne — Shops, etc. — Grand Canyon & Santa Fe Ry., Los Angeles, operated by Atchison, Topeka & Santa Fe R.R., having plans prepared car and locomotive shops, terminal improvements and new station, here. $3,000,000. R. B. Ball, 6th and Main Sts., Los Angeles, ch. engr. coast lines.

Tex., Jacksonville—Repair Shop, etc.—Texas & New Orleans R.R. operated by Southern Pacific Ry., Southern Pacific Bldg., Houston, had plans prepared repair shops, roundhouses, extension of yards on 32 acres. H. M. Lull, Houston, ch. engr. Texas lines.

Okla., Okmulgee—Refinery—Allied Refining Co. having plans prepared by W. P. Henry, engr., Okmulgee, addition to refinery. $125,000.

Ont., Schreiber—Roundhouse—Canadian Pacific Ry., Windsor Sta., Montreal, Que., plans rebuilding 1 story, rein.-con. and brick roundhouse recently destroyed by fire, here. $250,000.

California, Nevada and Utah — Shops, etc.—See "Railways."

Calif., Antioch—Substation—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans substation on 58 acre site, here. To exceed $150,000.

Calif., Burbank—Factory—Clark-Turner Piston Co., 2251 East 7th St., Los Angeles, had plans prepared by Austin Co. of California, Bartlett Bldg., Los Angeles, 1 story, 50 x 250 ft., brick and concrete, Olive St., here.

Calif., Los Angeles—Substations, Power Plants, etc.—Southern California Edison Co., 306 West 6th St., appropriated $2,394,000 for substations; $2,100,000 enlargement of Big Creek power plants, No. 1, 25,000 kva. and No. 2, 16,000 kva.; $1,160,500, transmission lines, etc.; $5,943,700 for distribution lines; $1,000,000, diversion dam and enlargement Florence Lake Reservoir; $5,879,000 Florence Lake Tunnel; $700,000 tunnel at Lake Huntington.

Calif., Oakland — Foundry — Marchant Calculating Machine Co., Powell and Landregan Sts., having plans prepared 1 story, hollow tile and galvanized iron, 10th Ave. near High St. $50,000. Private plans. Traveling crane, about 10 ton, will be installed.

Calif., Oakland—Warehouse—Aluminum Cooking Utensil Co., Monadnock Bldg., San Francisco, plans 2 story, to contain 60,000 sq.ft. of floor space, brick or concrete, Adeline and 46th Sts., here. E. T. Grove, dist. mgr.

Calif., Redding—Garage—W. E. Bewsher, 617 California St., plans 1 story, 150 x 300 ft., rein.-con., Placer, California and Sacramento Sts. $100,000 incl. equipment.

Calif., San Francisco — Bakery — Twentieth Century Baking Co., 1650 Polk St., having plans prepared by C. O. Clausen, Hearst Bldg., 2 story and basement, rein.-con., Howard St. and Washington Alley. $55,000.

Que., Montreal—Plant—McKinnon Steel Co., Ltd., Sherbrooke, plans fabricating plant, Hamilton and St. Patrick Sts., here. $250,000.

BIDS DESIRED

O., Cleveland—Garage—A. F. Janowitz, archt., 811 Prospect Ave., taking bids 1 story and basement, 75 x 128 ft., brick, Woodland Ave., for J. Makoff, 2740 Euclid Blvd., Cleveland Heights. $50,000.

Mich., Detroit — Factory — Esselstyn & Carey, engrs., 2539 Woodward Ave., taking bids and opens same about Feb. 15, 2 story, 60 x 160 ft. rein.-con., brick and steel addition to factory, Central Ave., for Wolverine Tube Co., 1411 Central Ave.

Calif., Oakland—Garage—E. W. Cannon, archt., Central Bank Bldg., receiving bids 1 story and basement, rein.-con., Bway. near Orchid St., for M. E. Roberts, 1622 East 19th St. $40,000.

CONTRACTS AWARDED

N. Y., New York—Garage—Lehfri Realty & Constr. Co., Inc., c/o J. M. Berlinger, archt. and engr., 469 7th Ave., will build 4 story, rein.-con., brick and steel, plain foundation, 308 East 48th St. $200,000. Work will be done by separate contracts under supervision of architect.

Pa., Phila. — Garage and Service — L. Folsheid, 815 East Chelten Ave., will build 1 story, 50 x 150 ft., brick and steel, plain foundation, Chew and Chelten Aves., by day labor. $50,000. E. A. Wilson, 1208 Chestnut St., archt.

Pa., Phila. — Plant — Howard Biddle Printing Co., 518 Locust St., 1 story, 65 x 116 ft. brick and steel, plain foundation, 520-526 Locust St., to Smith-Hardican Co., 1811 Callowhill St.

Pa., Phila.—Mill—E. A. Stopper, archt., Fuller Bldg., 2 story and basement, 66 x 105 ft. rein.-con. mill, plain foundation, Allegheny and Boudenot Sts., to Turner Constr. Co., 1713 Sansom St. for Concordia Silk Mills. Noted Jan. 10.

Va., Roanoke—Norfolk & Western R.R., 1 story machine shop at East Roanoke Wks., to J. P. Pettyjohn & Co., Lynchburg. Archts. est. $65,000.

N. C., Mebane—Factory—White Furniture Co., 3 story, 100 x 200 ft. machine room and 80 x 240 ft. finishing room, brick, steel and concrete, to J. L. Crouse, Greensboro. Noted Jan. 21.

Ky., Ashland—Dairy—Ashland Sanitary Milk Co., 34th and Winchester Sts., 2 story, 50 x 85 ft., to Elswick & Ramsey, Ashland. Archts. est .$40,000. Noted Sept. 27.

Ky., Somerset—Shop—Southern R.R. Co., Southern R.R. Bldg., 1 story addition to car repair shops, here, to T. P. Pettyjohn & Co., 212 8th St., Lynchburg, Va. Est. cost $65,000.

Ind., Evansville—Dairy, Shop and Warehouse—Ideal Dairy Co., 7th and Penn. Ave., 2 story, 95 x 132 ft., brick and rein.-con., to M. J. Hoffmann Co., Furniture Bldg., $40,000. Noted Jan. 24.

Mich., Detroit — Depot — Texas Co., 17 Battery Pl., New York City, 1 story, rein.-con. and brick oil distributing depot, incl. warehouse, pumphouse, office building, storage tanks, etc., to McKelvey Constr. Co., 406 Hammond Bldg. Engrs. est. $100,000.

Mich., Grand Rapids—Depot—Texas Co., 17 Battery Pl., New York City, 1 story, 118 x 334 ft., oil distribution depot incl. pumphouse, office building, steel storage tanks, etc. here, to McKelvey Constr. Co., 406 Hammond Bldg., Detroit. Engrs. est. $50,000.

Ill., Rockford — Distributing Depot — Texas Co., 17 Battery Pl., New York City, 1 story, 118 x 334 ft. depot, incl. rein.-con. and brick pump house, storage tanks, office, roadways, etc., here, to McKelvey Constr. Co., 406 Harmond Bldg., Detroit, Mich. Archts. est. $50,000.

Ill., Waukegan — Distributing Depot — Texas Co., 17 Battery Pl., New York City, 1 story, 118 x 334 ft. depot, incl. pump house, storage tank and office, rein.-con. and brick, roadways, etc., here, to McKelvey Constr. Co., 406 Hammond Bldg., Detroit, Mich. Archts. est. $50,000.

Wis., Algoma — Factory — Algoma Wood Products Co., 2 story, 60 x 120 ft., concrete and steel, plain foundation, to F. Wulf & Son, Algoma. $60,000. Noted Oct. 11.

Wis., Cornell—Garage—A. Fox will build 1 story, 100 x 132 ft., brick and concrete, plain foundation, by day labor. $50,000. Private plans.

Wis., West Allis—Foundry—Rosenthal Corn Husker Co., 7424 Elm St., 1 story, 60 x 70 ft. and 55 x 57 ft., brick and steel, plain foundation, Greenfield St., by day labor. $40,000. Private plans.

Mo., St. Louis—Factory—Measuregraph Co., 1821 Olive St., 2 story, 80 x 180 ft., rein.-con. and brick, Forest Park Blvd., to W. Cunliffe, 4935 Delmar Blvd. Archts. est. $60,000.

Calif., Emeryville—Warehouse and Factory—Detroit Steel Products Co., 251 Kearney St., San Francisco, 1 story, 106 x 120 ft., concrete, Boyle and 64th Sts., here, to R. W. Littlefield, 357 12th St., Oakland. Noted Jan. 3.

Calif., Fullerton — Factory — Western Glass Co., 939 East 1st St., Los Angeles, 1 story, 200 x 800 ft., steel frame, here, to Union Iron Wks., 5125 Santa Fe Ave., Los Angeles. Total cost $275,000.

Calif., Los Angeles—Garage—J. Ormsby, 176 North Echo Park Ave., 1 story, 60 x 148 ft., brick, to W. J. Gray, 2131 Sunset Blvd.

Calif., Los Angeles—Garage—P. L. Bixby, 705 Citizens Natl. Bank Bldg., 1 story, 130 x 158 ft., brick, Mateo and 8th Sts., to V. P. Gilbert, Citizens Natl. Bank Bldg.

Calif., Los Angeles—Garage—W. Shortsleeve, et al., 810 South Grand Ave., 8 story and basement, rein.-con., to Macdonald & Kahn, Loew State Bldg., $250,000.

Calif., Los Angeles—Warehouse—W. J. Norton, 5712 Brinehurst Ave., 5 story, 60 x 80 ft., rein.-con., South Western Ave., to Richards-Neustadt Constr. Co., Trust & Savings Bldg., $49,500.

Calif., Los Angeles—Warehouse—Union Pacific Ry. Co., 610 South Main St., 2 story rein.-con. addition, Clarence and 6th St., to Lynch Constr. Co., Central Bldg., $87,500. Pacific Southwest Distributing Co., 1600 East 6th St., lessee.

Calif., San Francisco—Printing Plant—Wobbers, Inc., 724 Market St., 1 story and basement, rein.-con., Jessie St. and Mint Ave., to Mager Bros., 1318 Valencia St., $42,000. Noted Nov. 22.

Buildings

PROPOSED WORK

Mass., Boston — Apartment — Kanter & Steinberg, 220 Warren St., having plans prepared by Silverman, Brown & Heenan, 51 Cornhill, 3 story, 100 x 120 ft., brick, plain foundation, Warren St. $250,000.

Mass., Boston—Apartment—M. Seretto, 3 Tremont Row, plans brick, Commonwealth Ave. $1,000,000. Engineer and architect not selected.

Mass., Pittsfield—Hotel—Wendell Hotel Co. having sketches made by H. L. Stevens & Co., 522 5th Ave., New York City, 6 story, 60 x 120 ft. addition, brick and steel, plain foundation, South and West Sts. $200,000.

N. Y., Albany—Hospital—Albany Hospital, North Scotland Ave., having plans prepared by Crow, Lewis & Wick, 200 5th Ave., New York City, 3 story, 150 x 200 ft., brick and steel addition, plain foundation. $700,000. This corrects report in Jan. 24 issue.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York City, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 105, brick, steel and stone, plain foundation, Ft. Hamilton Ave. and 59th St., here. $1,150,000.

N. Y., Brooklyn — School — St. Joseph Roman Catholic Church, 956 Pacific St., soon takes bids brick, steel and stone, plain foundation, Dean St. $250,000. W. T. McGuire, pastor. F. J. Berlenbach, 26 Graham Ave., archt. and engr.

N. Y., Eastview—Home—Supervs. Westchester Co., Court House, White Plains, soon take bids 4 story, brick, steel and stone, plain foundation, here. $650,000. Walker & Gillette, 126 East 37th St., New York City, archts. and engrs. Noted Dec. 6.

N. Y., Haverstraw—Club—B. P. O. E soon takes bids 2 story, brick, steel and stone, plain foundation. $150,000. Tooker

Buildings (Continued)

& Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Sept. 6.

N. Y., New York—Apartment—One Hundred Fifteen East 48th St., Corp., c/o M. B. Schmidt, archt. and engr., 14 East 40th St., soon takes bids 14 story, 200 x 200 ft., brick, steel and stone, plain foundation, 48th St., and Lexington Ave. $3,500,000. Noted Nov. 1.

N. Y., New York—Exchange—New York Telephone, 15 Dey St., having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., 3 story, 100 x 150 ft., brick, steel and stone, plain foundation, Kingsbridge Rd. and 230th St.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., soon takes bids 3 story, 100 x 150 ft., brick, steel and stone, plain foundation, Cruger Ave. McKenzie, Voorhies & Gmelin, 342 Madison Ave., archts. and engrs.

N. Y., New York—Office—J. Kovacs, 17 East 42nd St., plans 20 story, 50 x 100 ft., brick, steel and stone, plain foundation, 22 West 48th St.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 82, 5 story, brick, steel and stone, plain foundation, Macomb Rd. and 176th St. $800,000.

N. Y., Nyack—Hospital—Nyack Hospital Assn., having plans prepared by M. L. and H. G. Emery, archts. and engrs., 68 Bible House, New York City, brick, steel and stone addition, plain foundation, Midland Ave. $200,000. Noted May 24.

N. Y., Oyster Bay—School—Bd. Educ. having plans prepared by J. W. O'Connor, archt. and engr., 162 East 37th St., New York City, brick, steel and stone, plain foundation. $600,000. J. Birmingham, pres.

N. Y., Woodhaven—Theater—Cross Bay Theater Co., Inc., c/o R. T. Short, archt. and engr., 360 Macon St., Brooklyn, having plans prepared brick, steel and stone, plain foundation. Woodhaven Ave. and Rockaway Blvd., here. $275,000.

N. J., New Brunswick — Club — New Brunswick Lodge of Elks, plans 3 story, brick and limestone. $300,000. A. Merchant, 368 George St., and W. Boylan, 143 Albany St., archts.

N. J., Oradell—Hospital—Bd. Freeholders Bergen Co., Court House, Hackensack, having plans prepared by G. W. Conable, archt. and engr., 46 West 24th St., New York City, 3 story, brick, steel and stone, plain foundation, here. $200,000.

Pa., Bloomsburg — High School — Bd. Educ. having plans prepared by McLanahan & Bencker, Bellevue Court Bldg., Phila., brick high school. $500,000.

Pa., Phila.—Apartment—Fox Bros., 6224 North Broad St., having plans prepared by E. Roth, Drexel Bldg., 3 story and basement, 110 x 150 ft., brick and steel, plain foundation, Broad St. below Chelten Ave. $275,000.

Pa., Phila.—Hospital, Institution, etc.—City plans completing portion Phila. Hospital for Insane, $750,000, and female buildings for Institution for Feeble-minded, $1,200,000, both at Byberry 35th Ward, here. P. H. Johnson, 1713 Sansom St., archt.

Pa., Phila.—Nurses Home—Phila. Hospital, 34th and Pine Sts., having plans prepared by P. H. Johnson, 1713 Sansom St., addition to nurses home, 34th and Pine Sts. $200,000.

Pa., Phila.—Office—C. Kahn, Morris Bldg., having plans prepared by L. Rothschild, 25 South Broad St., 10 story and basement, 60 x 100 ft., rein.-con., brick, and limestone, plain foundation, Sydenham and Locust Sts. $500,000.

W., Va., Lumberport — Eagle Dist. Bd. Educ. having plans prepared by S. W. Ford, Clarksburg, and takes bids about Mar. 1, brick school, to replace one destroyed by fire. $150,000.

W. Va., Huntington—Feb. 25, by Meanor & Handloser, archts., Professional Bldg., 14 story, 59 x 90 ft., rein.-con., brick and steel, for Union Bank & Trust Co., 4th Ave. and 9th St. $800,000. Noted Feb. 7.

N. C., Gastonia — Plans Y. M. C. A. building. $250,000. Address Chamber of Commerce.

Ga., Albany—School—City and Dougherty Co. voted $200,000 bonds for school.

Ala., Tuscaloosa—Church—Bd. Deacons First Baptist Church soon takes bids 1 story, 50 x 100 ft. church and 2 story, 50 x 75 ft. sunday school. $150,000.

Tenn., Nashville—Fraternal—Grand Lodge Independent Order of Odd Fellows plans 12 story, rein.-con., 119th St. and 7th Ave. C. M. Bishop, 1651 North Parkway, Memphis, grand master. $500,000.

Ky., Louisville — Church — St. Agnes Parish, plans church, Newburg Rd. and Speed Ave. $150,000.

Ky., Louisville—Clinic—Solomon Clinic, Clinic Bldg., having plans prepared by L. C. Solomon, Clinic Bldg., two 6 story additions, East Chestnut St. $150,000.

Ky., Louisville—Court House—Comrs. Jefferson Co. plan two 3 story wings to court house, 5th and Jefferson Sts., $150,000.

O., Alliance—Lodge and Mercantile—Moose Lodge plans 5 story, 100 x 110 ft., East Market and South Seneca Sts. $250,000. R. E. White, secy.

O., Ashtabula — Exchange — Ashtabula Telephone Service Co., having plans prepared by McGarry & McGarry, 4614 Prospect Ave., Cleveland, 2 story and basement, 55 x 113 ft., brick and rein.-con. $150,000.

O., Ashtabula—Store—Carlisle Co., 161 Main St., had plans prepared by McGarry & McGarry, 4614 Prospect Ave., Cleveland, 4 story and basement, 60 x 130 ft., brick, steel and concrete. $150,000.

O., Columbus—City Hall—Having plans prepared by Allied Architects Assn., Ltd., Columbus, brick, stone and concrete, along Scioto River. $600,000-$800,000. G. H. Bulford, North High St., member of Bd. Mgrs.

O., St. Clairville—Hospital—Belmont Co. having plans prepared by C. W. Bates, 77 12th St., Wheeling, W. Va., 2 story and basement, 60 x 130 ft., brick and rein.-con. $175,000.

O., Unionville Center—School—Bd. Educ. having plans prepared 2 story and basement, 97 x 100 ft., brick and concrete, $150,000. Engineer and architect not announced.

Mich., Detroit—Apartment-Hotel—Abraham & Wood, archts., 705 Kresge Bldg., preparing plans 8 story and basement, 80 x 155 ft. rein.-con. and brick, plain foundation, Warren Ave. $350,000. Owner's name withheld.

Mich., National Mine—High and Grade School—Tilden Twp. Bd. Educ. having plans prepared by Derrick-Hubert, Menominee, 2 story, 98 x 212 ft. concrete, brick and tile, plain foundation, here. $175,000.

Ill., Chicago—Apartment—J. P. Quill, c/o Fox & Fox, archts., 38 South Dearborn St., having plans prepared 3 story, 125 x 200 ft., fireproof, Jackson St. near La Vergne St. $150,000.

Ill., Danville — Hotel — W. Van Valkenburg, Plaza Hotel, soon takes bids 8 story, 60 x 145 ft., rein.-con., brick and stone. Lewis & Dougherty, Adams Bldg., archts.

Ill., Okawville — Hotel — Okaw Mineral Springs Hotel Co., c/o G. W. Frank, having preliminary plans prepared 200 room, brick, concrete and stone. $300,000. Engineer and architect not selected.

Ill., Springfield—Exhibition and Administration—Illinois State Fair, Dept. Agriculture, having preliminary plans prepared 2 and 3 story, brick and concrete, Fairgrounds. $450,000. Private plans.

Wis., Madison—Club—Aerie of Eagles, c/o M. G. Ekstedt, 418 East Wilson St., plans 2 story, rein.-con., brick and steel, plain foundation, West Doty St., $150,000. Architect not selected.

Wis., Madison—Theatre—T. S. Nicholson & Sons Co., 1949 Winnebago St., having plans prepared by P. M. Homer, Pioneer Blk., 2 story, about 100 x 150 ft., brick, rein.-con. and steel, Atwood St. $150,000. Noted Jan. 24.

Wis., Milwaukee—Business—G. A. Butter Co., 603 Mitchell St., having plans prepared by Voelz & Siebert, 373 Bway., 2 story and basement, 139 x 300 ft., brick and concrete, plain foundation. $400,000.

Wis., Milwaukee — Church — St. Leo's Congregation, P. Theisen, 2442 Locust St., pastor, soon takes bids 2 story, 88 x 160 ft., brick and concrete, plain foundation, Locust and 24th Sts. $250,000. E. La Croix, 1394 25th St., archt. Noted Jan. 31.

Ia., Ottumwa—Rejected bids converting Y. M. C. A. building into Y. W. C. A., 4 story and basement, rein.-con., brick and stone. Archts. est. $150,000. Croft & Boerner, 1006 Marquette Ave, Minneapolis, Minn., archts. Noted Jan. 10.

Ia., Tipton—School—Election Feb. 17, $265,000 bonds for school. Thomas, McLenman & Thomas, 527 West 17th St., Des Moines, archt.

Minn., Breckenridge—Court House—Wilkin Co. defeated $200,000 bonds for court house. P. E. Truax, aud. Noted Nov. 1.

Minn., Minneapolis—Theatre, Store and Office—Auditorium Holding Co., Auditorium Bldg., having plans prepared by Magney & Tusler, 126 South 9th St., converting auditorium-office building, 3 story and basement, 165 x 220 ft., into theatre, store and office, Nicollet Ave. and 11th St. $250,000.

Kan., Wichita — Hospital — Southwest Osteopathic Sanitarium, Blackwell, Okla., making preliminary plans 4 story, rein.-con. and brick, here. $125,000 to $175,000. Private plans.

Neb., Beatrice—Hospital—State Bd. Control, Lincoln, soon takes bids 2 story and basement, 94 x 133 ft. rein.-con., brick and stone, for Institute for Feeble Minded, here. $125,000 to $150,000. R. W. Grand, Beatrice, archt.

Neb., Grand Island—High School—Bd. Educ., c/o S. E. Sinke, secy., having preliminary plans prepared by Kirsche & Baker, Ryan Bldg., 3 story and basement, 270 ft. long, rein.-con., brick and stone, Cedar St. between 5th and 6th Sts. $350,000.

Mo., Independence—Memorial—Tirey J. Ford Post Amer. Legion having preliminary plans prepared by A. Gentry, 3 story and basement, 100 ft. sq., brick, stone and rein.-con.

Mo., St. Louis—Home—Little Sisters of Poor, 20th and Hebert Sts., plans 4 story, rein.-con., brick and stone addition. $200,000.

Mo., St. Louis—Office—I. T. Cook Co., Arcade Bldg., soon takes bids remodeling Odd Fellows Building, consisting of tearing down large tower, adding additional story to building proper, etc., Olive St. $500,000. P. J. Bradshaw, International Life Bldg., archt.

Ark., Jonesboro—Hotel—E. B. Noble, Noble Hotel, plans 100 room addition, brick, rein.-con., stone and terra cotta. $175,000. Architect not selected.

Tex., Ft. Worth — See "Unclassified" under "Contracts Awarded."

Tex., San Antonio—Apartment—C. T. Boelhauwe & R. A. Baker, City Natl. Bank Bldg., having plans prepared 4 story, 90 x 160 ft., rein.-con., tile and stucco, plain foundation, Fredericksburg and Callinan Rds. $150,000.

Tex., Texarkana—City Hall—City having plans prepared by C. H. Page & Bros., archts., Austin Natl. Bank Bldg., Austin, and Witt, Siebert & Halsey, associated archts., Texarkana, 6 story and basement, stone, brick, concrete and steel. $200,000.

Okla., Fairfax—High School—Bd. Educ. having plans prepared by Fonini & Bramblett, Terminal Bldg., Oklahoma City, 3 story, 80 x 180 ft., rein.-con. and brick, plain foundation, 7th St. $178,000.

Okla., Newkirk—Hotel—Newkirk Hotel Co. having preliminary plans prepared by E. Charles, 404 Orpheum Bldg., Wichita, Kan., 4 story, 50 x 150 ft., rein.-con. and brick, plain foundation, Main St. $150,000.

Okla., Tulsa—School—Bd. Educ. making preliminary plans 4 new High School buildings, rein.-con. and brick, plain foundations. $2,000,000. Architect not selected.

Colo., Denver — Club — Denver Aerie of Eagles 2063, c/o S. Lobe, State House, plans club house. $500,000. Engineer and architect not selected.

Colo., Denver — Grade School — School Dist. had plans prepared by E. Groves, Foster Bldg., 2 story, 67 x 190 ft., brick, terra cotta and steel, between 11th and 12th Sts., Decatur and Bayard Sts., known as Fairview School. $150,000.

Nev., Sparks — High School — Sparks Junior School Dist. having plans prepared by F. J. DeLongchamps, Gazette Bldg., Reno, 2 story, brick. $150,000.

Calif., Beverly Hills—Office, Store and Apartment—S. Anderson, c/o W. A. Hudson, archt., Woodsbeekman Bldg., having plans prepared 5 story and basement, 100 x 150 ft. brick, Burton Way.

Calif., Hanford — Schools — Hanford Junior High School Dist. having plans prepared by W. H. Weeks, 369 Pine St., San Francisco, 1 story fireproof, probably rein.-con. gymnasium, auditorium, $150,000; 1 story rein.-con. academic building, $150,000.

Calif., Long Beach — Apartment — St. Regis Apartment Co., 1030 East Ocean Blvd., having preliminary plans prepared by J. H. Roberts, Marine Bank Bldg., brick addition, approximately 10 story. To exceed $200,000.

Calif., Long Beach—Club—C. T. McGrew & Sons, archts., 1345 West Ocean Ave., preparing plans fireproof, Hermosa and 2nd Sts. $150,000. Owner's name withheld.

Calif., Long Beach — Club — Details of financing now being worked out for club, East Ocean Blvd. $500,000. D. M. Smith, Empire Theatre Bldg., interested.

Calif., Long Beach—Store—H. A. Marti & Co., 411 Pine St., having preliminary

Buildings (Continued)

plans prepared by W. H. Austin, Pacific Southwest Bldg., 8 story, 150 x 150 ft., fireproof, 4th and Pine Sts.

Calif., Los Angeles—Apartment—T. A. McNamara, c/o Walker & Eisen, archts., Pacific Finance Bldg., having preliminary plans prepared apartment, 100 x 175 ft., about 5 story and basement, brick, Franklin Ave. To exceed $150,000.

Calif., Los Angeles — Club — Mt. View Country Club, c/o L. D. Sherer, designer, 7th Hill Bldg., had sketches made rein.-con., probably 4 story, Ventura Blvd. To exceed $150,000.

Calif., Los Angeles — Office and Loft — Universal Film Exch., 822 South Olive St., had plans prepared and soon takes bids 3 story and basement, 50 x 125 ft., brick, Olive St. Private plans.

Calif., Monrovia—Hotel—W. E. Keefe, 348 West White Oak St., representing organization which plans fireproof hotel. $250,000.

Calif., Sacramento—High School—Sacramento Junior College Dist. plans to vote on $150,000 or more bonds for fireproof junior high school. C. C. Hughes, secy. Bd. Educ.

Calif., San Francisco—Apartment—J. H. Nuttman, et. al., 4347 19th St., having plans prepared by G. A. Berger, 261 Valencia St., 5 story and basement, rein.-con. or steel and brick, Valencia and 14th Sts. $150,000.

Calif., San Francisco—Lindgren-Swinerton Co., Inc., general contracts, Standard Oil Bldg., soon takes bids 4,000 to 5,000 tons structural steel for 26 story and basement, Class A office building, New Montgomery St. near Howard St., for Pacific Telephone & Telegraph Co., 333 Grant Ave. Total estimated cost $3,500,000. Noted Dec. 26.

Calif., San Francisco — Office — W. B. Bourn, 2030 Bway., plans fireproof, Market, Front and Pine Sts. To exceed $150,000.

Calif., San Rafael — Hospital — J. H. Kuser, Cheeda Blk., interested in corporation which plans fireproof hospital. $250,000. Engineer and architect not selected.

Calif., Venice — Theatre — West Coast Theatre, Inc., et. al., Knickerbocker Bldg., Los Angeles, plan fireproof theatre, here. To exceed $250,000.

Calif., Woodland—Hotel—Woodland Hotel Co., c/o W. H. Weeks, archt., 369 Pine St., San Francisco, having preliminary plans prepared 4 or 5 story and basement, rein.-con., to contain 125 rooms, here. To exceed $150,000.

Que., Montreal — Hall and Office — Les Debardeurs Syndiques du Port of Montreal, having plans prepared by E. A. Doucet, 195 St. Catherine St., 5 story, rein.-con., brick, steel and stone, Bouscoeurs St. $150,000.

Ont., Toronto—Apartment—First Mortgage Bonds Ltd., 1104 Royal Bank Bldg., having plans prepared by Molesworth, West & Secord, 43 Victoria St., 7 story and basement, 100 x 180 ft. rein.-con., brick and steel, plain foundation, Sherbourne St. $800,000. Noted Feb. 7.

Ont., Toronto—School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 8 room, rein.-con., brick and steel addition to Rosedale School, $150,000.

BIDS DESIRED

Mass., Brookline (Boston P. O.)—School—Feb. 19, by Schoolhouse Dept., 2 story, 75 x 107 ft., brick, terra cotta and granite, Harvard St. $150,000. Kilham, Hopkins & Greeley, 9 Park St., Boston, archt.

N. Y., Annandale-on-Hudson — Science and Dormitory—Mar. 1, by C. H. Gardiner, archt., 46 North Pearl St., Albany, 3 story and basement, 54 x 62 ft. and 25 x 56 ft. science building, also 3 story and basement, 28 x 117 ft. dormitory, both cut stone and metal lumber, for St. Stephens School, here. $200,000. Heating, sanitary and electric contracts not included.

N. Y., Arlington—School—Feb. 11, by Union Free School Dist. 7, 2 story and basement, brick. $150,000 . E. C. Smith, 39 Market St., Poughkeepsie, archt.

N. Y., Brooklyn—Hospital and Chapel—Feb. 25 (extended date) by Lord & Hewlett, archts., 2 West 45th St., New York, 6 story, 225 x 300 ft., brick, steel and stone, plain foundation, Albany and Atlantic Aves., here, for St. Johns Hospital, 1531 Atlantic Ave. $850,000. E. E. Seelye, 101 Park Ave., New York, engr.

N. Y., Brooklyn—School—Mar. 7, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 214, Pitkin Ave. from Drew to Forbell Aves., for Bd. Educ., 500 Park Ave., New York City. Noted Mar. 29.

N. Y., Harrison—School—Feb. 25, by Bd. Educ., brick, steel and stone. $300,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Jan. 24.

N. Y., Mamaroneck—High School—Feb. 19, by Bd. Educ., 2 story, brick, steel and stone, Boston Post Rd. and Palmer Ave. $475,000. E. Hahn, 290 Fulton St., Hempstead, archt. E. E. Seelye, 101 Park Ave., New York City, engr. Noted Dec. 6.

N. Y., New York—School—Mar. 7, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 77, Ward Ave. through to Manor Ave. south side of East 172nd St., here, for Bd. Educ., 500 Park Ave.

N. J., Morris Plains — Dining Hall and Kitchen—Feb. 29, by B. G. Lewis, comr. Charities & Corrections, Trenton, 5 story, 30 x 60 ft., brick, steel and hollow tile, for New Jersey State Hospital, here. A. B. Mills, Trenton, state archt. Noted Jan. 24.

Pa., Phila.—Art Museum—Feb. 27, by Comrs. Fairmount Park, Room 127 City Hall, constructing certain portions of Phila. Museum of Art. Borie, Trumbauer & Zantzinger, 1406 Land Title Bldg., and 1300 Otis Bldg., archts.

Pa., Phila.—Nurses Home—Feb. 15, by Magaziner, Everhard & Harris, archts., 603 Chestnut St., 6 story and basement, 38 x 125 ft. rein.-con. and terra cotta, plain foundation, 5th and Reed Sts., for Mt. Sinai Hospital, 5th and Reed Sts. $250,000.

N. C., Davidson—College—Feb. 18, by Davidson College, 3 story, concrete, brick and stone college and dormitory. $500,000. H. C. Hibbs, 4th and 1st Natl. Bank Bldg., Nashville, Tenn., archt.

N. C., Smithfield—Schools—Feb. 22, by H. B. Marrow, supt. Johnston Co., 2 schools, one at Princeton and other at Glendale. $150,000. C. C. Hook, Charlotte, archts.

O., Cleveland—Apartments—L. Duchon, 515 Ulmer Bldg., taking bids two 2 story and basement, 31 x 92 ft. and 28 x 92 ft., brick, East 91st St. $150,000. A. F. Janowitz, 811 Prospect Ave., archt.

O., Cleveland—Apartment—A. H. Oyer and J. Blachman, Bangor Bldg., taking bids 3 story and basement, 44 x 206 ft., brick, 1932 East 97th St. $700,000. S. H. White, 1032 Schofield Bldg., archt. Noted Jan. 31.

O., Cleveland—Bank and Commercial—State Banking & Trust Co., 734 Euclid Ave., taking bids and opens same about Mar. 1, 3 story and basement, 30 x 125 ft., brick and concrete, Hamm Ave. and Bway. $150,000. W. G. Caldwell, Park Bldg., archt. Noted Nov. 8.

O., Columbus—Hall—Feb. 18 (extended date) by Richards, McCarty & Bulford, archts., 584 East Broad St., 5 story, 120 x 130 ft., brick, steel and terra cotta, East State St., for Knight of Columbus, 6th and State Sts. $500,000. Noted Dec. 27.

Mich., Bad Axe—School—Feb. 20, by A. Dundas, secy. Bd. Educ, 2 story and basement, rein-con, brick and steel, plain foundation, $200,000 S. D. Butterworth, 909 Prudden Bldg., Lansing, archt.

Mich., Highland Park (Detroit P. O.)—School—Feb. 19, by R. A. Palmer, business mgr. Bd. Educ., 2nd Blvd. and Glendale Ave., 3 story, 110 x 140 ft. rein.-con., brick, steel and stone, plain foundation, Cortland Ave. $200,000. Noted Dec. 13.

Ill., Chicago—Apartment—A. S. Traisman, c/o J. Cohen & Co., archts., 140 North Dearborn St., taking bids 3 story and basement, 80 x 140 ft., fireproof, 1235-41 North Shore. $150,000.

Ill., Chicago—Bank and Office—W. G. Uffendell, archt., 39 South State St., taking bids 2 story, 79 x 125 ft., fireproof, Fullerton and Central Park, for Kimball Trust and Savings Bank, 3538 Fullerton St. $200,000.

Wis., Elkhart Lake—Sanitarium—Mar. 6, by Tuberculosis Sanitarium Comn., W. S. Wisselink, chn., Hingham, 2 story, 60 x 180 ft., brick, rein.-con. and steel. E. A. Stubenrauch, Imig Bldg., Sheboygan, archt. Noted Jan. 24.

Wis., Madison—Store and Apartment—J. H. Bertrand, De Forest, taking bids 2 story, 57 x 61 ft., rein.-con. and brick, plain foundation, State St. $150,000. P. Dean, Dean Bldg., archt.

Wis., Waupun—Refectory, etc.—Mar. 3, by State Bd. Control, J. J. Hanan, secy., Madison, 2 story, 50 x 100 ft., refectory and ward buildings, at State Prison, here, brick, rein.-con. and stone, plain foundation. $150,000. A. Peabody, State Capitol, Madison, archt.

Minn., Redwood Falls—School—Feb. 27, by Bd. Educ., 2 story and basement, 147 x 150 ft., rein.-con., brick, tile and stone, $165,000. G. Pass & Son, Mankato, archts. Rose & Harris, 318 Auditorium Bldg., Minneapolis, engrs. Noted Nov. 1.

Mo., St. Louis—Seminary—Feb. 15, by Day & Klauder, archts., 925 Chestnut St., Phila., group of brick, rein.-con. and stone buildings on 70 acre tract, here, for Missouri Evangelical Synod, c/o Concordia Seminary. $2,000,000.

Okla., Pawhuska—Temple—Feb. 26, by C. L. Folley, secy. Wah Sha Mong Lodge 110, A. F. & A. M., 3 story, 80 x 148 ft., rein.-con. and brick, plain foundation, Main St. $150,000. Noted Oct. 11.

Calif., Sacramento—Store and Apartment—Baumann & Jose, archts., 251 Kearny St., San Francisco, receiving bids 6 story and basement, concrete, 12th and L Sts., here, for B. S. Berry, 110 Sutter St., San Francisco. $150,000.

Calif., San Francisco—Hotel—A. Vaysse, 107 4th St., receiving bids 6 story and basement, rein.-con. and steel, Eddy and Jones Sts. $200,000 or more. Fabre & Hildebrand, 110 Sutter St., archts. Noted Dec. 20.

Ont., Richmond Hill—High School—Feb. 18, by H. Marden, secy. School Bd., Sterling Bank, and Burden & Gouinlock, archts., 101 King St. W., Toronto, 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation. $150,000. Noted Jan. 17.

BIDS RECEIVED

N. Y., Amsterdam—School—Bd. Educ. general contract for school, from Prahl Constr. Co., Erie, Pa., $464,300. Noted Jan. 24.

N. Y., Bellaire (Jamaica P. O.)—School—Bd. Educ., 500 Park Ave., New York, Feb. 7, P. S. 109, brick, steel and stone, plain foundation, 92nd Ave. from 213th St to 213th Pl., here, from Lustbader Constr. Co., 423 Madison Ave., New York, $979,300, A deduct $24,000, B add $4,000, C add $3,300. Noted Jan. 24.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, Feb. 7, P. S. 201, brick, steel and concrete, plain foundation, 12th Ave. from 80th to 81st Sts., here, from T. A. Clarke Co., 122 Livingston St., $796,300, A deduct $14,000, B add $5,400, C add $4,000. Noted Jan. 24.

N. Y., New York—Bath House—J. Miller, pres. Manhattan Boro, Municipal Bldg., general contract for bath house, 34 West 134th St., from Blumar Constr. Co., 25 West 43rd St., A $324,200, L. Glantz, Inc., 110 West 40th St., B $223,290; plumbing and water supply in above, from D. Brandt, Inc., 467 East 155th St., A $29,987, B $22,787; heating and ventilating, from Teran Lange, Inc., Grand Central Terminal, A $26,875, B $23,775.

N. J., Florence—Florence Twp. School Bd., general contract 2 story and basement, 84 x 146 ft., brick and steel, plain foundation, from I. F. Day & Son, Fitzcharles Bldg., Trenton, $124,500. Noted Jan. 31.

Pa., Phila.—School—Bd. Educ., 3 story and basement, 50 x 120 ft. with 2 wings, 48 x 97 ft. and one wing 50 x 96 ft. general contract from Sinclair & Griggs, Otis Bldg., $437,800, plumbing from Thompson Bros., 520 Buttonwood St., $28,780, heating from McClintock Bros., 5608 Race St., $49,995, also alterations and additions to school on Benner and Pitman Sts., general contract from Nelson-Pedley Constr. Co., 1615 Spruce St., $215,000, heating from McCullough Bros., 5608 Race St., $36,000. Noted Jan. 31.

D. C., Wash. — School — Dist. Comrs., Room 509 District Bldg., 20 room addition to Western High School, from Parsons & Hyman, 19th and E Sts., (1) $478,000 (2) deduct $500 (3) add $500, (4) add $1,800. Noted Jan. 17.

Ky., Louisville—Office—Famous Players Lasky Corp., Pioneer St. and Bway, Cincinnati, O. 3 story, 76 x 105 ft., brick, 1st and Chestnut Sts., here, from R. N. Struck Constr. Co., 101 East Main St., $155,000.

CONTRACTS AWARDED

Mass., Boston—Apartment—B. Snider, 18 Tremont St., will build 5 story, 105 x 168 ft., brick and stone, Ivy St., by day labor. G. N. Jacobs, 12 Bosworth St., archt.

N. Y., Brooklyn—Apartment—Madison Constr. & Impvt. Co., c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 5 story, brick, steel and stone, plain foundation, Hewes St., by day labor. $200,000.

N. Y., New York—Apartment—Bonidell Realty Corp., c/o C. Kreymborg, archt.

Buildings (Continued)

and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, Burnside Ave., by day labor. $275,000.

N. Y., New York—Apartment—D. Garman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, 100 x 200 ft., brick, steel and stone, plain foundation, Grand Concourse, by day labor.

N. Y., New York — Apartment — One Thousand One Hundred Fifty-Eight 5th Ave., Inc., Princeton Club, 86 Park Ave., 15 story, 100 x 140 ft., brick, steel and stone, plain foundation, 5th Ave. and 97th St., to Dwight P. Robinson, 125 East 46th St. Archts. est. $2,000,000.

N. Y., New York—Apartment—Park Ave. and 74th St. Corp., c/o Electus D. Litchfield & Rogers, archts. and engrs., 477 5th Ave., 14 story, brick, steel and stone, plain foundation, 74th St. and Park Ave., to Starrett Bros., Inc., 101 Park Ave. Archts. est. $1,000,000.

N. Y., New York—Apartment—M. Roseff, c/o R. T. Lyons, archt. and engr., 342 Madison Ave., will build brick, steel and stone, plain foundation, West 93rd St., by day labor. $800,000.

N. Y., New York—Apartment—A. Rosenfeld, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Prospect Ave., by day labor. $250,000.

N. Y., New York — Apartment — A. Schwab, c/o C. Schaefer, archt. and engr., 294 East 150th St., will build 6 story, brick, steel and stone, plain foundation, Walton Ave., by day labor. $175,000.

N. Y., New York—Apartment—A. Silverman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, Bryant Ave., by day labor. $175,000.

N. Y., New York — Bank and Office — Railroad Co-operative & Loan Assn., 437 Lexington Ave., 13 story, brick, steel and stone, plain foundation, Lexington Ave., to G. A. Fuller Co., 175 5th Ave. Archts. est. $800,000. Noted Jan. 3.

N. Y., New York—Synagogue—Kehilath Israel Congregation, 1172 Jackson Ave., brick, steel and stone, plain foundation, Crotona Park E., to G. Colon & Co., 81 East 125th St. Archts. est. $250,000.

N. J., Bayonne — Apartment — Meltzer Bros. (owner and builder) 1066 Boulevard, will build six 3 story, 44 x 67 ft., brick, Ave. B, West 49th and West 50th Sts., by day labor. $175,000. Owner taking bids on sub-contracts. H. Adelman, 404 Bway., archt.

Pa., Phila.—Synagogue—Har-Zion Temple, c/o L. Rothschild, archt., 215 Broad St., 2 story and basement, 60 x 90 ft., steel and stone, plain foundation, 54th and Wynnefield Aves., to Murphy & Quigley, 1520 Sansom St., $150,000.

Pa., Williamsport—Bank—P. A. Davis, 3rd and Dunlap, 1713 Sansom St., Phila., archts., altering old structure and building 5 story and basement, 51 x 109 ft. rein.-con., brick and steel addition, plain foundation, Front, 3rd and Court Sts., for 1st Natl. Bank, to F. G. Stewart, 1520 Locust St., Phila. Noted Jan. 10.

O., Celina—High School—Bd. Educ., 2 story and basement, 60 x 160 ft. with 60 x 70 ft. wing, to Baker & Schindler, Defiance, $134,000. Noted Jan. 31.

Wis., Mayville—High School—Bd. Educ. 2 story, 70 x 157 ft. high school and 80 x 200 ft. gymnasium, rein.-con., brick and steel, plain foundation, to Rhode Kapelle Co., R. 2, $183,936. Noted Feb. 7.

Wis., Milwaukee—Business—C. Niss & Sons, 697 3rd St., 4 story and basement, 87 x 150 ft., brick and concrete, plain foundation, to Dahlman Constr. Co., 456 Bway. $200,000. Noted Jan. 31.

Wis., Milwaukee—Office—E. D. Fryer, 400 Grand Ave., 4 story and basement, 50 x 130 ft., brick and timber, plain foundation, East Water St., to Brun Constr. Co., 387 Clinton St. $150,000. Noted Nov. 1.

Wis., Prairie du Sac—School—Bd. Educ., 2 story, 59 x 96 ft., brick, rein.-con. and stone, plain foundation, to Dresen Bros. Co., Sauk City. Noted Jan. 17.

Minn., St. Paul—School—Dept. Educ., City Hall, 2 story and basement, rein.-con., brick and tile, general contract to Perry A. Swenson Co., 345 Endicott Bldg., $122,014. Noted Jan. 31.

Mo., St. Louis — Apartment — H. Hess, 3665 Connecticut St., will build 3 story and basement, 105 x 125 ft., brick, rein.-con. and stone, plain foundation, Maple St., by day labor under supervision of G. Boughton, archt., 6331 Clayton Ave. $150,000.

Tex., Dallas—College—Southern Methodist University, general contract 3 story and basement, brick and concrete, on campus, known as Kirby Hall, to Bellows & Maclay Constr. Co., Kirby Bldg., $130,000. Archts. est. $150,000. Noted Dec. 6.

Tex., Ft. Worth—Hospital—C. H. Harris, 1028 5th Ave., general contract 3 story and basement, 65 x 100 ft., concrete, brick and stone, 5th Ave., to Butcher & Sweeney, 806 Taylor St., $130,000. Noted Nov. 22.

Okla., Oklahoma City — School—Bd. Educ., constructing Harding Jr. High School, 3 story and part basement, 217 x 233 ft., brick and stone, to A. F. Stewart Constr. Co., 1st Natl. Bank Bldg. Archts. est. $400,000. Noted Oct. 11.

Calif., Elsinore — Club — Southern California Athletic & Country Club, Consolidated Realty Bldg., Los Angeles, 2 story, rein.-con. and hollow tile, here, to Wurster Constr. Co., 746 Central Ave., Los Angeles, $153,000.

Calif., Long Beach—Bank and Office—Security Trust & Savings Bank, 502 South Spring St., steel for 12 story and basement, Class A, Pine Ave. and 1st St., to Llewlyn Iron Wks., 1200 North Main St., Los Angeles, $200,000. Noted Jan. 24.

Calif., Los Angeles—Store and Loft—Columbia Investment Co., c/o A. C. Martin, archt., Higgins Bldg., 5 story and basement, 62 x 154 ft., brick, steel and rein.-con., Bway. near 6th St., to Barrett & Hilp, Bank of Italy Bldg., $280,000. Desmonds, 553 South Spring St., lessee.

Calif., San Francisco — Apartment — C. Peterson, 390 6th St., will build 6 story and basement, concrete, California St. near Jones St., by day labor. $155,000. Baumann & Jose, 251 Kearny St., archts. Noted Jan. 10.

Federal Government Work

PROPOSED WORK

N. Y., West Point—Stadium—U. S. Engineer Office, West Point, plans stadium, seating capacity 20,000 (but designed for larger capacity) at U. S. Military Academy, here. Osborn Eng. Co., 7016 Euclid Ave., Cleveland, O., engrs.

Ky., Owensboro—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 350,000 ft. yellow pine No. 2 common and better, also 192,000 ft. yellow pine No. 1, common and rough.

Ind., Leavenworth—Cement—U. S. Engineer, P. O. Box 72, Louisville, soon takes bids and opens same about Mar. 25, 10,000 bbl. cement for Dam 44. Noted Dec. 27.

BIDS DESIRED

Ala., Florence—Generators—Mar. 22, by U. S Dist. Engineer, Florence, furnishing 4 electric generators, each 32,000 kva., conventional vertical shaft revolving field type, 3 phase, 60 cycle, 12,000 volts at 100 r.p.m. $750,000.

Ky., Addison—Steel Form and Coffer Rods—Feb. 18, by U. S. Engineer, P. O. Box 72, Louisville, furnishing 80 tons round steel form and coffer rods, f.o.b. Addison.

Ky., Owensboro—Soft Steel Bars—Feb. 19, by U. S. Engineer, P. O. Box 72, Louisville, furnishing 60 tons soft steel bars, ¾ in. diam. washers and nuts, f.o.b. Owensboro.

Calif., Livermore—Ice and Refrigerating Plant—Mar. 28, by U. S. Veterans Bureau, Room 791, Arlington Bldg., Wash., D. C., ice making and refrigerating plant at hospital here; adv. E. N.-R. Feb. 14.

BIDS RECEIVED

N. C., Cape Lookout — Boat House, Quarters, etc.—Spec. 4906—Bureau Yards & Docks, Navy Dept., Wash., D. C., boat house, remodeling quarters and concrete retaining wall, at Naval Radio Compass Sta., here, from A. R. Master Co., Bank of Hampton Bldg., Hampton, Va., (1) $9,999 (2) $700 (3) $49 (4) $200 (5) $100 (6) $60.

Ky., Addison—Steel Sheet Piling—U. S. Engineer, P. O. Box 72, Louisville, furnishing 300 tons steel sheet piling, from Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., $57 per ton.

H. T., Pearl Harbor—Storehouse—Spec. 4911—Bureau Yards & Docks, Navy Dept., Wash., D. C., paint and oil storehouse at Naval Operating base, here, from A. Pope, 4722 15th St., Wash., D. C., (1) $60,000 (2) $6,000 (3) $6,000 (4) $12,000, telegraphic modification add $29,000.

CONTRACTS AWARDED

Ky., Owensboro—Hard Wood Piles—U. S. Engineer, P. O. Box 72, Louisville, furnishing 1,200 hard wood piles for Dam 46, to W. A. Davis Hardwood Lumber Co., Peoples Gas Bldg., Chicago, Ill., $5,000.

Wis., Milwaukee—Steel Crane—U. S. Engineer, Federal Bldg., one revolving steel crane, to McMyler-Interstate Co., Stop 27, A, B and C Electric Ry., Cleveland, O., $19,200. Noted Jan. 31.

Unclassified

PROPOSED WORK

Canal Terminal—Troy, N. Y.—Commissioner of Canals, 55 Lancaster St., Albany, soon takes bids barge canal terminal, here. $300,000.

Stadium — Morgantown, W. Va. — West Virginia University plans stadium on Falling Run Ravine. $500,000. Osborn Eng. Co., 7016 Euclid Ave., Cleveland, O., engrs.

Sea Wall—Daytona, Fla.—See "Sewers."

Transmission Line — Tennessee — Erin Utilities Co., Erin, granted franchise for 8 mi. transmission line from Erin to Cumberland City.

Transmission Line—Kentucky and Indiana—Kentucky Utilities Co., M. E. Taylor Bldg., Louisville, Ky., and Interstate Pub. Serv. Co., Board of Trade Bldg., Indianapolis, Ind., plan 66,000 volt transmission line from Scottsburg, Ind., to Dix River, Ky., across Ohio River. To exceed $75,000. N. R. Orcutt, c/o Interstate Pub. Serv. Co., Scottsburg, Ind., locating engr.

Transmission Line—Kentucky—Kentucky Utilities Co., M. E. Taylor Bldg., Louisville, plans transmission line from Lebanon to new Dix River power site, also extension to system in Lebanon. $100,000. G. Bogart, ch. engr.

Retaining Wall—Louisville, Ky.—Inland Waterways Co., 316 West Jefferson St., plans 800 ft. retaining wall in connection with proposed terminal warehouse on river front. $35,000.

Distribution System—Fredonia, Kan.—See "Industrial Works."

Elimination of Grade Crossings — California—See "Bridges."

Transmission and Distribution Lines, Tunnels, etc.—Los Angeles, Calif.—See "Industrial Works."

Pier—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., had working plans approved, 385 x 600 ft. pier, concrete and pile, also two sheds and railroad track, foot of 3rd St. $1,500,000-$2,000,000. Bids will be asked when State Treasurer authorizes sale of $2,000,000 bonds. F. G. White, Ferry Bldg., engr.

Hydro Electric Lines — Mimico, Ont. — Voted $46,000 bonds for extending and improving hydro electric system. Engineer not selected.

Heating and Ventilating Systems — Toronto, Ont.—Bd. Educ., 155 College St., having plans prepared new heating and ventilating systems in Huron St., Essex and Perth Ave. Schools. $108,000. C. Dyson, 155 College St., archt.

BIDS DESIRED

Bulkhead—Bayonne, N. J.—Feb. 21, by Hudson Co. Park Comrs., 1 Exchange Pl., Jersey City, bulkhead at Bayonne Park, here. Former bids rejected. C. N. Lowrie, c/o owner, landscape archt.; adv. E. N.-R. Feb. 14. Noted Jan. 17.

Stadium—Erie, Pa.—Feb. 28, by R. S. Scobell, dir. Schools, rein.-con. stadium, seating 19,000, here. Osborn Eng. Co., 7016 Euclid Ave., Cleveland, O., engrs.

Sand and Gravel Bin—Madison, Wis.—Castle & Doyle Co., 125 State St., taking bids sand and gravel bins, etc., Regent St. $25,000. F. L. Kronenberg, Carroll Blk., engr.

Stadium—Minneapolis, Minn.—University of Minnesota taking bids rein.-con. stadium, seating capacity 50,000. Osborn Eng. Co. 7016 Euclid Ave., Cleveland, O., engrs. F. M. Mann and associates, Architectural School, archts. Noted Oct. 11.

Retards—Missouri—Feb. 21, by State Hy. Dept., Jefferson City, two 100 ft., eight 150 ft. and eight 200 ft. current retards for Missouri River bank protection project in connection with bridge at Glasgow, Federal Aid Project 217, Howard and Saline Counties. Project to be financed by State Hy. Dept., War Dept., U. S. Bureau Pub. Rds., and local organizations. B. H. Piepmeier, state highway engr. Noted Jan. 31.

Steel Hull, etc.—Portland, Ore.—Mar. 15, by Port of Portland, 916 Spalding Bldg., steel hull, trusses and house for 30 in. diesel electric dredge. J. H. Polhemus, genl. mgr. and ch. engr.; adv. E. N.-R. Feb. 14.

Unclassified (Continued)

BIDS RECEIVED

Ferry Boats—New Orleans, La.—Algiers Pub. Service Inc., 1 Canal St., twin steel hull paddle wheel ferry boats, 150 ft. 6 in. deck, (a) price for one boat, (b) price of each boat for two boats, from Howard Ship Yards & Dock Co., Jeffersonville, Ind., (a) $137,743 (b) $135,973. Noted Dec. 17.

Gas Pipe — Los Angeles, Calif. — City, 150,800 lin.ft. 1- to 12-in. black steel and service gas pipe, from Pacific Pipe & Supply Co., 1112 West Ocean Ave., $64,988.

CONTRACTS AWARDED

Gas Tank — Albany, N. Y. — Municipal Gas Co., 126th St., steel gas tank, concrete foundation, 3,000,000 cu.ft. capacity, in North Albany, to Bartlett Haywood Co., c/o owner, $275,000. Noted Jan. 17.

Foundations — Ft. Worth, Tex. — Methodist Sanitarium, c/o W. E. Williams, Texas State Bank, concrete foundations for 8 story, X shaped building, to J. T. Taylor, Burkburnett Bldg., $36,296. Total for building $1,000,000.

Pipe Line—Santa Anna, Tex.—Prairie Oil & Gas Co. will build 30 mi. 8-in. pipe line from here to Crosse Plains, by day labor. $75,000.

Transmission Lines — San Francisco, Calif.—City and San Francisco Co., transmission lines for Hetch Hetchy project, to Pacific Coast Steel Co., Rialto Bldg., $437,944.

Lighting System—Culver City, Calif.—Los Angeles Co., (Los Angeles), street lighting system on Washington Blvd. between east and west city limits, here, to Electric Lighting & Supply Co., 216 West 3rd St., Los Angeles, $39,500.

Tunnel — Oregon — See "Streets and Roads."

Material and Equipment

PROPOSED WORK

Sand, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids Jan. 14, 11,000 cu.yd. sand and 14,000 tons steam ashes. Will readvertise. Noted Jan. 17.

Structural Steel—Louisville, Ky.—Louisville & Nashville R.R. Co., 10th and Bway., plans to purchase 6,800 tons structural steel for bridgework, mainly in Louisiana. $450,000. W. H. Courtnay, ch. engr.

BIDS DESIRED

Rip Rap—Scotia, N. Y.—Mar. 11, by R. K. Fuller, comr. Canals & Waterways, Albany, rip rap at Movable Dam 4, here, Contr. 215; adv. E. N. R. Feb. 14.

Steam Roller—West New Brighton, N. Y.—Feb. 20, J. A. Lynch, pres. Richmond Boro, Boro Hall, St. George, New Brighton, one 10 ton three wheel steam roller equipped with steam pressure scarifier, at store yard of Bureau of Highways, Dubois Ave., here.

Fibre Conduit—Baltimore, Md.—Feb. 20, by Bd. Awards, 50,000 ft. more or less 3-in. fibre conduit. C. F. Goob, ch. engr. Electrical Comn., 311 St. Paul Pl.

Pipe—Harrisburg, Pa.—Feb. 20, by Dept. Highways, furnishing corrugated metal, rein.-con. and c.i. pipe. P. D. Wright, secy.

Freight Handling Equipment — Tampa, Fla. — Mar. 11, by City Comn., gasoline power locomotive, standard gage, capacity to handle two loaded freight cars; locomotive crane, 15 to 20 ton capacity and one magnet for handling steel, combined if possible; conveyor or stacker for elevating and piling bags of fertilizer, etc.; electric or gasoline truck and trailers; 1 to 4 sets automatic platform scales, capacity 1,000 lb. each; 50 hand trucks. Bids may be submitted on all or any part. W. L. Brown, city mgr.

Curbstone—Detroit, Mich.—Feb. 18, by G. J. Finn, comr. Purchase & Supplies Dept., 700 Marquette Bldg., 7,000 lin.ft. Medina, 5,000 lin.ft. Berea,2,000 ft. granite and 4,000 lin.ft. limestone curbstone.

Double Drum Hoist—Eau Claire, Wis.—G. Osborn, comr. Eau Claire Co., taking bids one double drum hoist for drag-line, 300 cu.yd. per day.

Gravel Pit Machines—Manitowoc, Wis.—Mar. 3, mounted stone crusher, chain bucket elevator dragline equipped with ½ yd. bucket and 8 ft. revolving screen. F. Alter, City Hall, engr.

Steel, Lumber, etc.—Sac City, Ia.—Feb. 21, by Clerk Sac Co. 36,000 lb. reinforcing steel, 4,500 ft. culvert pipe, 1 car lumber. W. D. Maxwell, engr.

Ladders, Fir, Valves, etc. — St. Paul, Minn.—Feb. 19, by H. W. Austin, city purch. agt., 9,067 lb. miscellaneous wrought and c.i. ladders, stairs, manholes and special castings; 2,000 pieces 2 x 8-16 No. 1 fir (rough or smooth one side one end), 500 pieces 4 x 4-16 No. 1 fit, 300 pieces 3 x 8-16, 500 pieces 2 x 4-16, 500 pieces 1 x 6-16; 2 horizontal swing type check valves for Water Dept., 3 vertical spur-geared band-operated gate valves, 2 vertical hydraulic gate valves. G. M. Shepard, city engr.

Road Graders—Houston, Tex.—Feb. 25, by H. L. Washburn, aud. Harris Co., road graders and 4 one ton trucks. Howe & Wise, co. engrs.

BIDS RECEIVED

Asphaltic Cement—Trenton, N. J.—For 300 tons asphaltic cement for Street Dept., from Warner-Quinlan Co., 79 Wall St., New York City, $14.80 per ton. Noted Jan. 31.

CONTRACTS AWARDED

Asphaltic Cement — Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 950 tons asphaltic cement in light containers, to Standard Oil Co., 26 Bway., New York, $18,212. Noted Feb. 7.

Paving Blocks—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 25,000 vitr. paving blocks, to G. B. Raymond & Co., 293 Borden Ave., $62 per M. Noted Jan. 17.

Cement—Detroit, Mich.—Dept. Purchases & Supplies, 700 Marquette Bldg., furnishing 150,000 bbl. portland cement, to Huron & Wyandotte Portland Cement Co., 1325 Ford Bldg., $1.85 in bulk at Wyandotte plant, $2.12 in bulk f.o.b. Detroit.

Valves—San Francisco, Calif.—City and San Francisco Co., three butterfly valves, 104 in. inside diameter, one c.i. blind flange for one side of valve, one steel platform extending over valve, all operating mechanism for valves, bypass valves and connections, bolts and gaskets for joints, foundation and platform, Hetch Hetchy Moccasin Creek Power plant, to J. Hendy Iron Wks., 75 Fremont St., $26,728. Noted Jan. 24.

OFFICIAL PROPOSALS

Bids: **Feb. 23.**

Intercepting Sewer

Lima, Ohio

Sealed proposals for the construction of an intercepting sewer, designated as Contract "B" will be received at the office of the City Manager, Lima, Ohio, until 12 o'clock noon (Central Standard Time) February 23rd, 1924, and will then be publicly opened and read. The City reserves fifteen (15) days thereafter in which to act on the bids.

Contract B comprises the construction, with connections and appurtenances, of an intercepting sewer along and adjacent to the Ottawa River. The work consisting of about 2.4 miles of sewers, varying in sizes from 12 to 36 inches in diameter, together with one inverted syphon under the Ottawa River. Also all standard and diversion manholes, regulating chambers and other connections.

Plans and specifications may be seen or obtained at the office of the Supervising Engineer, City Hall, Lima, Ohio. A charge of $5.00 will be made for a complete set covering this contract.

The City Manager reserves the right to reject any or all bids, to waive any informalities in the bids received and to accept any bid which is deemed most favorable to the interest of the City of Lima, Ohio.

CLARENCE A. BINGHAM,
City Manager.

B. F. DARRING,
Supervising Engineer.

Bids: Mar. 3.

Sewage Treatment

CONTRACTS 41, 42, 43 AND 44

Syracuse, N. Y.

Sealed proposals will be received until 3 o'clock p.m., standard time, March 3, 1924, at the office of the Syracuse Intercepting Sewer Board, 104 City Hall, Syracuse, N. Y., for Contract No. 41 for Bar screens and raking equipment for main sewage station.

Contract No. 42 for machinery and eqeuipment for sludge pumping station, including 4 vertical triplex stuff pumps connected to 15 hp. variable speed A.C. motors control equipment and appurtenances.

Contract No. 43 for exterior wiring and lighting for sewage treatment works.

Contract No. 44 for transformer sub-station structure.

All of said contracts form a part of the Sewage Treatment Works of the City of Syracuse.

Proposals must be made on blanks to be furnished upon application and must be accompanied by a New York Draft or certified check on a Syracuse bank for 5% of the amount bid, which shall be payable to the order of the Board and shall be given as a guarantee that the successful bidder will within five days after award execute said contract.

Drawings, specifications and form of proposals and contract are on file in the offices of the Board. Copies thereof may be obtained by depositing $10.00 to insure their return in acceptable condition on or before April 1, 1924.

HARRY J. HAMLIN,
Secretary.

Bids: Feb. 25.

Gate Valves

Springfield, Mass.

Sealed proposals will be received by the Board of Water Commissioners of the Springfield Municipal Water Works, at its office in the Municipal Building, Springfield, Mass., at 11 o'clock a.m., February 25, 1924, for furnishing gate valves.

The proposal shall state price per valve, delivered f.o.b. Armory, Mass., for each size of valve in accordance with the following schedule:

125— 8-in. Valves, double bell
15—12-in. Valves, double bell

Twenty per cent (20%) of the 8-in. valves must be furnished by April 7, 1924, and the entire order completed on or before May 15, 1924.

The proposal shall be placed in a sealed envelope addressed to the Board of Water Commissioners, Springfield, Mass., and plainly marked on the outside "Sealed Proposal for Valves."

The Board of Water Commissioners reserves the right to increase the number of either of the items designated above according to its needs during the year 1924. The number specified is given as a basis of estimate only.

The Board of Water Commissioners reserves the right to reject any or all bids, or to accept any bid or any portion of any bid which it may be to the best interests of the city so to do.

For further information and specifications, apply to the Superintendent at the above address.

Board of Water Commissioners,
Springfield, Mass.,
H. M. KING, Superintendent.

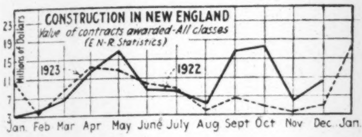
CONSTRUCTION NEWS

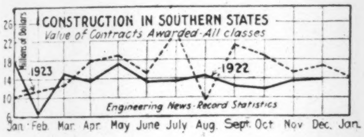
Engineering News-Record, February 21, 1924

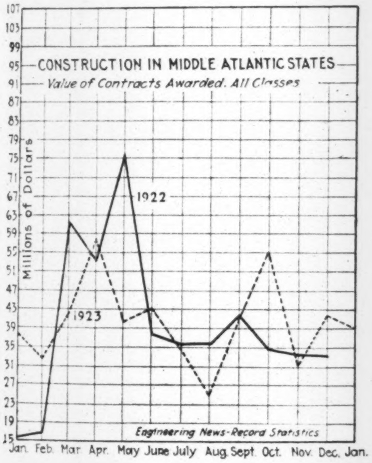
The Construction Barometer

Volume of January Construction Increased 3 Per Cent Over Preceding Month—Gain Due Mostly to Public Works—New England and Far West Active

JANUARY construction showed a gain of over 4 per cent, compared with the month preceding. While this increase was largely due to lettings of contracts for public improvements, such as water-works, sewers and excavation projects, two classifications, namely, bridges and streets and roads, fell below December levels. The greater part of the January gain was realized in New England and the Far West. The increase in January building permits in the Southern and Eastern sections of the country, points toward an unusually active building construction program, in these states, during the next month. However, measured by the money value of contracts awarded each week, construction has been steadily falling off since Feb. 1. The decline is confined principally to private projects; public work, exclusive of buildings, is about holding its own.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

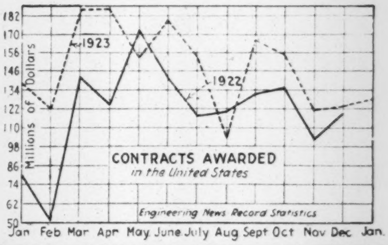
Week Ended	Public Work	Private Work	Total Contracts
Jan. 31	$8,013,000	$25,998,000	$34,011,000
Feb. 7	7,708,000	20,266,000	27,974,000
Feb. 14	7,624,000	11,004,000	18,628,000
3 weeks	$23,345,000	$57,268,000	$80,613,000

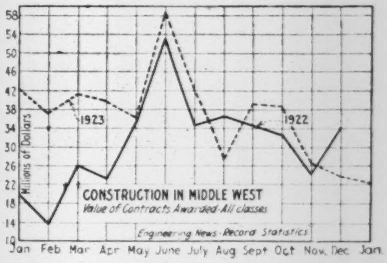
LARGE BUILDING CONTRACTS—NUMBER AND VALUE

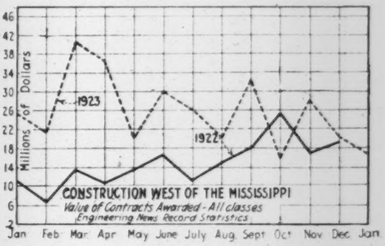
Week Ended	No.	Public Work	No.	Private Work
Jan. 31	5	$1,704,000	35	$16,119,000
Feb. 7	13	4,530,000	27	12,495,000
Feb. 14	5	1,140,000	24	8,118,000
3 weeks	23	$7,374,000	86	$36,732,000

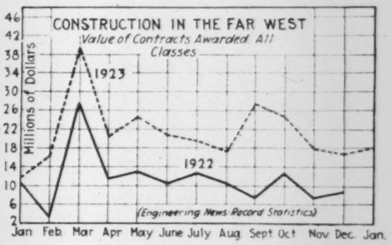
PINE TIMBERS UP—OTHER BASIC MATERIALS FIRMER

	Quoted on Feb. 21 at	Price was	On
Structurals, Pittsburgh, 100 lb....	$2.40 @ 2.50	$2.35 @ 2.50	Feb. 7
Cement, Chi., net bbl..........	2.20	2.10	Jan. 24
Pine, N.Y., M.ft...	62.00	61.00	Feb. 14
Fir, San Fran., M.ft..........	36.00	38.00	Jan. 24
Common labor, hr.	.54	.53	June 28









PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Feb. 25	Springfield, Mass.	Feb. 14
Feb. 25	New York, N. Y.	Feb. 21
Feb. 26	Brooklyn, N. Y.	Feb. 21
Feb. 27	Hartsville, S. C.	Feb. 21
Feb. 28	Burbank, Okla.	Feb. 21
Feb. 28	Buffalo, N. Y.	Feb. 7
Feb. 28	Wallingford, Conn.	Feb. 21
Feb. 28	Durham, N. C.	Feb. 21
Feb. 29	New York, N. Y.	Feb. 21
Mar. 1	Cleveland, O.	Feb. 21
Mar. 3	Wanaque, N. J.	Feb. 14
Mar. 4	Gloversville, N. Y.	Jan. 31
Mar. 4	Galva, Ill.	Feb. 21
Mar. 10	Toledo, O.	Feb. 21
Mar. 11	Kansas City, Mo. Adv. Feb. 14 and 21.	Feb. 21
Mar. 13	Kansas City, Mo. Adv. Feb. 14 and 21.	Feb. 21
Mar. 17	Black River Falls, Wis.	Feb. 21
Mar. 18	Mount Prospect, Ill.	Feb. 14
Mar. 26	Litchfield, Ill. Adv. Feb. 21.	Feb. 21

SEWERS

Bids Close		See Eng. News-Record
Feb. 23	Lima, O.	Feb. 7
Feb. 25	Richmond, Va.	Feb. 14
Feb. 25	Long Island City, N. Y.	Feb. 21
Feb. 27	Mobile, Ala. Adv. Jan. 31 to Feb. 21.	Feb. 7
Feb. 27	Charlotte, N. C. Adv. Feb. 21.	Feb. 21
Feb. 27	Cleveland, O.	Feb. 21
Feb. 28	Milwaukee, Wis.	Feb. 14
Feb. 29	Wash., D. C.	Feb. 7
Mar. 3	Syracuse, N. Y.	Feb. 14
Mar. 10	Toledo, O.	Feb. 21
Mar. 12	Jackson, Mich. Adv. Feb. 21.	Feb. 21

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Mar. 18	Toronto, Ont.	Feb. 21

BRIDGES

Bids Close		See Eng. News-Record
Feb. 25	Alabama	Feb. 7
Feb. 26	Nebraska	Feb. 14
Feb. 26	Florida	Feb. 14
Feb. 27	Austin, Minn.	Feb. 7
Feb. 27	Michigan	Feb. 21
Feb. 28	Houston, Tex.	Feb. 7
Feb. 29	Illinois	Feb. 21
Mar. 3	St. Paul, Minn. Adv. Jan. 24 to Feb. 21.	Jan. 24
Mar. 4	Wilber, Neb.	Feb. 21
Mar. 10	St. Anne de Bellevue, Que.	Jan. 31
Mar. 11	Nashville, Tenn. Adv. Feb. 21.	Feb. 21
Mar. 11	Concordia, Kan.	Feb. 21
Mar. 14	Springfield, Mass. Adv. Feb. 21.	Feb. 21
Mar. 19	Sullivan, Me.	Feb. 21
Mar. 19	Phila., Pa. Adv. Feb. 21.	Feb. 21
Mar. 20	Charleston, S. D. Adv. Feb .21.	Feb. 21
May 1	**Tientsen, North China**	**Oct. 11**

DAMS

Bids Close		See Eng. News-Record
Mar. 1	Kingston, Jamaica — West Indies	Feb. 7
Mar. 6	Newark, N. J.	Feb. 14
	Adv. Feb. 14 and 21.	

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 18	New Zealand	Sept. 20
Apr. 1	Indiana	Jan. 24

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Feb. 25	Kingston, Pa.	Feb. 7
Feb. 26	Redwood Falls, Minn.	Feb. 14
Feb. 29	New York	Feb. 21
Mar. 5	Oroville, Calif.	Feb. 21
Mar. 11	Glens Falls, N. Y.	Feb. 21
	Adv. Feb. 14 and 21.	

STREETS AND ROADS

Bids Close		See Eng. News-Record
Feb. 25	Verona, Pa.	Feb. 14
Feb. 25	Alabama	Feb. 14
Feb. 25	Williamson, W. Va.	Feb. 14
Feb. 25	New Praque, Minn.	Feb. 21
Feb. 25	Cleveland Heights (Warrensville P. O.), O.	Feb. 21
Feb. 26	Plymouth, Wis.	Jan. 31
Feb. 26	Greenville, Tex.	Feb. 7
Feb. 26	Bluefield, W. Va.	Feb. 7
	Adv. Feb. 7 and 14.	
Feb. 26	Nebraska	Feb. 14
Feb. 26	Bay St. Louis, Miss.	Feb. 14
Feb. 26	Greenville, Tex.	Feb. 14
Feb. 26	Canton, O.	Feb. 21
Feb. 26	New York, N. Y.	Feb. 21
Feb. 27	Rio Grande, Tex.	Feb. 7
Feb. 27	Nebraska	Feb. 14
Feb. 27	Akron, O.	Feb. 21
Feb. 27	Brooklyn, N. Y.	Feb. 21
Feb. 27	McKinney, Tex.	Feb. 21
Feb. 28	Kenosha, Wis.	Jan. 17
Feb. 28	Nebraska	Feb. 14
Feb. 29	Waxahachie, Tex.	Feb. 21
Feb. 29	Illinois	Feb. 21
Mar. 1	Tuscaloosa, Ala.	Jan. 31
Mar. 3	Alabama	Feb. 14
Mar. 3	Houston, Tex.	Feb. 21
Mar. 3	California	Feb. 21
Mar. 3	Cheyenne, Wyo.	Feb. 21
Mar. 3	Richmond, Ind.	Feb. 21
Mar. 3	Pine Bluff, Ark.	Feb. 21
	Adv. Feb. 21.	
Mar. 3	Tulsa, Okla.	Feb. 21
Mar. 4	Beaumont, Tex.	Feb. 7
Mar. 4	St. Louis, Mo.	Feb. 14
Mar. 4	Ontario	Feb. 21
Mar. 4	Wabash, Ind.	Feb. 21
Mar. 5	Marshfield, Wis.	Feb. 21
Mar. 5	Freehold, N. J.	Feb. 21
	Adv. Feb. 14 and 21.	
Mar. 6	Pocahontas, Ia.	Feb. 21
Mar. 6	Louisiana	Feb. 21
Mar. 6	and 7 Pennsylvania	Feb. 21
	Adv. Feb. 14 and 21.	
Mar. 7	De Funiak Springs, Fla.	Feb. 21
	Adv. Feb. 21.	
Mar. 10	Wichita Falls, Wis.	Feb. 21
Mar. 10	California	Feb. 21
Mar. 11	Washington	Jan. 10
Mar. 11	Antigo, Wis.	Feb. 7
Mar. 11	Fairport, N. Y.	Feb. 14
	Adv. Feb. 14 and 21.	
Mar. 11	Corsicana, Tex.	Feb. 14
	Adv. Feb. 14 and 21.	
Mar. 12	Delaware	Feb. 21
	Adv. Feb. 21.	
Mar. 12	Salina, Kan.	Feb. 21
Mar. 18	Washington	Feb. 7

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Feb. 26	Greensboro, N. C.	Feb. 21
Feb. 26	West Allis, Wis.	Feb. 21
Feb. 29	Ottawa, Ont.	Feb. 21
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Bids Close		See Eng. News-Record
Feb. 25	Rome, N. Y.	Jan. 31
Feb. 25	Amarillo, Tex.	Feb. 7
Feb. 25	Harrison, N. Y.	Feb. 14
Feb. 25	Brooklyn, N. Y.	Feb. 14
Feb. 25	Huntington, W. Va.	Feb. 21
Feb. 25	Garfield Heights (Cleveland P. O.), O.	Feb. 21
Feb. 25	Burlington, N. C.	Feb. 21
Feb. 25	Detroit, Mich.	Feb. 21
Feb. 26	Brooklyn, N. Y.	Feb. 7
Feb. 26	Long Island City, N. Y.	Feb. 7
Feb. 26	Pawhuska, Okla.	Feb. 14
Feb. 27	Vermilion, S. D.	Feb. 7
Feb. 27	Redwood Falls, Minn.	Feb. 14
Feb. 27	Phila., Pa.	Feb. 14
Feb. 27	Huntington, W. Va.	Feb. 21
Feb. 27	Flint, Mich.	Feb. 21
Feb. 28	Phila., Pa.	Jan. 31
Feb. 28	Hannibal, Mo.	Feb. 21
Feb. 28	Mimico, Ont.	Feb. 21
Feb. 29	Morris Plains, N. J.	Feb. 14
Mar. 1	Gilbert, Minn.	Feb. 7
Mar. 1	Akron, O.	Jan. 24
Mar. 1	Chattanooga, Tenn.	Jan. 31
Mar. 1	Annandale-on-Hudson, N. Y.	Feb. 14
Mar. 1	Milwaukee, Wis.	Feb. 21
Mar. 1	Phila., Pa.	Feb. 21
Mar. 1	Durham, N. C.	Feb. 21
Mar. 1	Troy, N. Y.	Feb. 21
Mar. 3	Rhinelander, Wis.	Jan. 31
Mar. 3	Waupun, Wis.	Feb. 14
Mar. 3	Los Angeles, Calif.	Feb. 21
Mar. 5	Berlin, N. H.	Feb. 21
Mar. 5	Columbus, O.	Feb. 21
Mar. 6	Elkhart Lake, Wis.	Feb. 14
Mar. 7	Brooklyn, N. Y.	Feb. 14
Mar. 7	New York, N. Y.	Feb. 14
Mar. 10	Detroit, Mich.	Feb. 21
Mar. 11	Sumter, S. C.	Feb. 21
Mar. 11	Brooklyn, N. Y.	Feb. 21
Mar. 12	Falls City, Neb.	Feb. 21
Mar. 15	Bradford, Pa.	Feb. 21
Mar. 17	North Plainfield (Watchung P. O.), N. J.	Feb. 21
Mar. 21	Lockport, N. Y.	Feb. 21
Apr. 1	Duluth, Minn.	Feb. 7
Apr. 1	Atlantic City, N. J.	Feb. 7
May 1	Youngstown, O.	Feb. 7

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Feb. 23	Steel Barges—Florence, Ala.	Feb. 7
	Adv. Feb. 7 to 21.	
Feb. 25	Dredging—Plymouth, Mass.	Jan. 31
	Adv. Jan. 31 to Feb. 21.	
Feb. 25	Dredging—Chelsea, Mass.	Feb. 7
Feb. 26	Water Piping, etc.—Phila., Pa	Jan. 31
Feb. 27	Barrack — Puget Sound, Wash.	Jan. 31
Feb. 28	Steel Boat Hull—Huntington, W. Va.	Jan. 31
	Adv. Jan. 31 to Feb. 21.	
Feb. 28	Dump Scow—Duluth, Minn.	Jan. 31
	Adv. Jan. 31 to Feb. 21.	
Mar. 1	Turbines—Florence, Ala.	Jan. 17
	Adv. Jan. 17 to Feb. 21.	
Mar. 1	Hospital Ward—Fort Sill, Okla.	Feb. 7
Mar. 3	Dredging—Galveston, Tex.	Feb. 7
	Adv. Feb. 7 to 21.	
Mar. 3	Boats—Wash., D. C.	Feb. 7
Mar. 4	Dredging—Providence, R. I.	Feb. 7
	Adv. Feb. 7 to 21.	
Mar. 4	Switchboard Apparatus — Florence, Ala.	Feb. 7
Mar. 10	Stone—Humboldt Bay, Calif.	Jan. 24
Mar. 11	Hospital—Pikesville, Ky.	Feb. 21
	Adv. Feb. 14 and 21.	
Mar. 14	Sand Pump and Boiler Feed Pump—Memphis, Tenn.	Feb. 21
	Adv. Feb. 21.	
Mar. 17	Canal—Klamath Falls, Ore.	Feb. 21
	Adv. Feb. 21.	
Mar. 21	Reservoirs—Wash., D. C.	Feb. 21
	Adv. Feb. 21.	
Mar. 22	Generators—Florence, Ala.	Feb. 14
Mar. 28	Ice and Refrigerating Plant —Livermore, Calif.	Feb. 14
	Adv. Feb. 14 and 21.	

UNCLASSIFIED

Bids Close		See Eng. News-Record
Feb. 23	Dike, Bulkhead, etc. — Plymouth, Mass.	Feb. 7
Feb. 25	Sea Wall, Dock and Sewer— New Haven, Conn.	Jan. 31
Feb. 28	Stadium—Erie, Pa.	Feb. 14
Mar. 11	Rip Rap—Scotia, N. Y.	Feb. 14
	Adv. Feb. 14 and 21.	
Mar. 12	Sanitary Works—Binghamton, N. Y.	Feb. 21
	Adv. Feb. 21.	
Mar. 15	Steel Hull, etc.—Portland, Ore.	Feb. 14
	Adv. Feb. 14 and 21.	
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIAL AND EQUIPMENT

Bids Close		See Eng. News-Record
Feb. 25	Hoisting Machinery and Equipment—Ft. Wayne, Ind.	Feb. 7
Feb. 25	Tarvia—Two Rivers, Wis.	Feb. 21
Feb. 25	Sip Sap and Steel—New York, N. Y.	Feb. 21
Feb. 25	Asphalt Binder—New York, N. Y.	Feb. 21
Feb. 26	Supplies—Toronto, Ont.	Feb. 7
Feb. 26	Lumber, etc.—Guthrie Center, Ia.	Feb. 21
Feb. 26	Brick Castings, etc.—Ottawa, Ont.	Feb. 21
Feb. 26	Road Oil—La Crosse, Wis.	Feb. 21
Feb. 26	Truck—Kenosha, Wis.	Feb. 21
Feb. 27	Asphalt, Cement, etc.—Kingston, Ont.	Feb. 21
Feb. 28	Paving Blocks, etc.—New York, N. Y.	Feb. 21
Mar. 1	Supplies—Hamilton, Ont.	Feb. 21
Mar. 3	Gravel Pit Machines — Manitowoc, Wis.	Feb. 14
Mar. 3	Road Oil—Adrian, Mich.	Feb. 21
	Adv. Feb. 21.	
Mar. 5	Crushed Stone, etc.—Freehold, N. J.	Feb. 21
Mar. 11	Freight Handling Equipment —Tampa, Fla.	Feb. 14
Mar. 19	Tractor—Benson, Minn.	Feb. 7

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. C., Thomasville—Making survey new water supply, nearest source 5 mi distant. W. C. Olsen, Raleigh, engr.

O., Columbus—See "Streets and Roads."

Ill., Jonesboo—Election Feb. 28. $42,000 bonds for water works plant, tank on tower and 4- and 6-in. distribution lines. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs. Noted Jan. 17.

Ill., Monmouth—Approved bond issue of $90,000 for water works improvements, extensions, etc.

Wis., Madison — Plans rein.-con. high service reservoir with roof, 5 m.g. capacity, incl. laying feeder mains in vicinity. $125,000. L. L. Smith, supt. Engineer not selected.

Wis., Whitefish Bay—Making plans 20,000 lin.ft. 6- and 8-in. c.i. main. T. F Buckley, Village Hall, engr.

Wis., Whitehall — See "Excavation, Drainage, Irrigation."

Neb., Hay Springs—Plans election, $20,000 bonds, to extend waterworks system. R. Gustafson, clk.

Neb., Kearny—Having plans prepared rebuilding waterworks plant. $135,000 bonds voted. Burns & McDonnell Eng. Co., Interstate Bldg., Kansas City, Mo., consult. engrs. H. A. Mole, city engr. Noted Jan. 10.

Mo., Harrisonville — Plans waterworks, pumping equipment, 4 and 6 in. distribution system, etc. $35,000.

Mo., Portageville—Election soon $40,079 bonds, 2 wells, two 150 g.p.m. pumps, pump house, 21,300 ft. 4-in. and 600 ft. 6-in. c.i. pipe, 17 gate valves and boxes, 30,000 gal. tank on 100 ft. tower. A. C. Moore, 222 Industrial Bldg., Joplin, engr.

Mo., Sedalia—Making preliminary plans increasing water supply and other improvements. $200,000. Burns & McDonnell Eng. Co., Interstate Bldg., Kansas City, engr.

Ark., Little Rock—Making plans new water supply incl. pumps, motors, filters and storage reservoir. $15,000. Dickson & Watkins, 610 Boyle Bldg., engrs.

Ark., Magnolia — Having surveys made water and sewerage developments. E. T. Archer & Co., 1011 Merchants Bank Bldg., Shreveport, La., engrs

Tex., Houston—City Com. taking bids 3 wells to produce 3,000 g.p.m. $15,000. J. C. McVea, city engr.

Okla., Gore—Voted $28,000 bonds new waterworks incl. deep well, pump, tower and 9,000 ft. 4- to 6-in. c.i. pipe. Gant Baker Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Okla., Waynoka—Voted $28,000 bonds for new 200 hp. oil engine generator set, motor driven pumps, etc. Engineer not selected.

Wash., Auburn—Election Mar. 11, $60,000 bonds extending water system. Plans include 2 m.g. reservoir and 14-in. connecting pipe.

Calif., Huntington Park (Branch Los Angeles)—Having plans prepared 1 m.g. reservoir. H. McCurdy, Pacific Electric Bldg., Los Angeles, consult. engr.

Ont., London—Utilities Bd. plans to drill new wells to increase water supply. $30,000. E. V. Buchanan, Hydro Office Bldg., engr.

Ont., Toronto—Plans to extend mains, incl. new steel and c.i. pipe, 12-24 in. diam., $1,190,042, purchase new water meters, $41,400, and replace 6 in. gate valves $11,620. R. C. Harris, city engr.

Ont., Waterford—Plans waterworks system. $40,000. W. B. Redfern, 36 Toronto St., Toronto, engr.

BIDS DESIRED

Conn., Wallingford — Feb. 28, by Bd Water Comrs., Town Hall, 8,600 lin.ft. more or less ditches, carting and laying 18-in. Class C c.i. main, etc.; making 2 cross connection between 18-in. main and present 12- and 8-in. pipe lines. C. Nearing, chn. W. A. MacKenzie, engr. and mgr. Water Dept.

N. Y., Brooklyn—Feb. 26, by Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in 2nd Ave., 37th, 42nd, Bridge, Sands, Clinton Sts., etc., here.

N. Y., New York—Feb. 26, by Bd. Water Supply, Gas & Electricity, Municipal Bldg., 36 in. mains in Jerome Ave.

N. Y., New York—Feb. 15, by Bd. Water Buckley, comr. Purch., Municipal Bldg.,

Waterworks (Continued)

c.i. pipe, special and valve box castings, valves and double nozzle fire hydrants to Dept. Water Supply, Gas & Electricity.

N. Y., New York—Feb. 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Riverside Terrace, Bennett and 12th Aves., West 12th, 40th, 46th and 186th Sts.; setting fire hydrants, etc. on existing mains in Ave. A, Bway., East Bway., Riverside Dr., Bayard, James, Madison, Oak, Water, and West 153rd Sts.

N. C., Durham—Feb. 28, by City Manager, 725 hp. vertical hydraulic turbines, three 500 kw. vertical generators, one 2,000 kva., and one 1,000 kva. substation, two 5,000 g.p.m. centrifugal pumps, arranged for turbine drive, two 260 hp. horizontal hydraulic turbines, two 500 g.p.m. centrifugal pumps arranged for motor drive, 150 ft. head, two 300 hp. and two 400 hp. synchronous motors with exciters, two 5,000 g.p.m. centrifugal pumps, motor drive, 230 ft. head, switch board, sluice gates, etc. W. M. Piatt, Durham, engr.

S. C., Hartsville—Feb. 27, by City Clerk, one 500,000 gal. rein.-con. reservoir, 20 x 30 ft. brick building, 2 motor driven centrifugal pumps 1,000 g.p.m., also 4,700 ft. 6 and 12-in. c.i. main extensions, and 6,100 ft. 8, 10 and 12-in. sewer pipe extensions with manholes, flush tanks, Y branches. Ryan Eng. Co., Arcade Bldg., Columbia, engrs.

O., Cleveland—Mar. 1, by Cuyahoga Co., 12,000 ft. 6 and 8 in. c.i. mains, Impvt. 45 of Co. Sewer Dist. R. F. MacDowell, Court House, engr. Noted Nov. 1.

O., Toledo—Mar. 10, by Lucas Co., 3,050 ft. 6 in. c.i. mains in Sewer Dist. 4, Owens addition, $6,703; 11,974 ft. 6 and 8 in. c.i. mains in Sewer Dist. 9, Wernerts Park, $26,491; 13,130 ft. 6 in. c.i. mains in Sewer Dist. 4, Broadmoor and Central Gardens, $27,629; 9,943 ft. 6 in. c.i. mains in Sewer Dist. 5, Old Orchards addition, (2nd extension), $20,732. L. Boyatt, co. sanitary engr.

Ill., Litchfield—Mar. 26, by Citizens Waterworks, Inc., at office of City Attorney, improved waterworks, incl. filtration plant, equipment, dam, etc. Pearse, Greeley & Hansen, 39 West Adams St., Chicago, engrs.; adv. E. N.-R. Feb. 21.

Wis., Black River Falls—Mar. 17, water well systems to produce from 300,000 to 500,000 gal. daily, equipped with vertical electric motors, appurtenances and auto starter. $15,000. W. G. Kirchoffer, Dean Bldg., Madison, engr.

Ill., Galva—Mar. 4, by city, installing generators, two 500 g.p.m. centrifugal pumps, etc. J. D. Rankin, 5707 Glenwood Ave., Chicago, consult. engr.

Mo., Kansas City—Mar. 11, by M. H. Raming, city purch. agt., City Hall, 15,500 ft. concrete lined pressure tunnel under Missouri River and adjacent bottom lands. Fuller & Maitland, engrs. for Bd. Fire & Water Comrs., 600 Walnut St. Fuller & McClintock, 170 Bway., New York City, engrs.; adv. E. N.-R. Feb. 21.

Mo., Kansas City—Mar. 13, by M. H. Raming, city purch. agt., City Hall, 11,300 ft. and 14,000 ft. concrete lined pressure tunnels along East and West bottom lands. Fuller & Maitland, engrs. for Bd. Fire & Water Comrs., 600 Walnut St. Fuller & McClintock, 170 Bway., New York City, engrs.; adv. E. N.-R. Feb. 21.

Okla., Burbank—Feb. 28, by A. H. Riney, ch. engr., Phillips Petroleum Co., Bartlesville, earthen dam, spillway, excav., etc., 48,000 cu.yd. earth embankment, 27,000 cu. yd. rock excav., 3,000 sq.yd. riprap. $150,000.

BIDS RECEIVED

N. Y., Coney Island (Brooklyn, P. O.)—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Feb. 9, high pressure fire service mains and appurtenances in Surf and Stillwater Aves., West 6th, 8th, 10th, 12th, 15th 16th, 19th, 24th, 27th, 28th, 29th, 31st, 33rd, 35th, 36th and 37th Sts., here, from N. De-Stefano, 257 Glenn Ave., Tompkinsville, S. I., $88,200. Noted Feb. 7.

W. Va., Fairmont—Filtration and purification plant from Rust Eng. Co., 311 Ross St., Pittsburgh, Pa., $137,459.

CONTRACTS AWARDED

N. C., Mooresville—Complete water and sewerage systems, to Boyd Higgins & Goforth, Realty Bldg., Charlotte, $35,000.

Ky., Elizabethtown—Filtration plant, 2 units, 1 m.g. capacity, to Mason Contg. Co., West Point, $39,000. Noted Jan. 17.

Tenn., Gallatin—Filtration plant and equipment, to Sherman Machine & Iron Co., 18-32 East Main St., Oklahoma City, Okla., $35,000.

Minn., Minneapolis—F. S. Gram, city purch. agt., 5,000 ⅝-in. corporation cocks and 4,000 ¾-in. curb cocks, to Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur, Ill., $0.72 and $1.86 each respectively. Noted Jan. 31.

Kan., Russell—City 820 ton 8-in. Class A, B and D pipe and 2 tons 6-in. specials. to Natl. Cast Iron Pipe Co., 903 Commerce Bldg., Kansas City, $46,000; two 10-in. deep wells, to Well Works Mfg. Co., Garden City, $4,400; general contract (laying 36,000 ft. pipe, two pump houses, etc.) to Connor Constr. Co., Kansas City, $19,000. Noted Feb. 7.

Wis., La Crosse—Laying c.i. mains various streets, to T. E. Wooley, 148 West Ave., S., $21,967.

Wis., Madison—Motor driven deep well pump, together with all auxiliary devices for delivering not less than 1,200 g.p.m., to Aurora Pump & Mfg. Co., Aurora, Ill., $5,497. Noted Jan. 24.

Wash., Seattle—Bd. Pub. Wks., Lake Youngs Reservoir, to Jahn & Bressi, Seattle, $1,210,000. Noted Dec. 20.

Colo., Pueblo—Furnishing and laying 4 mi. 36 in. creosote wood-stave pipe, to Federal Pipe & Tank Co., 5332 24th St., N. W., Seattle, Wash., $98,000.

Sewers

PROPOSED WORK

O., Columbus—See "Streets and Roads."

O., Columbus—Making plans 1,280 ft. 8 in. sewer in Renick St. $2,759, also Cleveland Ave. storm sewer relief in Mock Rd., 6,605 ft. 12- to 30-in. pipe $27,029. R. H. Simpson, city engr.

O., New Philadelphia—Plans sanitary sewers in Bway., 7th, 6th, 5th, Howe, Cross, 3rd and 2nd Sts. et al. $67,582. G. E. Arnold, City Hall, engr.

O., Norwood—Plans 1,050 ft. 8 x 10 ft. rein.-con. sewer in Duck Creek from Edwards Rd. to Williams Ave. $90,000. A. Baker, City Hall, engr.

Ill., Elgin—Voted $700,000 bonds and takes bids about June 1, sewage treatment works $450,000, collecting sewers $270,000. M. H. Brighton, 25 Spurling Bldg., engr. Noted Jan. 24.

Wis., Whitefish Bay—Making preliminary plans storm and sanitary sewers, 16,000 lin.ft. 8 and 10-in. vitr. or concrete pipe. T. F. Buckley, Village Hall, engr.

Kan., Pittsburg—Soon takes bids sanitary sewers. $30,000. L. D. Cornelius, City Hall, engr. Noted Sept. 13.

Neb., Fremont—Having plans prepared 9 mi. sanitary sewer outfall, $100,000 bonds voted. Burns & McDonnell Eng. Co., Interstate Bldg., Kansas City, Mo., consult. engrs. L. M. Roessler, city engr. Noted Jan. 24.

Neb., Omaha—Plans sanitary and storm sewers. $600,000. H. Beal, City Hall, engr.

Ark., Magnolia—See "Waterworks."

Tex., Lubbock—City Com. takes bids about Mar. 15, 30,000 ft. 18- to 24-in. tile and 27- to 78-in. concrete pipe in various streets. $100,000. J. B. Hawley and H. N. Roberts, Cotton Exch. Bldg., Ft. Worth, engrs. Noted Jan. 3 under "Streets and Roads."

Calif., Arroyo Grande—Plans sewerage system, 3½ mi. long. To exceed $25,000.

Calif., Los Angeles—Had plans prepared Main St. storm sewer system, incl. 9,000 lin.ft. double barrel rein.-con. rectangular section of 6 ft. 9 in. height and width varying from 6 ft. 5 in. to 9 ft. 7 in. for each section; 8,000 lin.ft. rectangular rein.-con. section varying from 5 to 6 ft. 7 in. high by 8 ft. 4 in. wide; 12,500 lin. ft. rein.-con. rectangular section from 3 ft. 5 in. x 5 ft. to 5 ft. x 5 ft. 3 in.; 9,800 lin.ft. non-rein. arch section from 5 ft. 11 in. x 7 ft. to 6 ft. 6 in. x 7 ft.; 11,100 lin. ft. circular non-rein.-con. from 60 to 70 in.; 59,000 lin.ft. rein.-con. pipe 24 to 66 in.; 23,000 lin.ft. cement pipe 12-21 in.; 20,000 lin.ft. cement pipe sanitary sewer, 6 to 12 in.; 787 catch basins; 179 manholes. From $2,500,000 to $3,000,000. J. A. Griffin, city engr.

Calif., Petaluma—Having surveys made complete sewerage system. To exceed $25,000. Howe & Peters, 24 California St., San Francisco, engrs.

Ont., Fort Erie—Plans sewers in 33 streets north of Garrison Rd. $100,000.

BIDS DESIRED

N. Y., Long Island City—Feb. 25, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Cooper Ave., Market, 85th, 77th and 25th Sts.

N. C., Charlotte—Feb. 27, by Bd. Comrs., sewers and sewage treatment plant. J. Firth, city engr.; adv. E. N.-R. Feb. 21.

S. C., Hartsville—See "Waterworks."

Fla., De Funiak Springs—See "Streets and Roads."

O., Cleveland—Feb. 27, by Cuyahoga Co., 16,000 ft. 8- to 27-in. vitr. tile and 3,200 ft. 30 and 42 in. brick, segmental block or rein.-con. sewers, Impvt. 55 of Co. Sewer Dist. R. F. MacDowell, Court House, engr.

O., Toledo—Mar. 10, by Lucas Co., 9,405 ft. 6- to 15-in. vitr. pipe in Sewer 84 Old Orchards 2nd extension, $25,310; 15,298 ft. 6- to 15-in. in Sewer 89, Broadmoor and Central Gardens, $35,790; 3,650 ft. 6 and 8 in. in Sewer 95, Owens addition, $10,161; 14,232 ft. 6- to 12-in. in Sewer 97, Wernert Park, $50,778. L. Boyatt, co. sanitary engr.

Mich., Jackson—Mar. 12, by City clerk, constructing drainage sewer and low pressure pipe, also furnishing one motor driven centrifugal pumping unit complete; adv. E. N.-R. Feb. 21.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Feb. 11 sewers in **(1)** 115th St. **(2)** 85th Rd. **(3)** Way Ave. **(4)** Palmetto St., from Tunnell Constr. Co., **(1a)** $73,915; J. Gallo, 203 Division St., Brooklyn, **(1b)** $58,953 **(4)** $3,775; D. A. Gross, **(2)** $2,364; J. D. Bridgidia **(3a)** $18,627; Duit, Inc., **(3b)** $16,946. Noted Feb. 7.

Calif., Pasadena—Sewer, etc., in Arroyo Blvd., incl. 6,500 lin.ft. 2 in. vitr. sewer, 63 manholes, average depth 6 ft., from de Waard & Cobham, Granger Bldg., San Diego, $33,500. Noted Dec. 27.

CONTRACTS AWARDED

Md., Baltimore—Mayor and City Council, City Hall, vitr. sewer pipe for Highways Dept., to Baltimore Clay Products Co., 2113 West Lafayette Ave., $28,122. Noted Feb. 7.

N. C., Moresville—See "Waterworks."

La., Baton Rouge—Comn. Council, 4,600 ft. 10-24 in. vitr. clay sewer and 520 ft. 36 in. c.i. sewers in various streets, to J. B. McCrary Co., Citizens & Savings Bank Bldg., Atlanta, Ga. $51,092. Noted Jan. 3.

O., Cleveland—Cuyahoga Co., 17,000 ft. 8- to 60-in. vitr. or rein.-con., also 8,000 ft. 30- to 60-in. brick or concrete sewer in State Rd. (Impvt. 10), to Gantose Constr. Co., Columbia Bldg., $297,767. Noted Feb. 14.

Mich., Royal Oak—Sanitary main sewer in Campbell Rd., 14,115 ft. 12-30 in. concrete pipe, to Liberty Constr. Co., Detroit Savings Bank Bldg., Detroit, $97,362.

Ill., Mt. Morris—For 10,000 ft. sanitary sewers and 2 disposal plants, to Craig Constr. Co., Des Moines, Ia., $56,000. Noted Jan. 17.

Minn., Minneapolis—See "Material and Equipment."

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, 505 ft. 10- to 12-in. vitr. clay sewer in Clifton Heights Sewer 4, to Riley Bros. Constr. Co., International Life Bldg., $2,251; 6,505 ft. 8- to 27-in. vitr. clay and 1,725 ft. 36- to 66-in. concrete sewer in Glaise Creek Sewer 19, also 2,100 ft. 12- to 24-in. vitr. clay sewer in Glaise Creek Dist. Sewer 24, to Hogan Contg. Co., 2120 Harris Ave., $47,025 and $7,790 respectively; 1,065 ft. 8- to 21-in. vitr. clay sewer in Glaise Creek Dist. Sewer 23, to Higgins-Wall-Dyer Constr. Co., International Life Bldg., $3,725. Noted Feb. 14.

Mo., University (St. Louis P. O.)—For 2,400 ft. vitr. clay and segmental block sewer in Colby Ave., also 2,650 ft. 12- to 36-in. vitr. clay and 575 ft. 42 in. segmental block sewer in North Pennsylvania Ave., to Stolle-Moll Constr. Co., 5243 Delmar Blvd., St. Louis, $20,921 and $20,706 respectively; 3,161 ft. 12- to 36-in. sewer in River Des Peres Sect. A-2, 797 lin.ft. 10- to 12-in. vitr. clay sewer in Dist. Sewer 29, also 4,475 iln.ft. 10- to 24-in. vitr. clay sewer in Dist. Sewer 26, to A. Lewald, 1219 Amherst Pl., St. Louis, $26,147, $1,703 and $9,673 respectively. Noted Jan. 31.

Okla., Chickasha—Outfall sewer and disposal plant, incl. Imhoff tank, 4,350 ft. 18- to 21-in. vitr. clay pipe, one 750 g.p.m. and one 1,000 g.p.m. motor driven pump, to Gibson & Mitchell, Pauls Valley, $43,206. Noted Jan. 10.

Okla., Tulsa—Sanitary sewers with laterals, connections, etc., in Dists. 199 and 201, to Comstock-Smedley Co., 432 Ia. Bldg., $1,478 and $36,468 respectively. Noted Jan. 31.

Calif., Los Angeles—See "Streets and Roads."

Waste Disposal

BIDS DESIRED

Ont., Toronto—Mar. 18, by W. W. Hiltz, mayor, City Hall, 2 story and basement, 50 x 80 ft., waste disposal plant, rein.-con., brick and steel, plain foundation, Wellington St. W. $150,000.

Bridges

PROPOSED WORK

North Carolina — State Hy. Comn., Raleigh, rejected bids rein.-con., bridge over Yadkin River, $286,660. Will readvertise soon. C. M. Upham, state highway comr. Noted Feb. 14.

O., Cincinnati—Plans replacing existing through truss bridge with new plate girder bridge, etc., over Mill Creek, Gest St. $34,749. F. Krug, City Hall, engr.

Kan., Oskaloosa—Jefferson Co. plans one 220 ft. steel truss span, 20 ft. wide, Federal Aid Project 175, Sect. A, near Perry. R. C. Ham, co. engr.

Neb., Omaha—Douglas Co., F. Dewey, clk., and Saunders Co. (Wahoo) plan bridge over Platte River. $155,000.

Ark., Cody (Hulpert, P. O.)—Lee Co. (Marianna) soon takes bids bridge over St. Francis River, here, 3 steel and concrete spans. Noted Sept. 20.

Tex., Amarillo — Atchison, Topeko & Santa Fe. Ry. System, 80 East Jackson Blvd., Chicago, having sketches made steel and rein.-con. bridge across Canadian River, here, sixteen 119 ft. spans in addition to 4 now in use. $1,000,000. A. R. Mitchell, Chicago and M. C. Blanchard, Amarillo, c/o owner, engrs.

Ont., London—Middlesex Co. plans to expend $35,000 on concrete culverts and bridges and steel bridges on concrete abutments. C. Talbot, co. engr.

BIDS DESIRED

Me., Sullivan — Mar. 19, by State Hy. Comn., Augusta, superstructure of bridge over Taunton River between here and Hancock. 1,470,000 lb. steel not incl. swing span machinery. P. D. Sargent, ch. engr. Noted Feb. 1, 1923.

Mass., Springfield—Mar. 14, at office of City Clerk, furnishing, fabricating and delivering, but not incl. erecting, of structural steel of 66-ft. span bridge on Berkshire Ave. over Boston & Albany R.R. R. P. Marsh, supt. Dept. Streets and Eng.; adv. E. N.-R. Feb. 21.

Pa., Phila.—Mar. 19, by Delaware River Bridge Joint Comn., Room 806 Widener Bldg., constructing cable bands, suspenders, and hand ropes, Contr. 13, and constructing suspended structure, Contr. 14, of bridge over Delaware River connecting city with Camden, N. J.; adv. E. N.-R. Feb. 21.

Delaware—See "Streets and Roads."

S. C., Charleston — Mar. 20, at office Sanitary & Drainage Comn. of Charleston Co., 39 Broad St., bascule span superstructure of bridge over Ashley River, State Highway 6; adv. E. N.-R. Feb. 21.

Tenn., Nashville—Mar. 11, by City Clerk, repairing and strengthening 2 steel and concrete bridges over Cumberland River at Sparkman and Jefferson Sts. $300,000. Freeland, Roberts & Co., Independent Life Bldg., consult. engrs.; adv. E. N.-R. Feb. 21. Noted Dec. 20.

Michigan—Feb. 27, by State Hy. Dept., Lansing, one 175 ft. truss span bridge, 364,000 lb. steel, Newaygo Co. G. C. Dillman, ch. engr.

Illinois—Feb. 29, by Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, 68 bridges in various counties, 18,814 cu.yd. concrete, 2,183,400 lb. structural steel. C. H. Older, ch. highway engr.

Kan., Concordia — Mar. 11, by Clerk Cloud Co., three 50 ft. span deck girder or 130 ft. arch, 24 ft. roadway, Federal Aid Project 197, near Ames. B. E. Thurston, co. engr.

Neb., Wilber—Mar. 4, by Clerk Saline Co., 5 bridges on Federal Aid Project 161, one 100 ft. and two 50 ft. concrete pony trusses, one 22 ft. I beam bridge, 45.9 cu. yd. Class A concrete, 48.9 sq.yd. gravel, etc., one 100 ft. pony truss bridge, 292.4 cu.yd. concrete, 216 sq.yd. gravel, etc, one 30 ft. I beam bridge, 79.18 cu.yd. Class A concrete, 65.5 sq.yd. gravel, 1,475 lb. structural steel, etc., and one 22 ft. I beam bridge, 72.55 cu.yd. Class A concrete, 49 sq.yd. gravel, 1,475 lb. structural steel. R. L. Cochrane, Lincoln, state engr.

Tex., Houston—See "Streets and Roads."

BIDS RECEIVED

Pa., Phila. — Delaware River Bridge Joint Comn., Room 806 Widener Bldg., constructing Phila. and Camden approach piers of bridge over Delaware River between here and Camden, N. J.: Phila. approach piers, Contr. 11, from Frederick Snare Corp., 114 Liberty St., New York City, $231,000; Camden approach piers, Contr. 12, from H. G. Ley & Co., 716 Raymond St., Phila., $271,863. Noted Jan. 17.

Illinois—See "Streets and Roads."

California — State Hy. Comn., Sacramento, from John Simpson & Co., 701 Antonio St., Los Angeles, bridge over Cedar Creek, 18 mi. east of Gilroy, Santa Clara Co., 560 cu.yd. concrete $19.56, 370 cwt. reinforcing steel $7, bridge over North Fork Pacheco Creek, 21 mi. east of Gilroy, 675 cu.yd. concrete $26.66, 980 cwt. reinforcing steel $7, etc., total $42,234. Noted Jan. 17.

CONTRACTS AWARDED

Louisiana — State Hy. Dept., Reymond Bldg., Baton Rouge, constructing Bayou Vidal Bridge on Federal Aid Project 134, Madison and Tensas Parishes, and Bayou Macon Bridge on Federal Aid Project 135 B, Madison and Richland Parishes, to Meyer-Greenwald Constr. Co., Monroe, $13,924 and $41,261 respectively; Bayou Vermillion Bridge on Federal Aid Project 136 B, Lafayette Parish, to Banta & Mutersbaugh, Lake Charles, $22,628. Noted Jan. 17.

Tennessee—See "Streets and Roads.".

North Carolina — State Hy. Comn., Raleigh, rein.-con. bridges and culverts on State Project 472-B, Vance Co., to Rhyne & Kitchen, Blacksburg, $38,973; on State Project 720, Caldwell Co., to Berry-Fortune Constr. Co., Hickory, $36,295. Noted Feb. 14.

O., Cambridge—Dept. Highways and Pub. Wks., Columbus, 500 ft. bridge, 29 ft., over Wills Creek and tracks of Baltimore & Ohio R.R. and Pennsylvania R.R., on Dewey St., here, to Hickey Bros., 520 Emerich St., Columbus, billet steel $174,360. Noted Feb. 7.

S. D., Kankton — Meridian Highway Bridge Co., J. B. Gurney, pres., concrete approach and slab on truss spans, incl. 2,230 cu.yd. concrete, 282,000 lb. reinforcing and 80,000 lb. structural steel, 4,580 sq.yd. asphalt pavement, 1,050 sq.yd. brick pavement, one frame office building and lights for entire bridge over Missouri River, to F. T. Leeder, 619 5th St., Sioux City, Ia., $75,470, and Monarch Eng. Co., Falls City, Neb., $37,910. Noted Jan. 17.

Tex., Robert Lee—Coke Co. 237 ft. bridge over Oak Creek, one 70 ft. steel span, concrete approaches and piers, to Hannah Constr. Co., Box 994, Waco, $20,035. Engrs. est $26,000. Noted Jan. 24.

Washington—State Hy. Dept., Olympia, bridge over Yakima River, Benton Co., two 180 ft. through riverted steel spans, etc., to Union Bridge Co., Central Bldg., Seattle, $49,000. Former contract rescinded. Noted July 26.

Oregon—See "Streets and Roads."

Dams

PROPOSED WORK

Ill., Aurora — Plans dam across west branch of Fox River. $25,000.

BIDS RECEIVED

Pa., Phila.—Dir. Pub. Wks., Room 216, City Hall, overflow dam 1,200 ft. long, maximum height 35 ft., in southern section of Fairmount Park across Schuylkill River, 12,000 cu.yd. earth and 8,000 cu.yd. rock excav., 35,000 bbl. cement, etc., from Seeds & Durham, 6320 Wissahickon Ave., $604,650. Noted Jan. 31.

CONTRACTS AWARDED

N. Y., Kingston—Bd. Water Comrs., City Hall, addition to Coopers Lake Dam, 2,500 cu.yd. earth fill, 410 cu.yd. rein.-con., etc., to R. B. Kennedy Co., Inc., Utica. Noted Dec. 27.

Railways

PROPOSED WORK

Oklahoma—Atchison, Topeka & Santa Fe R.R. Co., 406 Delaware St., Topeka, Kan., plans 9 mi. extension from Marland to Tonkawa oil fields, 75 lb. rails, standard gauge track, chat and macadam ballast, etc. R. A. Rutledge, ch. engr.

California, Nevada and Utah—Western Pacific R.R. Co., Mills Bldg., San Francisco, appropriated $6,000,000 for 1924 improvements, portion of which will finance reballasting and laying new tracks on line between Oakland, Calif., and Salt Lake City, Utah, replacing track on Loyalton branch with 70 lb. rail, depots, shops, yards, etc, at various points in California, Nevada and Utah; steel and concrete bridges to replace present wooden structures at Oroville, Calif., to exceed $25,000. J. W. Williams, ch. engr.

Ontario — York Twp., 40 Jarvis St., Toronto, plans 2 mi. double track street railway on Oakwood and Eglinton Aves., Rogers and Weston Rds., Toronto. $300,000. Owners propose having same built by Hydro Electric Power Comn. of Ontario, 110 University Ave., Toronto, and operated by City of Toronto.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. Y., Buffalo—Plans dredging Buffalo River and Cazenovia Creek from Babcock to Seneca Sts., 800,000 cu.yd. excav. To exceed $150,000. C. E. P. Babcock Municipal Bldg., engr.

Ky., Hartford—Drainage Comn., Ohio Co., plans Howard Ditch, 25,000 ft. long, $28,500. S. L. King, c/o Comn., engr.

Wis., Barron—Barron Co. Drainage Bd., C. Cockran, secy., Turtle Lake, plans 1,200 acres tile drainage and 4 mi. open ditch drainage. $25,000. J. G. D. Mack, State Capitol Bldg., Madison, engr.

Wis., Whitehall—Trempealeau D. D., W. S. Wadleigh, secy., Gatesville, making plans additional tile and open ditch drainage and improvements to present ditches and pumping plant. $33,000. J. D. Mack, State Capitol, Madison, engr.

Calif., Long Beach—City rejected bids dredging Channels 2 and 3. Plans to dredge deeper than provided under last call for bids. Noted Jan. 24.

New York—Feb. 29, by J. A. Delaney, comr. Docks, Pier "A," foot of Battery Pl., New York City, dredging channels, constructing dikes, and placing fill on west island in connection with improvement of Jamaica Bay, Queens Boro, Contr. 1818-B and C. Noted Jan. 24.

N. Y., Glens Falls—Mar. 11, by R. A. Fuller, comr. Canals & Waterways, Albany, repairing Glens Falls feeder, also improving New York State Canals; adv. E. N.-R., Feb.

Calif., Oroville—Mar. 5, by Directors of Oroville-Wyandotte Irrigation Dist., ditch, 600 cu.yd. earth excav., 1,200 cu.yd. loose or soft rock excav., 4,200 cu.yd. solid rock excav. S. J. Norris, Oroville, engr.

BIDS RECEIVED

Minn., Minneapolis—Bd. Park Comrs., City Hall, Feb. 7, dredging in Powderhorn Lake, 140,000 cu.yd., from LaCrosse Dredging Co., 405 Plymouth Bldg., $0.35 per cu. yd. Noted Jan. 10.

CONTRACTS AWARDED

N. Y., New York — Superintendent Bd. Educ., 500 Park Ave., excavating and removing earth and rock from property adjoining P. S. 30, East 141st St., to T. De Roma, 33 Evelyn Pl., $19,677. Noted Jan. 24.

Calif., Long Beach—City, dredging 2,000,000 cu.yd. in waterway between Recreation Park and Alamitos Bay, to United Dredging Co., Central Bldg., Los Angeles, $0.1618 cu.yd. Noted Feb. 7.

Streets and Roads

PROPOSED WORK

Vermont — Dept. Highways, Montpelier, plans grading, gravel surfacing, etc., 1.25 mi. Crystal Lake Rd., 21 ft., in Sutton, Federal Aid 55A, 3.1 mi. Newport-North Stratford Rd., 21 ft., in Charleston; grading and concrete paving 1.2 mi. Fairhaven-Castleton Rd., 18 ft., in Fairhaven; Federal Aid 50, 0.75 mi. Barre-Montpelier Rd., 18 ft., in Berlin, Federal Aid 56A; bituminous macadam paving 2.25 mi. road in Georgia, Federal Aid 52; 330-ft. deck plate girder bridge and 1,700 ft. roadway, gravel surfaced, project known as Gassets Overpass on Proctorsville Gulf Rd., in Chester, Federal Aid 54A. T. W. Dix, ch. engr.

N. Y., Cohoes—Soon takes bids grading, widening, laying sidewalks, repaving, etc. 0.7 mi. Columbia St., 30 ft. $40,000.

N. Y., Elizabethtown—Essex Co. voted $38,730 bonds graveling 16 mi. roads, 20 ft.

N. Y., Schenectady—Had plans prepared widening 0.7 mi. Lower State St., 75 ft. roadway, 14 ft. sidewalks on either side. $100,000. Address City Planning Comn.

N. Y., Tonawanda—Making plans repaving Main St. and eliminating grades at junction of Main, Niagara and Young Sts. To exceed $35,000. T. W. Barrally, City Hall, engr.

N. J., Asbury Park—Plans paving Bangs Ave. and Emory St. $40,000. N. Rogers, Asbury Park, engr.

W. Va., Clarksburg—Plans paving and underway crossing at West Adamston. $50,000. Council soon takes bids paving 53 blocks, (separate contract). T. S. Long, city engr.

North Carolina—State Hy. Comn., Raleigh, plans improving roads **(S. P. means State Project)** grading 4 mi. S. P. 975, Madison Co., $25,000; grading and gravel surfacing 2.17 mi. S. P. 390, Robeson Co., $30,000; grading and surfacing 13 mi. S. P. 394, Roberson Co., $78,000; sand asphalt surfacing 8 mi. S. P. 318, Brunswick Co., $94,000; grading, concrete or asphaltic paving 11 mi. S. P. 330, Columbus Co., $363,000; hard surfacing 12 mi. old S. P. 316, Brunswick Co., $250,000. C. M. Upham, state highway comr.

North Carolina — State Hy. Comn. Raleigh, rejected bids improving roads **(S. P. means State Project)** grading and concrete paving 12.5 mi. S. P. 720, Caldwell Co., $453,528; grading and gravel surfacing 5.33 mi. S. P. 714, Ashe Co., $98,762; grading and concrete or asphaltic paving

Streets and Roads (Continued)

6.85 mi. S. P. 111, Camden Co., $144,200; grading and waterbound macadam paving 11.5 mi. S. P. 106-B, Bertie Co., $151,721. Will readvertise soon. Noted Feb. 14.

N. C., Asheville—Plans paving various streets. $150,000.

N. C., Morgantown — Voted $150,000 bonds to pave principal streets now unpaved. Noted Jan. 24.

Tenn., Nashville—City soon takes bids paving Belcourt, Villa, Capers, 16th and Maxwell Sts., 28th, Bates and Shelby Aves. W. W. Southgate, City Hall, engr. Noted Jan. 17.

O., Columbus — Making plans grading, laying necessary water services and sewers and paving 7,757 ft. Breevoort Rd., 22nd St., Pomola and Ardmore Aves., 24 ft., brick $119,961, asphalt $97,059; 1,193 ft. alleys north of 6th, 7th and Oakland Aves., 16 ft., brick $7,253, concrete $6,899; 1,987 ft. alley north of Norwich Ave. and alleys west of Michigan and Harrison Aves., 20 ft., brick $15,534, concrete $13,718; 126 ft. 2nd alley west of High St., 15 ft., brick $743, concrete $656; 362 ft. alley north of 11th Ave., 22.5 ft., brick $3,099, concrete $2,741; 3,130 ft. Ann St., 40 ft., brick $56,636, asphalt $50,251; 451 ft. Wendell Ave., 20 ft., brick $7,930, asphalt $6,226; 4,187 ft. Rich St., 46 ft., asphalt $33,938; widening 1,908 ft. Grant Ave., from 32 ft. to 44 ft., asphalt $36,494. R. H. Simpson, city engr.

O., Steubenville—Jefferson Co. plans resurfacing Richmond-Knoxville Rd., $49,961, also Dillonvale-Rayland Rd., $40,220, both macadam with tar top. V. N. Penn, Steubenville, engr.

O., Toledo — Lucas Co. plans grading, curbing and concrete paving Barrows St. Impvt. 215, Balkan Pl. Impvt. 216, Brussels St. Impvt. 217, Mansfield St. Impvt. 219, Talbot St. Impvt. 218. A. E. Schmitt, clk. This corrects report in Jan. 24 issue.

Mich., Detroit—Having plans prepared paving with 3 in. sheet asphalt on 6 in. concrete 2,300 sq.yd. Louis Ave. $11,320, and 3,900 sq.yd. Genoa Ave. $19,740; 3½ in. sheet asphalt on 8 in. concrete, on 2,800 sq.yd. Byron Ave., $15,990, 2,100 sq. yd Hendrie Ave. $12,030, 2,600 sq.yd. Lakewood Ave. $15,840, 1,100 sq.yd. Springwells Ave. $6,780, 9,300 sq.yd. Dequindre St. $55,890, 2,500 sq.yd. Lonyo Rd. $14,760, 6,100 sq.yd. Lakeview Ave. $36,070, 990 sq.yd. Grove Ave. $5,775, 400 sq.yd. Domine Ave. $2,410, 3,000 sq.yd. Eason Ave. $17,160, 2,900 sq.yd. Atkinson Ave. $16,980, 1,400 sq.yd. Brighton Ave. $8,400, 3,600 sq.yd. Savery Ave. $21,180, 1,300 sq.yd. Wilson Ave. $7,810 and 18,600 sq.yd. Davison Ave. $111,300. G. Jerome, city engr.

Ill., Sycamore—Plans paving streets 9,520 sq.yd., 7-in. concrete, 7,148 ft. curb and gutter, etc. $40,145. W. M. Hay, engrs. for Bd. Local Impvts.

Ill., Waukegan—Soon takes bids 60,000 sq.yd. 7-in. rein.-con. paving with curbs and gutters, also 15,000 sq.yd. brick on concrete. H. J. Douthitt, City Hall, engr.

Wis., Eau Claire—Had plans prepared 21,415 sq.yd. concrete paving, 11,500 lin.ft. integral concrete curbing, 6,216 cu.yd. earth excav. on 1st Ave., Babcock, Chestnut, Madison, Hogeboom, Farwell and Lake Sts. $50,000-$60,000. J. T. Hurd, City Hall, engr.

Wis., Janesville—Making plans paving approximately 5 mi. streets, 25 ft., one course rein.-con., concrete curbs and gutters. $50,000. C. V. Kirch, City Hall, engr.

Wis., Kilbourn — Election soon. $48,000 bonds, concrete paving, curbing and guttering Eddy, La Crosse and Washington Sts., 25 ft. $48,000. E. B. Parsons, Jefferson, engr.

Wis., Madison—Plans paving Hillington Way, Norwood Pl., Van Hise, Kendall, Chamberlain, Elm, Washington, Rogers, Jenifer, Spaight, Ingersoll, Rutledge, Waubesa, Walnut, Welch, Center, Commercial, Schurz, Ryan, Fair View, Milwaukee, Farwell, 7th, Dayton, 2nd, Corry and Doty Sts., 25- to 30-ft., vitr. brick, asphalt or concrete. $83,566. H. C. Buser, clk. Engineer not selected.

Ia., Anamosa — Plans paving, etc., 12 blocks. $40,000. D. Stevens, clk.

Kan., Pittsburgh—Soon takes bids grading and surfacing with vitr. brick on concrete, concrete curbing and guttering on 40 blocks, Tucker Ave., Elm, Walnut, Carlton and Olive Sts. $160,000. L. D. Cornelius, city engr.

Kan., Topeka — W. S. Hancock, comr. streets & pub. impvts., takes bids about Mar. 1, paving 43 blocks asphaltic concrete on 7 in. concrete, also 20,000 sq.yd. 6 in. concrete alley paving. $240,000. W. E. Baldry, City Hall, engr. Noted Jan. 17.

South Dakota—State Hy. Comn., Pierre, will let contracts in March or April grading 9.5 mi. Federal Aid Project 169, Pennington Co.; 17.1 mi. Federal Aid Project 162, Haakon Co.; 12 mi. Federal Aid Project 179, Dewel Co.; 44 mi. Federal Aid Project 173, Faulk, Spink and Edmund Counties; 10.3 mi. Federal Aid Project 167 A, Bon Homme Co.; 6.9 mi. Federal Aid Project 178, Bon Homme Co. F. D. Hudgins, ch. engr.

Ark., Marianna—Lee Co. soon takes bids hard surfacing 50 mi. roads, 18 ft., north to St. Francis Co. line, south to Phillips Co. line and northwest to Wheatley.

Ark., Pine Bluff — Making preliminary plans improving 35 blocks from Olive to Cherry and 6th to Barraque Sts., grading and paving with rein.-con. or asphaltic concrete, concrete curbs and gutter.

Ark., Rogers—Soon takes bids improving 4,000 ft. streets, 28 ft., in business section, incl. grading, surfacing with asphaltic concrete or rein.-con., concrete curbs and gutters.

Tex., Abilene—Taylor Co. making plans State Highway 30, 30 mi. long. $995,000 includes bond issue and Federal and State Aid. W. A. Riney, Abilene, engr.

Tex., Alice—Jim Wells Co. soon takes bids crushed rock, caliche base with 1½ in. bituminous topping on 14.3 mi. highway from point 2,000 ft. south of Nueces River to point 10 mi. north of here, 20 ft. L. W. S. Mantel, co. engr.

Tex., Archer City—Archer Co. election Feb. 23, $300,000 bonds, highway improvement in Rd. Dist. 2. Federal Government will appropriate $300,000 if bonds are voted. E. M. Hooper, co. judge.

Tex., Burkburnett—Making plans gravel paving, concrete curbing and guttering on 20 blocks. $45,000. Montgomery & Ward, City Natl. Bank, Wichita Falls, engrs.

Tex., Columbus—Colorado Co. plans 21.2 mi. State Highway 3, 18 ft., 6 in. concrete and 1 in. rock asphalt topping. $650,000. B. H. Faber, co. engr.

Tex., Denison—Making plans paving 18 Blocks Mirick Ave., miscellaneous types of standard paving, also paving alleys in blocks between Houston and Eddy Sts. $60,000. C. E. Hayden, city engr.

Tex., Houston — Making plans paving Ashland, Pecore and Cumberland Sts. in Houston Heights, miscellaneous standard paving, $25,000; paving West Capitol Ave. from Capitol Ave. Bridge to Henderson St., bituminous types, $25,000. J. C. McVea, city engr.

Tex., Lubbock—Making plans paving 99 blocks, Bway., Ave. K, Main, 7th, 10th and 16th Sts., various types. $250,000. Jno B. Hawley and H. N. Roberts, Cotton Exch. Bldg., Ft. Worth, engr. Noted Jan. 3.

Tex., Roscoe—Plans prepared paving 6 blocks Main St., 8 in. rein.-con. or 3 in. brick on 5 in. concrete. $25,000. Montgomery & Ward, City Natl. Bank, Wichita Falls, engrs.

Tex., Sanderson — Terrell Co. making plans gravel surfacing 12½ mi. State Highway 12, 18 ft., from here, east. J. Stovall, Sanderson, engr.

Okla., Comanche — Voted $70,000 bonds grading and concrete paving 7 blocks Oak, Church, 1st and 2nd Sts. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Wash., Hoquiam — Making plans and takes bids about Mar. 7, concrete paving and concrete sidewalks on Emerson Ave. et. al. $100,000. W. L. Lovejoy, Hoquiam, engr.

Wash., Seattle—King Co. rejected bids Jan. 21, constructing Quartermaster-Dockton Rd. Will readvertise. $49,500. T. R. Beeman, co. engr. Noted Feb. 7.

Calif., Richmond — Had plans prepared improving portion 34th, 35th and 36th Sts. betwen Macdonald Ave. and Richmond-Pullman tract, etc., incl. grading, 8 in. macadam, concrete curbs, walks, gutters, etc. To exceed $40,000. Noted Feb. 14.

Calif., Riverbank—Plans paving various streets. To exceed $25,000. Engineer not selected.

Calif., San Diego—Had plans prepared improving Mission Blvd., 49,443 sq.yd. 5 in. concrete, 19,097 lin.ft. cement curbing. F. A. Rhodes, City Hall, city engr.

Ontario—Provincial Government, Northern Development Branch, plans 125 mi. trunk road from either North Bay or Sturgeon Falls to Cobalt, gravel road. $600,000. F. R. Fullerton, Parliament Bldg., Toronto, engr.

Ont., Chatham — Kent Co. plans 11,000 sq.yd. concrete pavement on Creek Rd. $35,000. W. H. McGeorge, Chatham, engr.

Ont., Kingston—Having plans prepared 30,000 sq.yd. asphalt pavement on various streets. $100,000. H. S. Dick, city engr.

Ont., Leamington — Having plans prepared concrete pavements. $40,000. Prices wanted on all materials. R. M. Selkirk, city engr.

Ont., London—Middlesex Co. plans to expend $210,000 for maintenance and construction of gravel and macadam roads, also 25,000 sq.yd. concrete on Sarnia Rd. C. Talbot, co. engr.

Ont., Ottawa—Bd. Control takes bids early in spring, grading, sidewalks and asphalt pavements on Rideau St. approaching Cummings Bridge. $40,000. A. F. Macallum, city engr.

Ont., Port Perry — Ontario Co. plans permanent pavements on main streets, 15,000 sq.yd. asphalt or concrete. $50,000. D. J. Keene, Whitby, engr.

Ont., Toronto — Toronto & York Rds. Comn., 57 Adelaide St. E., plans 6 mi. bituminous macadam roads. $150,000. E. A. James, 57 Adelaide St. E., engr.

BIDS DESIRED

N. Y., Brooklyn—Feb. 27, by E. Riegelmann, boro pres., Boro Hall, permanent asphalt paving Delamere Pl., Empire Blvd., Ave. L, Banker, East 9th, Osborn, Van Dam, West 8th, 43rd, 63rd, 68th and 76th Sts., Hegeman, Hopkinson, Riverdale and 11th Aves.; curbing and flagging Delamere Pl., Empire Blvd., East 9th and 68th Sts.; grading, curbing and flagging 71st and 76th Sts.; curbing 81st St.

N. Y., New York — Feb. 26, by Dept. Plant & Structures, Municipal Bldg., westerly footwalk flooring on steel approaches of Manhattan Bridge. $25,000.

N. J., Freehold—Mar. 5, by Bd. Freeholders Monmouth Co., reconstructing 2.15 mi. Palmer Ave., Rd. 73, Sect. 1, rein.-con. Throckmorton & Morris, 202 Bway., Long Branch, civil engrs.; adv. E. N.R. Feb. 21.

Pennsylvania—Mar. 6 and 7, by State Hy. Dept., Harrisburg, constructing 48 mi. roads in 24 counties; adv. E. N.-R. Feb. 21.

Delaware—Mar. 12, by State Hy. Dept., Dover, constructing 1.775 mi. road from Walker to Deakyneville, Contr. CN-14, 2.27 mi. from Mt. Pleasant to Summit Bridge, Contr. CN-15, 0.507 mi. road through Frederica, Contr. CK-17, 1.01 mi. Walnut St., Milford, Contr. CK-20, 5.75 mi. from Wescoats Corner to Rehoboth, Contr. CS-30, 2.43 mi. road from Bethel to Broad Creek, Contr. CS-31; rein.-con. bridge at Drawyers, Contr. 37-A, adv. E. N.-R. Feb. 21.

Fla., De Funiak Springs—Mar. 7, by City Council, paving and storm sewers. M. Bruce, city engr.; adv. E. N.-R. Feb. 21.

Louisiana—Mar. 6, by State Hy. Dept., Reymond Bldg., Baton Rouge, 11.36 mi. Federal Aid Project 144, Many-Mansfield Highway, Sabine Parish, washed or sand clay gravel. J. M. Fourmy, ch. engr.

O., Akron — Feb. 27 (extended date), by W. F. Peters, dir. Pub. Serv. grading, laying sidewalks, sewers and cindering 2,830 cu.yd. Spring St. and McKinley Ave., $44,000; grading, laying sidewalks and cindering 825 cu.yd. Mildred Ave., $14,000; grading, laying sidewalks and paving 3,305 ft. Big Falls Ave., Allyn and Power Sts., 24 ft., vitr. brick or asphalt, $74,000; grading and paving 1,165 ft. South Arlington St., 44 ft., vitr. brick or asphalt $34,000; curbing, guttering and paving 2,000 ft. Aqueduct St., 30 ft., Hillside vitr. brick or asphalt, $28,000. E. A. Kemmler, Delaware Bldg., engr. Noted Feb. 14.

O., Canton—Feb. 26, by Dir. Pub. Serv., City Hall, brick paving ½ mi. 18th St., N. W., 40 ft., $27,500; paving 11th St. S.W. and 19th St. N. W., $70,000, about ¾ mi. 8th St., 40 ft., $95,000-$125,000; repaving ½ mi. Market Ave. S, 60 ft., $75,000-$100,000; improving 13th St. S. W., $28,500. W. E. Sarver, City Hall, engr.

O., Cleveland Heights (Warrensville P. O.)—Feb. 25, grading, curbing and paving Washington Blvd., Goodnor, Martindale, Rossmor and Hampstead Rds., brick, bituminous macadam, asphaltic concrete or sheet asphalt. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ind., Richmond — Mar. 3, by Comrs. Wayne Co., paving, etc. $43,045. H. E. Thornburgh, aud.

Ind., Wabash—Mar. 4, by Comrs. Wabash Co. at office of W. Beauchamp, aud., improving Albert Bechtol Rd. $49,412.

Illinois — Feb. 29, by Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, grading 23 sections in various counties, 2,082,168 cu.yd. excav. C. H. Older, ch. highway engr.

Ill., Waukegan—A. L. Rogers, secy. Bd. Local Impvts., c/o Lake County Title & Trust Co., taking bids and opens same about Feb. 20, 22,000 sq.yd. rein.-con. paving with concrete curbs and gutters. H. J. Douthitt, City Hall, engr.

Wis., Marshfield—Mar. 5, by Wood Co. Hy. Comn., at City Hall, grading and surfacing Marshfield-Lincoln Rd., portion in Town of Lincoln, 2,171 cu.yd. earth excav., 9,244 sq.yd. 16 ft. concrete, 2,000 lb. reinforcing bars, etc.; Marshfield-Lincoln Rd., portion in City Marshfield, 1,970 cu.yd. earth excav., 7,000 sq.yd. 18 ft. concrete, etc. E. Morris, comr.

Streets and Roads (Continued)

Ia., Pocahontas—Mar. 6, by Pocahontas Co. graveling 32 mi. roads, 17,625 cu.yd. gravel. A. L. Thornton, Pocahontas, engr.

Minn., New Prague—Feb. 25, paving, curbing and guttering 8 blocks Main St. $30,000. E. E. Budin, city clk.

Kan., Dodge City—Taking bids paving 7 blocks brick on concrete, also curbing, guttering, etc. 9 blocks. $35,000.

Kan., Salina—Mar. 12, by Clerk Saline Co., fine grading and surfacing with sand clay 5.25 mi. Federal Aid Project 44, Sects. A and B, 18 ft., and 7.015 mi. Federal Aid Project 45, Sects. C and D, 18 ft. W. H. Cost, co. engr.

Ark., Pine Bluff — Mar. 3, by Comrs. Paving Dist. 71, resurfacing various streets in district with vitr. brick blocks. F. R. Aller, city engr.; adv. E. N.-R. Feb. 21.

Wyo., Cheyenne—Mar. 3, by City Comrs. improving 15 blocks, 30 ft., Dist. 5, Pershing Heights, incl. grading, curbing and paving with asphalt on concrete. J. A. Bruce, 710 Bankers Reserve Life Bldg., Omaha, Neb., engr.

Tex., Houston—Mar. 3, by H. L. Washburn, aud. Harris Co., surfacing, concrete bridging and culverts on Bway. and Telephone Rds. $26,000. Howe & Wise, co. engrs.

Tex., McKinney — Feb. 27, by O. T. Murray, judge Dollin Co., improving State Highway 1, Federal Aid Project 234, 22,590 sq.yd. concrete pavement and 1,882.85 cu.yd. gravel cushion. Already graded and subbase placed. $70,000. F. W. Cawthon, co. engr.

Tex., Waxahachie — Feb. 29, by H. R. Stovall, judge Ellis Co., grading and gravel surfacing 3.04 mi. State Highway 14, Federal Aid Project 384, 18 ft. $52,330. W. A. Spalding, co. engr.

Tex., Wichita Falls—Mar. 10, by D. B. Sartin, judge Wichita Co., grading and surfacing with one course rein.-con. 7.43 mi. State Highway 30, Bates Sect. Wichita Falls-Seymour Rd., Federal Aid Project 432, 18 ft. $263,000. J. M. Isbell, co. engr.

Okla., Tulsa—Mar. 3, by R. Garbett, city aud., grading and paving 56 blocks, 20,000 sq.yd. asphalt, 50,000 sq.yd. concrete, 20,000 cu.yd. excav. C. Schultz, City Hall, engr.

California—Mar. 3, by State Hy. Comn., Sacramento, improving highway between Half Moon Bay Rd. and Kings Mountain Rd., San Mateo Co., 6.4 mi. grading and surfacing with gravel and broken stone. R. M. Morton, state highway engr. Noted Nov. 8.

California — Mar. 10, by State Hy. Comn., improving highway between south boundary Ventura Co. and Camarillo, 13.5 mi. grading, 2.5 mi. widened with cement concrete shoulders, and 7.4 mi. to be paved with cement concrete. Former bids rejected. R. M. Morton, state highway engr. Noted Feb. 7.

Calif., Burlingame — City Trustees receiving bids improving Bway. between El Camino Real and San Mateo Dr., 25,000 sq.ft. grading, 985 tons asphalt concrete base, 60,000 sq.ft. asphalt concrete surface, etc. Bids previously asked not opened due to irregularity in proceedings. Noted Jan. 24.

Calif., Mill Valley—Town Trustees receiving bids and will open same about Mar. 15, improving Alcatraz Pl., Gardner, Bay View, Olive, Madrone Sts., etc., incl. 4,624 cu.yd. grading, 121,007 sq.ft. of 5 in. concrete, 19,044 sq.ft. macadam, 2,730 lin.ft. concrete curb and gutter, 2,768 sq.ft. concrete gutter, etc. J. C. Oglesby, Cheeda Blk., San Rafael, engr. Noted Dec. 6.

Calif., Tulare — City Trustees receiving bids improving various streets, 9,507 sq.ft. 6 in. and 142,435 sq.ft. of 5 in. concrete, 24,000 sq.ft. 4 in. concrete alley pavement, 74,390 sq.ft. 4 in. street pavement, 21,093 sq.ft. of 4 in. cement walks, 6,916 lin.ft. of cement concrete curb, etc. J. P. Williams, city engr. Noted Jan. 24.

Ontario—Mar. 4, by S. L. Squire, deputy minister of highways, Toronto, 7.6 mi. washed gravel concrete pavement, Contrs. 1051 and 1053, $300,000; 6.9 mi. bituminous penetration pavement, Contrs. 1054 and 1055, $210,000; 21.5 mi. waterbound macadam roadway Contrs. 1056 to 1063 inclusive, $400,000; 74.7 mi. oiling and repairing and surface treatment of macadam roads, Contrs. 1064 to 1075 inclusive $200,000; 18.8 mi. grading Contrs. 1076 to 1080 inclusive $120,000. G. Hogarth, 110 University Ave., Toronto, ch. engr.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Quees Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc. on **(1)** Ambrose St. **(2)** Chafee St. **(3)** Edson St. **(4)** 80th St. **(5)** 85th Ave., sheet asphalt paving **(6)** Edson St. **(7)** 50th St., grading **(8)** 39th St. and Bryce Rd., receiving basins and paving **(9)** 39th St., from C. Kurth, 9519 126th St., Richmond Hill, **(1)** $7,789 **(3)** $6,354; Highway Impvt. & Repair Co., **(2)** $5,479 **(4)** $33,128 **(5)** $5,300 **(6)** $12,704 **(7)** $24,284 **(9)** $17,907; Peace Bros., Inc., 57 North Laurence St., Flushing, **(8)** $9,158. Noted Feb. 7.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Feb. 15, grading, regrading, curbing, recurbing and sheet asphalt paving unpaved portion of Riverside Dr., etc., from C. D. Beckwith, Inc., 2875 Bway., $888,868. Noted Feb. 7.

N. Y., New York—Park Bd., Municipal Bldg., Feb. 14, paving and repaving, asphaltic mastic walks in Central Park, from L. DiMinna, $29,590; grading and curbing, etc., new roadway entrance to Central Park at 6th Ave. and 59th St., also drain pipe in music stand in mall in Central Park, from Fleming & Sheppard, Inc., 116 Broad St., $20,880 and $3,673 respectively; drain pipe and completing roads and paths in connection with construction of Rice Memorial on Pelham Bay Parkway, from J. Paladino, Inc., $111,742. Noted Feb. 7.

Md., Towson—Baltimore Co., Feb. 14, concrete paving 1.5 mi. Graystone Rd., Group 1, and 2 mi. Middletown Rd. from end of concrete east, from A. C. Cantell & Sons Co., Towson, $96,617.

Tennessee — Dept. Hys. & Pub. Wks., Nashville, grading and surfacing with limestone on course stone base 13.64 mi. Sparta-Warren Co. line Rd., 18 ft., Federal Aid Project 201, White Co., from Boyd Williams Constr. Co., Murfreesboro, $376,971. Noted Jan. 24.

O., Akron—W. F. Peters, dir. Pub. Serv., Feb. 13, grading, laying sidewalks and cindering **(1)** 675 cu.yd. Avon St. **(2)** 1,600 ft. Atwood Ave., grading and paving with **(a)** asphalt **(b)** brick **(3)** 700 ft. Wellesley Ave., 24 ft., grading, laying sidewalks and sewers, etc. **(4)** 2,670 ft. Emerling Ave., 26 ft., grading, laying sidewalks and paving **(5)** 3,560 ft. Wildwood Ave., 26 ft. **(6)** 2,085 ft. Chalker Ave., 24 ft. **(7)** 820 ft. Elma St., 20 ft., from Guran & Brucich, 429 Mathews St., **(1)** $8,471 **(2)** $7,385; T. A. McShaffrey Constr. Co., 171 South Forge St., **(3a)** $10,790 **(4a)** $46,309 **(5a)** $68,276 **(6a)** $3,028 **(7a)** $14,681; Hollinger & Davidson, 435 South Bway., **(6b)** $32,030 **(7b)** $15,907. Noted Feb. 7.

Indiana—State Hy. Comn., Indianapolis, Feb. 5, paving 6.032 mi. Louisville Rd., Federal Aid 21, Clark Co., from Deer & Bergen, Franklin, $156,998, engrs. est. $173,418; 6.199 mi. Yellowstone Trail, Sect. D, Federal Aid 66, Kosciusko Co., from Williams & Baldwin, Cleveland Heights, O., $141,042, engrs. est. $157,054; 5.834 mi. Sect. E and 6.98 mi. Sect. F Yellowstone Trail, Federal Aid 66, Kosciusko and Whitley Counties, from E. & G. Alexander, North Star, O., $152,122 and $168,657 respectively, engrs. est. $172,613 and $182,290 respectively; 7.699 mi. Sect. G and 7.352 mi. Sect. H Yellowstone Trail, Federal Aid 66, Whitley and Allen Counties, from Hilding Constr. Co., Grand Rapids, Mich., $181,443 and $151,503 respectively, engrs. est. $183,539 and $172,149 respectively; 7.736 mi. Sect. A LaFayette Pike, Federal Aid 74, Boone Co., from G. T. Miller, Lebanon, $153,437, engrs. est. $156,048; 8.095 mi. Sect. D LaFayette Pike, Federal Aid 74, Tippecanoe Co., from S. S. Palma, LaFayette, $152,865, engrs. est. $152,333. Noted Jan. 24.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Feb. 15, concrete paving **(15.61 mi. 1-22, 23 and 24, Crawford, means 15.61 mi. Route 1, Sects. 22, 23 and 24, Crawford Co.)**, 15.61 mi. 1-22, 23 and 24, Crawford, from A. J. Parish, Paris, $313,727; 47.28 mi. Div. A 18 and Div. C 2, LaSalle, Bureau and Lee, and 5.28 mi. 23-4, LaSalle, from R. F. Conway Co., 133 West Washington St., Chicago, $926,000 and $145,146 respectively; 8.56 mi. 3-26 and 27, Mercer and Warren, from W. O'Neil Sons Co., Faribault, Minn., $196,994; 12.07 mi. 8-21, Iroquois, from Cast Stone Constr. Co., 318½ South Barstow St., Eau Claire, Wis., $243,389; 9.37 mi. 8-24 and 25, Livingston, from Shanks & Gannon, Watseka, $172,465; 3.12 mi. 3-51, Green, and 2.88 mi. 36-1, Hancock, from E. J. Eiff & Co., Quincy, $75,816 and $56,989 respectively; 2.99 mi. 832, Woodford, from Hedges Constr. Co., $60,506; 5.04 mi. 9-26, Hancock, from Cameron & Joyce Co., Keokuk, Ia., $109,599; 3.45 mi. 16-16, Christian, from Indiana Road Paving Co., Rochester, Ind., $79,296; 15.52 mi. 12-30, 31 ,32 and A-1, St. Clair, from Capital Constr. Co., 1207 Cherry St., Des Moines, Ia., $339,500; 7.48 mi. 19-26, 27, McHenry, from G. Welch, Beloit, Wis., $155,000; 12.84 mi. 25-15 and 16, Cumberland and Coles, from Stressenreuter Bros., 3020 South Halsted St., Chicago, $240,000; grading 2-74A, Lee, 82,466 cu.yd excav., from F. M. Johnson, Dixon, $39,673; bridge on 3-26B, Mercer, 1 concrete girder and 1 concrete substructure, from C. D. Stratten, Little York, $8,566; 1 superstructure for steel bridge on 3-26C, Mercer, from St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., $7,248; 2 concrete girders on 8-21D, Iroquois, from Ferguson Constr. Co., 1033 North 2nd St., Rockford, $31,679; 2 concrete girders on 23-4B, LaSalle, from Acme Engrs. Co., Decatur, $25,753. Noted Jan. 31.

Mont., Great Falls—Improving Central Ave. between Park and 6th Sts., incl. 12,459 sq.yd. paving, etc., from Leigland & Kleppe, Stanton Bank Bldg., rein.con. $2.60 sq.yd., total $42,488; Birch & Son, Ford Blk., bitulithic $42,169, 3 in. brick $73,488, 3½ in. $83,677.

Tex., Laredo—Webb Co., widening present gravel from 15 to 18 ft. and constructing thereon 16 ft. x 2½ in. asphalt macadam wearing surfacing on 8.14 mi. State Highway 2, Sect. B, Federal Aid Project 165, 152,750 gal. asphalt cement, 4,709 cu.yd. gravel with 8,757 cu.yd. crushed rock base, also on 6.5 mi. State Highway 1, Sect. A, Federal Aid Project 165, 122,032 gal. asphalt, 3,643 cu.yd. gravel and 6,997 cu.yd. crushed rock, from F. P. McElwrath, Corsicana, $55,209 and $45,795 respectively. Noted Jan. 17.

Colorado — State Hy. Dept., Denver, gravel surfacing 6.508 mi. Federal Aid Project 253-A, Routt Co., from Northwestern Constr. Co., Craig, $126,375; concrete paving 1.799 mi. Federal Aid Project 256-B, Logan Co., from W. F. Pigg & Son, Engineers Bldg., Denver, $53,703. Noted Jan. 31.

Oregon—State Hy. Dept., Salem, Feb. 5, improving 19.9 mi. Coquille Bandon Sect. Roosevelt Highway, 18 ft., Coos Co., **(1)** 16,500 cu.yd. base course **(2)** 18,000 cu.yd. top course **(3)** 5,000 cu.yd. maintenance **(4)** 1,500 cu.yd. cushion course sand **(5)** 2,000 cu.yd. filler sand, **(a)** broken stone **(b)** crushed gravel, from Johnson Contg. Co., Exch. Bldg., Portland, **(1a)** $4.03 per cu.yd. **(2a)** $4.13 **(3a)** $4.25 **(4a)** $0.50 **(5a)** $0.50, total $163,835, **(1b)** $3.93 **(2b)** $4.13 **(3b)** $4.25 **(4b)** $0.50 **(5b)** $0.50, $162,185.

Calif., Oroville — Butte Co., improving 3.46 mi. Biggs-Princeton Rd., incl. 6,500 tons broken stone surface, 236 tons E asphalt road oil, and 7.87 mi. Gridley-Colusa Rd., incl. 15,500 tons broken stone surface, 470 tons E asphalt, from Skeels & Hudson, Auburn, $16,807 and $38,965 respectively. Stone and asphalt furnished by county, $15,423 and $35,443 respectively. Noted Feb. 14.

Calif., Stockton—San Joaquin Co., from W. Moreing, 232 West Vine St., improving Bainbridge Rd., incl. 4,500 cu.yd. grading, 10,350 tons gravel or 8,780 tons crushed rock, etc., $24,222; Eight Mile Rd., 9,520 cu.yd. grading, 9,930 tons gravel or 8,430 tons crushed rock, etc., $25,244; 3.7 mi. Taylor-Ferry Rd., 3,000 cu.yd. grading, 7,690 tons gravel or 6,760 tons base rock, 2,700 tons top rock, 1,250 tons dressing for oil, 1,035 bbl. asphalt oil, $32,695; Harney Lane Rd., 1,200 cu.yd. grading, 5,450 tons gravel or 4,620 tons crushed rock, etc., $17,328. Noted Jan. 24.

CONTRACTS AWARDED

N. J., Newark—G. C. Bergen, purch. agt. Essex Co., grading and paving Bay Ave. in Bloomfield to Glenridg-Montclair line, granite block and asphalt on concrete, to Franklin Contg. Co., 20 Washington Pl., $61,759. Noted Jan. 31.

W. Va., Charleston—Canawa Co. constructing Lens Creek Rd., to L. J. Chandler, Virginia, Va., $84,761. Noted Jan. 10.

North Carolina — State Hy. Comn., Raleigh, grading, etc. **(S. P. means State Project)** 4.66 mi. S. P. 472-A, Vance Co., to C. A. Ragland, Louisburg, $37,494, 6.19 mi. S. P. 662-A, Richmond Co., to T. W. Chandler, Virgilina, Va., $41,606, 8.35 mi. S. P. 912-B, Cherokee Co., to W. T. Moore, Andrews, $32,981; 1.57 mi. S. P. 992, Transylvania Co., to W. H. Anderson Constr. Co., Spruce Pine, $45,432, 8.62 mi. S. P. 912-A, Cherokee Co., to Wilson Constr. Co., Rutherfordton, $81,007; grading and concrete paving 8.07 mi. S. P. 732-B, Davie Co., to Hardway Constr. Co., 909 Elizabeth Ave., Charlotte, $282,758, 9.51 mi. S. P. 836-B, Henderson Co., to J. M. Gregory & Co., Pittsboro, $282,956, 5.15 mi. S. P. 536, Guilford Co., to Hagedorn Constr. Co., Greensboro, $171,656; grading 10 mi. S. P. 222, Duplin Co., grading and waterbound macadam paving 2.31 mi. S. P. 352, New Hanover and Brunswick Counties and grading and sand asphalt paving 11.99 mi. S. P. 381, Pender Co., to Highway Eng. & Constr. Co., Selbyville, Del., $264,801, $48,187 and $240,274 respectively. Noted Feb. 14.

Fla., Jacksonville—Duval Co. improving 19.6 mi. St. Augustine Rd., to J. W. Wilson,

Streets and Roads (Continued)

Clark Bldg., $329,000; 14.9 mi. Atlantic Blvd. also Baldwin-Maxwell Rd., to C. F. Lytle, Atlantic Natl. Bank Bldg., $819,000 and $170,000 respectively; 10.3 mi. Kings Rd., to J. Y. Wilson and W. J. Bryson, 1418 West Church St., $189,000; 11 mi. Main St. Rd., 5.5 mi. Moncrief Rd. and 5.4 mi. San Jose Blvd., to W. J. Bryson, 1418 West Church St., $203,000, $96,000 and $79,000; 6.3 mi. Orange Park Rd. to W. J. Bryson and T. B. Gillespie, Palatka, $93,000. Noted Nov. 15.

Miss., Leland—Paving 70,000 sq.yd. various streets, 1½ in. Willite top, 1 in. binder on 5 in. concrete, to R. G. Lassiter, 327 Arcade Bldg., Norfolk, Va., $2.49 per sq.yd. Noted Jan. 17.

Miss., Vicksburg — Paving 61,000 sq.yd. various streets, brick on concrete, curbing, etc., to E. A. Finch, Hattiesburg; brick will be furnished by Murphysboro Paving Brick Co., Murphysboro, Ill. City will do grading. $225,000.

La., Baton Rouge—Comn. Council, paving 80,000 sq.yd. 2 in. Warrenite bitulithic on 5 in. concrete to Southern Roads Co., Amer. Trust Bldg., Birmingham, Ala., $2.80 per sq.yd., also 20,000 sq.yd. 3 in. vertical fibre brick on 5 in. concrete, to Valieant & Toomer, Ft. Worth, Tex., $3.40 per sq.yd. Noted Jan. 3.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, grading, structures, etc., 0.63 mi. Cumberland River Bridge City Ferry Rd., 16 ft., State Project 139, Montgomery Co., to Federal Constr. Co., Nashville, $15,637, 16.07 mi. Brownsville-Tipton Co. Rd., 18 ft., Haywood Co., to Little & Dean, Memphis, $106,701, 13.49 mi. Linden-Lewis Co. Rd., 16 ft., State Project 116, Perry Co., to C. & G. Constr. Co., Hohenwahl, $82,659; 15.56 mi. Crossville-White Co. line Rd., 16 ft., State Project 130, Cumberland Co., incl. 3 bridges, to A. M. Cook, Oneida, $168,490; grading and concrete surfacing 7.6 mi. Manchester-Hillsboro Rd., 18 ft., State Project 150, Coffee Co., incl. 3 bridges, to Citizens Constr. Co., Savannah, Ga., $114,106; grading, structures, and cement concrete surfacing 14.41 mi. Federal Aid Projects 95 and 97 Kingsport-Blountville Rd., 18 ft., Sullivan Co., incl. 2 bridges, over 20 ft. spans, to Dickson Constr. Co., Savannah, Ga., $583,186; macadam surfacing, etc., 2.25 mi. Nolichnicky River-Caney Branch Rd., 10 ft., Greene Co., to Anderson & Scott, Harriman, $14,258. Noted Jan. 24.

O., Cincinnati—Hamilton Co. paving 10,840 ft. Mullen Rd., 16 ft., waterbound macadam, to H. Westermann, R.R. 13, Mt. Healthy, $26,556. Noted Feb. 7.

O, Steubenville—Improving Market and 6th Sts., to Federal Asphalt Paving Co., Main and D Sts., Hamilton, $79,855.

Wis., Waukesha—Waukesha Co. concrete surfacing, etc., Waukesha-Prospect Rd., to McGucken Constr. Co., 92 Mason St., Milwaukee, $59,771. Noted Feb. 7.

Ia., Des Moines—Polk Co., paving, etc., 5.223 mi. road east from here, to Wright Constr. Co., 211 Flynn Bldg., Des Moines, 21,542 cu.yd. excav. $0.65 per cu.yd., 2,020 cu.yd. excav. $0.80, 61,289 sq.yd. paving $2,385.

Ia., New Hampton — Curbing, guttering and asphaltic concrete paving 34,000 sq.yd. various streets, to Bryant Asphalt Paving Corp., Sioux City, $95,000.

Ia., Oakland—Curbing, guttering and paving 15,000 sq.yd. various streets, to Union Constr. Co., Des Moines, $0.93 per lin.ft. for curb and gutter and $2.65 per sq.yd. for vibrolithic concrete.

Neb., Auburn—City Council, grading and paving in Dist. 8, 8,100 sq.yd. rein.-con., 4,600 ft. curb and gutter, etc., to Kerns Constr. Co., Auburn, $24,941. Noted Jan. 17.

Mo., St. Joseph—Buchanan Co. improving 2.5 mi. Fankhouser Rd., 18 ft., 33,915 cu.yd. earth, 30,000 cu.yd. borrow and 2,500 cu.yd. rock excav., etc., also 4 mi. Kessler Rd., 18 ft., 60,000 cu.yd. earth and 100 cu.yd. rock excav., to M. Costello, 1519 South 22nd St., $21,636 and $11,000 respectively. Engrs. est. $31,274 and $18,000 respectively.

Ark., Little Rock—Improving Dist. 353, 21,000 sq.yd. asphalt resurfacing on old concrete and brick, 1,500 sq.yd. concrete base renewal, 2,100 tons asphalt binder, 1,000 ft. concrete curb, etc., to Gregory & Wilson, Southern Trust Bldg., $36,750. Engrs. est. $43,000. Noted Jan. 31.

Ark., Pine Bluff—Concrete paving 33,000 sq.yd. various streets, to C. E. Philpot, Pine Bluff, $2.19 per sq.yd. Noted Jan. 24.

Tex., Amarillo—Paving 28 blocks, 3 in. brick on 4 and 5 in. concrete, to Plains Paving Co., 316½ Polk St., curb and gutter $1.08, 4 in. base $3.20, 5 in. base $3.30. Engrs. est. $80,000. Noted Jan. 17.

Tex., Bryan—Resurfacing 25,000 sq.yd. various streets, asphaltic concrete, to Smith Bros. Inc., Sumpter Bldg., Dallas, $34,000. Engrs. est. $30,000.

Tex., Houston—Paving Walker St. from Austin to Sam Houston Sts., bituminous, to C. K. Horton, Box 1025, $64,998. Noted Jan. 10.

Tex., Houston—Harris Co., grading and gravel surfacing on crushed rock 1.56 mi. State Highway 19, Federal Aid Project 393, 16 ft., to B. S. Davidson, Box 1097, $27,504; bituminous topping to Haden & Austin, 727 Kress Bldg., $6,248. Engrs. est. $37,127. Noted Jan. 31.

Tex., Palo Pinto—Palo Pinto Co. grading and laying crushed stone base on 4.97 mi. State Highway 28, Federal Aid Project 414, 18 ft., to McClung Constr. Co., Cleburne, $63,714. Bids for bituminous topping to be received later. Noted Feb. 14.

Tex., Robert Lee — Coke Co., grading, etc., 14.47 mi. State Highway 70, from Bronte to Nolan Co. line, and 11.477 mi. State Highway 70 from here to Bronte, both 16 ft., to Hannah Constr. Co., Box 994, Waco, $44,557 and $45,750 respectively. Engrs. ests. $40,000 and $42,000 respectively. Noted Jan. 24.

Okla., McAlester—Pittsburg Co., grading and paving 2 mi. Hartsborne Rd., 21,000 sq.yd. concrete, 8,600 cu.yd. excav., to Altman Rogers Co., McAlester, $35,071.

Okla., Oklahoma City — Grading and concrete paving 16 blocks Hill, Olie, Shartel, 33rd and 34th Sts., 30 ft., to Tibbets & Pleasant, Daniels Bldg., Tulsa, $88,474.

Wash., Seattle—Bd. Pub. Wks., paving Angeline St. et. al., to Olympic Constr. Co., 1326 Northlake Ave., $35,209. Noted Feb. 7.

Oregon—State Hy. Dept., Salem, broken stone surfacing 7.55 mi. Unit 1 and 12.41 mi. Unit 2 of Sherman Highway, 18 ft., Wasco Co., to Morrison Knudsen Co., Railroad St. and Reclamation Ave., Boise, Idaho, $220,820; clearing and grading 14.1 mi. Dalles-California Highway, 18 ft., Wasco Co., to Bauers & Bauers, Dayton, Wash., $67,245; gravel surfacing 27 mi. Linn-Quinton Sect. of Columbia River Highway, Morrow Co., to Lyons & Pierce, Spokane, Wash., $25,050; 5 small steel bridges in Umatilla Co., to O. M. Pierce & Co., Portland, $16,630.

Calif., Hanford — Improving portion Myrtle, Florinda, Water Sts., etc., incl. grading, 1½ in. Warrenite-bituminous surface on 3 in. bituminous, cement curbs, gutters, etc., to California Constr. Co., 58 2nd St., San Francisco, $36,100.

Calif., Los Angeles—Improving 48th St. between 1st Ave. and Angeles Mesa Dr., concrete on bituminous, to Griffith Co., Railway Bldg., $104,265; North Sherman Way between San Fernando and Parenthia Sts., to Tryon & Brain, Tajo Bldg., grading $14,775, 560 sq. ft. asphalt $0.35, 543,609 sq.ft. concrete $0.23, total $140,000; 21st St. between Gaffney and Crescent Sts., to Warren Constr. Co., 5444 Hollywood Blvd., grading $4,800, 2,104 sq.ft. concrete $0.30 ft., 78,216 sq. ft. Warrenite-bituminous surface $0.227 ft., $1,481 ft. curb $0.75, 13,879 sq.ft. walks $0.22, 4,336 sq. ft. gutter $0.32, 1,230 ft. house sewers, $1.75, total $34,485.

Calif., Oceanside—Improving Pacific Ave., incl. 2 mi. walks and curbs, to Fenton & Co., P. O. Box 907, San Diego, $58,500.

Calif., Pacific Grove—Improving portion Fountain and Central Aves., grading, 1½ in. Warrenite-bituminous surface on 3½ in. asphalt concrete, concrete curbs, gutters, etc., to Clark & Henery Constr. Co., Chancery Bldg., San Francisco, $60,000. Noted Jan. 24.

Industrial Works

PROPOSED WORK

Mass., Fitchburg—Machine Shop—H. L. Goodnow Fdry. Co. plans machine and pattern shop, $40,000.

Mass., West Lynn—Plant—Genl. Electric Co. plans reinforcing 4 story, 80 x 180 ft. building with wooden framing and brick walls.

N. Y., New York — Warehouse and Garage—Charles & Co., 48 East 43rd St., plans 100 x 105 x 175 ft., rein.-con., brick and steel, plain foundation, 1st Ave. and 45th St. $750,000. Private plans.

N. J., Allenhurst—Power Plant—Atlantic Coast Electric Light Co., Main St., plans power plant improvements. $400,000. Engineer and architect not selected.

N. J., Newark—Plant—Palmolive Co., 42 4th St., Milwaukee, Wis., having plans prepared by Lockwood, Greene & Co., archts. and engrs., 38 South Dearborn St., Chicago, brick and concrete, plain foundation, here. $2,000,000.

Pa., Somerset — Plant — Somerset Drug Co. plans 4 story and basement, 66 x 122 ft. brick plant with office rooms on top floor, Union St. $150,000.

Md., Baltimore — Warehouse — Central Metal & Supply Co., 609 East Lombard St., had plans prepared 4 story, 90 x 108 ft., 20th and Mace Sts. $200,000. Private plans.

Md., Baltimore—Heating Plant—Mayor and City Council, City Hall, plan heating plant. $250,000. W. F. Stone, Jr., Munsey Bldg., archt. Engineer not selected.

W. Va., Morgantown—Garage and Sales—Oldsmobile Sales Corp., 379 Beechnut Ave., soon takes bids 1 story, 67 x 194 ft. $70,000.

Fla., Clearwater—Gas Plant—City Comn. passed ordinance authorizing $150,000 bond issue for gas plant.

Tenn., Jacksonville—Mill—Old Hickory Paper Co. plans 1st' unit of plant at Old Hickory Powder plant. Cost incl. equipment $1,250,000.

Tenn., Memphis—Warehouse—O. K. Storage & Transfer Co., Jefferson Ave., having plans prepared by E. W. Mann, Madison Ave. Bldg., 7 story, rein.-con., Madison Ave. $250,000. J. M. Walker, pres.

Ky., Henderson — Factory — Kentucky Box & Crate Co. plans factory. $65,000.

O., Cincinnati—Factory—Davis Welding & Mfg. Co., 10 Richmond St., having preliminary plans prepared by Lockwood, Greene & Co., 38 South Dearborn St., Chicago, 1 story, brick and steel. $100,000.

O., Cincinnati—Freight Depot—Pennsylvania R.R., Pearl and Butler Sts., plans superstructure, 1 story, 60 x 200 ft., Court and Gilbert Aves. $300,000. H. C. Johnston, c/o owner, engr.

O., Cleveland — Factory — T. Gutscher, 4236 West 36th St., had plans prepared by Miller & James Co., Erie Bldg., altering and constructing 2 story, 58 x 100 ft., brick, steel and concrete addition, West 65th St. $50,000.

O., Cleveland — Foundry — Nickel Plate Fdry. Co., 14915 Woolworth Rd., had plans prepared by H. M. Morse & Co., Finance Bldg., 1 story, 96 x 160 ft., brick and steel, Woodworth Rd. $50,000.

O., Cleveland — Garage — Lessee, c/o Goakes & Dettlebach, 319 Williamson Bldg., plans 2 story, brick, steel and concrete, Superior Ave. near East 12th St. $60,000. Engineer and architect not selected.

O., Cleveland—Garage—J. M. Sampliner, 10111 Euclid Ave., having plans prepared by Braverman & Havermaet, Ulmer Bldg., 2 story, 45 x 80 ft., brick, steel and concrete, East 81st St. and Euclid Ave. $40,000.

O., Columbus—Service Station and Sales Room—Windus Motor Car Co., 178 East Long St., having plans prepared by H. J. Dauben, 22 Ontario Bldg., 1 story and basement, 120 x 169 ft., brick and concrete, North High St. $100,000.

O., Garfield Heights (Cleveland, P. O.)—Factory — Cleveland Builders Supply & Brick Co., c/o L. Koblitz, Leader-News Bldg., Cleveland, had plans prepared 1 story, 42 x 135 ft., steel and tile, Warner Rd., here. $40,000. Private plans.

O., Toledo — Garage — City takes bids about Mar. 1, 3 story, 100 x 141 ft., rein.-con. and brick, plain foundation, Erie St. $150,000. Langdon, Hohly & Gram, Nicholas Bldg., archts. Noted Nov. 29.

O., Toledo — Plant — Langdon, Hohly & Gram, Nicholas Bldg., preparing plans and takes bids about Mar. 15, 2 story and basement, 50 x 150 ft., brick and concrete, Woodruff St., for Cannan Dry Cleaning Co., 2018 Adams St. $50,000.

Ind., Bloomfield—Garage and Service—Haywood Motor Sales Co., plans 1 and 2 story, 100 x 135 ft., brick. $45,000.

Ind., Hobart—Plant—Natl. Fireproofing Co. plans to build portion of plant recently destroyed by fire. $75,000.

Mich., Detroit — Plant — Detroit Free Press Co., Free Press Bldg., having plans prepared by A. Kahn, 1000 Marquette Bldg., 6 and 13 story, 130 x 212 ft. rein.-con., brick and steel, plain foundation, Lafayette and Cass Aves.

Mich., Port Huron — Mill — Dunn Sulphite Paper Co. plans paper mill, 15 ton daily capacity. $250,000. Billingham & Cobb, 404 Press Bldg., Kalamazoo, engrs.

Mich., River Rouge — Factory — Ford Motor Co., Highland Park, (Detroit, P. O.), had plans prepared by A. Kahn, 1,000 Marquette Bldg., Detroit, 1 story, 270 x 1260 ft. spring and upset building, rein.-con., brick and steel, plain foundation.

Wis., Milwaukee — Warehouse — Amer. Ry. Express Co., 15 North Wabash Ave., Chicago, having plans prepared by their Architectural Dept., 1 story, 52 x 150 ft. brick and timber addition, plain foundation, Michigan St., here. $50,000.

Wis., Wauwatosa — Garage — M. Stark, 53rd St. and Blue Mound Rd. plans 1 story, 100 x 202 ft., brick and concrete addition, plain foundation, Blue Mound Rd. $50,000. Engineer and architect not selected.

Industrial Works (Continued)

Mo., St. Louis—Garage—Local syndicate, c/o A. Sommer, 3704 Juniata St., plans 5 story and basement, 100 x 160 ft., rein.-con., brick and stone, Morgan St. $175,000. Private plans.

Tex., Dallas—Bakery—F. A. Carreaud, 3521 Dartmouth St., plans to remodel building on Elm and Walton Sts. for bakery. $50,000.

Tex., Houston — Warehouse — Houston Bag & Bagging Co., Washington Ave., plans concrete and brick. $50,000. Engineer and architect not announced.

Tex., Luling — Refinery — Mutual Pipe Line Co. making plans topping plant. $40,000-$50,000.

Tex., Panhandle City—Refinery—Pauline Oil & Gas Co. had plans prepared oil refinery, 5,000 bbl. daily, and 17 mi. pipeline. $80,000.

Tex., San Antonio—Roundhouse—International Great Northern R.R. Co., San Antonio, plans 1 story, brick and rein.-con. roundhouse, to house 10 oil burning engines, West Commerce and South Comal Sts. $100,000. F. S. Schwinn, Houston, ch. engr.

Tex., San Juan—Cotton Compress—J. K. Cain, Corpus Christi, plans 140 x 190 ft., brick and concrete, here. $45,000.

N. M., Silver City—Power Plant—Amer. Alum Corp., 55 Liberty St., New York, having preliminary plans prepared hydro-electric power plant on the Gila River, here. $100,000. Private plans.

Wash., Seattle—Distribution and Storage Plants—Union Oil Co., 3000 Railroad St., plans to expend $500,000 for extensions to distributing plants, will erect 16 new storage plants.

Calif., Fruitvale (Oakland P. O.)—Factory, Planing Mill, etc.—Concealo Fixture Co., 1343 East 12th St. Oakland, having plans prepared by Hutchinson & Mills, 1214 Webster St., Oakland, rein.-con., High St., here. $55,000.

Calif., Los Angeles—Drafting Room—Southern California Edison Co., 306 West 6th St., having plans prepared 1 story, 104 x 160 ft. drafting room for engineering department, 2nd St. and Boylston Ave. $40,000. Private plans.

Calif., Los Angeles—Warehouse—Santa Fe Land Co. having plans prepared by Eng. Dept. of Atchison, Topeka & Santa Fe Ry., 6th and Main Sts., 4 story, 144 x 374 ft., rein.-con., Mateo St. $300,000.

Calif., Oakland—Plant—T. J. Dorsch, 283 Minna St., San Francisco, representing interests which plan frame and steel sulphur plant on western waterfront, here. $40,000. Private plans.

Calif., Oakland—Warehouse, etc.—H. J. Heinz Co., 217 2nd St., San Francisco, plans warehouse, packing plant, offices, etc., Bay, Cedar, Belle and 7th Sts., here. $1,000,000.

Que., Hull—Power Plant—Hull Electric Co., 117 Main St., plans power plant, dam, and hydro electric lines at Paugan Falls, Gatineau River, Low Twp., will eventually have capacity of 100,000 hp. $3,000,000. G. G. Gale, vice-pres. and engr.

Que., La Salle — Gas Plant — Montreal Light, Heat & Power Co., 13 Craig St. W., Montreal, plans 8,000,000 cu.ft. carbureted water gas plant, also 6,000,000 cu.ft. steel holder, here. $1,000,000.

Que., Verdun — Plant, etc. — Montreal Light, Heat & Power Co., Craig St. W., Montreal, plans large hydro-electric plant and dam at city limits of Verdun and Ville LaSalle. $2,000,000. R. M. Wilson, ch. electrical engr.

BIDS DESIRED

N. C., Greensboro—Boiler Plant—Feb. 26, by J. I. Foust, pres. North Carolina College for Women, boiler plant. $40,000. C. R. Place, 70 East 45th St., New York, engr. A. Fellheimer and S. Wagner, 7 East 42nd St., New York, archts.

O., Cleveland—Factory—Chicago Pneumatic Tool Co., 1241 East 49th St., taking bids and opens same about Feb. 28, 3 story and basement, 43 x 126 ft., brick, addition. $60,000. Private plans. Noted Dec. 6.

Wis., West Allis—Garage—Feb. 26, by R. Allison, archt., 425 East Water St., Milwaukee, 1 story, 62 x 120 ft., brick, plain foundation, for Mertz-Knippel Co., 6620 Greenfield Ave. $40,000. Noted Jan. 24.

Calif., Los Angeles—Newspaper Plant—Morgan, Walls & Clements, archts., Van Nuys Bldg., receiving bids 3 story (ultimately 4 story), and basement, 100 x 200 x 282 ft., rein.-con., Trenton St., for Evening Herald Publishing Co., 136 South Bway. Noted Jan. 10.

Ont., Ottawa—Bakery—Feb. 29, by S. Comber, archt., 127 Stanley St., Montreal, Que., rein.-con. and brick, plain foundation, Hillson Ave., for Standard Bread Co., Ltd., Hillson Ave., $100,000.

BIDS RECEIVED

N. Y., Long Island City—Housing Station—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Feb. 11, housing station, 62nd Rd. and 94th St., from Charles Meads & Co., 217 West 14th St., New York City, $116,200. Noted Feb. 7.

CONTRACTS AWARDED

Me., Knightville (Portland P. O.)—Generating Plant—Cumberland County Power & Light Co., 453 Congress St., Portland, brick, rein.-con. and steel, plain foundation, here, to Foundation Co., 120 Liberty St., New York City. Archts. est. $1,000,000.

N. Y., Albany—Garage and Salesroom—Bolz & Hegelman, Ontario St. and Park Ave., 1 story, 134 x 138 ft., rein.-con. and brick, to J. Myers, 476 Central Ave., $75,000.

N. Y., Albany—Garage and Salesroom—J. Myers, 1 story, 134 x 138 ft., brick, plain foundation, Ontario St. and Park Ave., to Bolz & Hegelman, Park St., $75,000.

N. Y., New Windsor — Plant — Hudson River Woolen Mills, rein.-con., brick and steel, plain foundation, to B. M. Higginson, Inc., 64 2nd St., Newburgh. Archts. est. $40,000.

N. Y., New York—Bakery—W. W. Astor c/o Farmers Loan & Trust Co., 26 William St., altering and constructing 3 story, brick, steel and stone addition, plain foundation West 50th St., to F. J. Murphy, Inc., 2 West 45th St. Archts. est. $175,000.

N. J., Bridgeton—Plant—Illinois Glass Co., 1 story, 100 x 450 ft., steel and brick, plain foundation, to J. S. Rogers Co., Drexel Bldg., Phila. Archts. est. $200,000. Noted Jan. 17.

Pa., Lewistown — Garage — S. Hawke, Valley St., 3 story and part basement, 94 x 145 ft. concrete, brick and steel garage, Valley St., to J. B. Trexler, Lewistown.

Pa., Phila.—Plant—Collins & Aikman Co., 51st and Columbia Sts., 6 story, 62 x 92 ft. rein.-con. and brick, plain foundation, Leidy and Farson Sts., to Turner Constr. Co. 1713 Sansom St., $100,000.

Md., Baltimore—Generator House—Consolidated Gas, Electric Light & Power Co., Lexington Bldg., will build 3 story, 64 x 65 x 113 ft., brick and steel, plain foundation, Race and Barney Sts., by day labor. $300,000. Private plans.

Md., Baltimore — Manufacturing — Bal-Mar Co., c/o Ballinger Co., archts., 12th and Chestnut Sts., Phila., 1 story, 214 x 451 ft., brick, plain foundation, Homeland Ave. and Notre Dame Lane, here, to Consolidated Eng. Co., Calvert Bldg., $200,000. Noted Feb. 7.

Md., Baltimore — Warehouse — Central Metal & Supply Co., 609 East Lombard St., 4 story, 90 x 108 ft., rein.con., plain foundation, 20th and Mace Sts., to W. F. Chew, 212 Clay St., $200,000.

W. Va., Huntington—Garage—B. G. Cain, 313 6th St., 3 story, 60 x 140 ft., brick and stone, to J. E. Berry, 1678 3rd Ave. Est. cost $140,000.

Fla., Jacksonville—Plant and Warehouse—Cheek-Neal Coffee Co., Cummins Sta., Nashville, Tenn., 5 story, to contain 75,000 sq.ft. of floor space, rein.-con. and brick, wood pile foundation, here, to Turner Constr. Co., 140 Pinetree St., Atlanta. Cost plus basis. Archts. est. $225,000. Noted Jan. 31.

O., Cincinnati — Plant — Union Gas & Electric Co., 4th and Plum Sts., foundations for Fort Miami power plant, 1,500 tons reinforcing and 50,000 cu.yd. concrete, to Foundation Co., 120 Liberty St., New York City, $1,000,000. Noted Dec. 6.

O., Cleveland — Garage — J. J. Russell, Ulmer Bldg., 1 story, 80 x 115 ft., brick, and steel, 6010 Euclid Ave., to M. J. Buros, 913 Ulmer Bldg. Archts. est. $40,000.

O., Cleveland—Factory—McCauley Storage Battery Co., 1060 St. Clair Ave., 1 story, 35 x 128 ft., brick, Chester Ave., to Mikelson Constr. Co., Discount Bldg. Archts. est. $40,000. Noted Dec. 6.

O., Columbus—Cattle—Dept. Agriculture State Authentics, 1 story, 300 x 500 ft., brick, concrete and steel, to Schirmer O'Hara Co., 2031 Euclid Ave., Cleveland. Archts. est. $150,000. Noted Jan. 10.

O., Mt. Vernon — Factory — C and G Cooper Co., 1 story, 80 x 120 ft., to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland. Archts. est. $40,000.

O., North Canton — Factory and Dyehouse—Hoover Suction Sweeper Co., 4 story, 80 x 300 ft. factory, and 114 x 115 ft. dyehouse, brick, steel and concrete, to Hunkin-Conkey Constr. Co., Hunkin-Conkey Bldg., Cleveland, without competition on cost plus percentage basis. Will construct administration building and foundry later. Archts. est. $1,000,000.

O., Reading (branch of Cincinnati)—Factory—General Match Co., 1 and 2 story, 204 x 224 ft., brick and steel, to Hodges Erwin Co., Blymer Bldg., Cincinnati. Archts. est. $225,000.

Wis., Milwaukee — Garage — E. Liederbach, 4708 Center St., 1 story, 70 x 90 ft., brick, plain foundation, 38th St., to Byrne Bros., 3112 Burleigh St. $40,000.

Tex., Houston — Warehouse — Magnolia Coffee Co., Moffit and Liberty Sts., 2 story, 45 x 67 ft., concrete, to L. V. Miller, 2715 Helena St., $50,000.

Tex., Navasota — Warehouse — W. M. Floyd will build 1 story, 100 x 105 ft., concrete, Holland St., by day labor. $45,000.

Tex., Sweetwater—Garage—G. E. Morris, 2 story, 90 x 100 ft., brick and tile garage, to J. H. Meyers, Sweetwater, $50,000.

Ore., Portland—Warehouse—Northwest Warehouse Co., Portland, Ore. and Seattle, Wash., 10 story, 100 x 100 ft., rein.-con., plain foundation, to Hurley Mason Co., Gasco Bldg., $500,000.

Calif., Los Angeles—Factory—Western Furniture Mfg. Co., 759 North Spring St., 2 story, brick, Western Ave., to R. E. Homann Co., 3720 South Park Ave., $65,000.

Calif., Los Angeles—Warehouse—Austin Co. of California, Bartlett Bldg., will build 1 story or more, 81 x 330 ft., brick and concrete, McKinley Ave., by day labor.

Calif., Oakland—Garage and Sales—F. J. Hurley, 365 28th St., 1 and 2 story and basement, rein.-con., Webster and 20th Sts., to Lindgren-Swinerton, Inc., Standard Oil Bldg., San Francisco, $109,000.

Calif., Sacramento—Garage—C. O. and O. W. Huelsman, 1123 43rd St., brick or concrete, I St., to Holdener Constr. Co., 2608 R St., $42,000.

Calif., San Francisco—Garage—J. Pasqualetti, 785 Market St., 2 story, rein.-con., Clement St. near 27th Ave., to Amer. Concrete Co., Humboldt Bank Bldg., $42,000.

Buildings

PROPOSED WORK

Mass., Boston — Club — University Club had plans prepared by Monks & Johnson, 99 Chauncey St., and takes bids in spring 6 story and basement (ultimately 10 story), 135 x 160 ft., rein.-con. and Indiana limestone, wood pile foundation, Trinity Pl. $2,000,000. J. W. Powell, 6 Mt. Vernon Pl., chn. executive com.

N. Y., Albany — School — Albany Law School, 239 State St., plans 96 x 100 ft., brick and steel, plain foundation, State St. $200,000. J. N. Fiero, Eagle St., one of trustees. Engineer and architect not selected.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., P. S. 17, Newkirk and Coney Island Aves., P. S. 215, Ave. S and East 2nd St., P. S. 114 Ave. A, P. S. 220, 48th St. and 9th Ave., P. S. 219, Pitkin Ave., P. S. 216, Ave. X and East 1st St., also additions to P. S. 128, 81st St., and P. S. 97, Stilwell Ave., all 5 story, here.

N. Y., Jamaica — Hospital — Mary Immaculate Hospital soon takes bids 10 story, brick, steel and stone, plain foundation, Sheldon Ave. $1,500,000. W. J. Boegel, 185 Madison Ave., New York City, archt. and enrg. Noted Dec. 7, 1922.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 19, 237th St. and Crotona Ave., P. S. 81, Delafield Ave., P. S. 83 Rhinelander Ave., P. S. 77 West 172nd St., all 5 story; also De Witt Clinton High School, Jerome Ave.

N. Y., New York — Theatre — Minskey Bros., c/o G. Keister, archt. and engr., 56 West 45th St., having plans prepared brick, steel and stone, plain foundation, East Houston St. near Bway. $500,000.

N. Y., Schuylerville—School—Bd. Educ. takes bids about May 1 for school. $150,000. C. H. Gardinier, 46 North Pearl St., Albany, archt.

N. Y., Troy—Nurses Home—Samaritan Hospital having plans prepared by G. B. Post & Sons, archts. and engrs., 101 Park Ave., New York City, brick and steel, plain foundation, Peoples St. $150,000.

N. J., Pensauken (Merchantville, P. O.)—High School—Bd. Educ., c/o A. Moses, archt., Temple Bldg., Camden, having plans prepared 2 story and basement, 200 x 250 ft., brick and steel, plain foundation, here. $700,000.

Buildings (Continued)

Pa., Easton—Hotel—Thomas, Martin & Kirkpatrick, archts., Otis Bldg., Phila., preparing plans for 10 story, hotel. $1,500,000. Citizens of Easton raised funds for above.

Pa., Johnstown—School—School Bd. having plans prepared by J. E. Adams, Nemo Bldg., 3 story and basement, 110 x 120 ft. concrete, brick and steel. $300,000.

Pa., Lock Haven — Lodge — Fraternal Order of Eagles, Bellefonte Ave., takes bids in spring, 3 story and basement, 100 x 160 ft. brick, East Church St., here. $200,000. Will select architect at once.

Pa., Phila. — Apartment — Rose Constr. Co., North American Bldg., will build 3 story and basement, 45 x 105 ft. and 45 x 123 ft., brick and steel, plain foundation, 51st and Overbrook Sts. $175,000. Work will be done by separate contract.

Pa., Phila. — Municipal Court — City Council appropriated $1,600,000 for 1st unit of Municipal Court Building, 18th, 19th, Vine and Wood Sts.

Pa., Phila. — Recreation — City Council appropriated $150,000 to build George A. Vare Recreation Centre, 26th and Morris Sts.

Pa., Williamsport—Hospital—Williamsport-Memorial Hospital, 798 Louisa Ave., having plans prepared by Stearns & Woodnutt, St. Girard Bldg., Phila., 7 story and basement, 100 x 300 ft., concrete, brick and steel, Rural Ave. $450,000. Plan to ask for bids this spring.

Md., Baltimore—Police—Mayor and City Council, City Hall, plan police building, brick, Lexington and Fallsway Sts. $1,000,000. J. Pennington, 330 North Charles St., archt. Engineer not selected.

W. Va., Huntington — Church — Second Presbyterian Church having plans prepared by L. J. Dean, Foster Bldg., 85 x 90 ft. church. $150,000.

W. Va., Mannington—Election Mar. 4, $200,000 bonds for school.

N. C., Asheville—Municipal—City plans 4 story and basement. $500,000.

N. C., Clayton—School—Voted $150,000 bonds new brick school.

N. C., Rutherfordton—School—Rutherford Co. voted $200,000 bonds for high school for Rutherfordton, Spindale and Hampton sections. W. R. Hill, supt.

N. C., Wake Forest — College — Wake Forest College plans library, law building, new science building and 3 dormitories. W. L. Poteat, pres.

La., New Orleans — School — Orleans Parish School Bd. had plans prepared by E. A. Christy, City Hall Annex, and takes bids in about 2 weeks, Lafayette School, 3 story, 190 x 244 ft. rein.-con. and brick, Belfast and Carrolton Aves.

Tenn., Chattanooga—School and Home—St. Peter & St. Paul Catholic Congregation purchased site for home and school, 400 capacity. $150,000. F. T. Sullivan, 214 East 8th St., pastor.

Ky., Dayton—High School—Bd. Educ. having plans prepared by C. C. & E. A. Weber, 1408 Ingalls Bldg., Cincinnati, O., 2 story and basement. $150,000.

Ky., Louisville—Office—C. J. Stinson, archt. and promoter, Inter-Southern Bldg., preparing plans 8 or 12 story. $200,000 to $300,000.

Ky., Louisville—Theater and Club—J. G. Brown, Brown Hotel, plans theater and club, Bway. To exceed $150,000. Architect not selected.

O., Akron — High School — Election in spring, $650,000 bonds, 2 story and basement, Firestone Park.

O., Cleveland—Apartment S. Gutentag, Ulmer Bldg., plans 3 story and basement, brick, East 88th St. $200,000. Engineer and architect not selected.

O., Cleveland—Apartment—K. H. Smith, 11333 Bellflower Rd., representing company which is having preliminary plans prepared by H. D. Hughes, 920 Citizens Bldg., 4 or 6 story, brick, steel and concrete, Cedar Rd. and Fairmount Blvd. $300,000.

O., Cleveland — Church — St. Lawrence Roman Catholic Church, 3547 East 80th St., having plans prepared by W. C. Jansen, Electric Bldg., 1 story, brick and steel, East 81st St. $150,000.

O., Cleveland — Mausoleum — Knollwood Mausoleum Co., 2014 East 105th St., having plans prepared by A. W. Harris, Discount Bldg., 1 story, granite and marble, Knollwood Cemetery. $200,000.

O., Cleveland—Theatre—Reades Hippodrome Theatre, c/o W. Reade, 112 West 34th St., New York City, plans altering theatre, 720 Euclid Ave., here. $150,000. T. W. Lamb, 644 8th Ave., New York City, archt.

O., Columbus—Club—Columbus Federation Womens Club, Southern Hotel, plans 6 story and basement, 94 x 131 ft., rein.-con. and brick, West Town and Scioto Sts. Plans campaign to raise about $300,000 for project. C. P. Ross, pres. Engineer and architect not selected.

O., Newton Falls—Temple—Newton Falls Masons plan 3 story and basement, 67 x 80 ft., broad St. $150,000.

Mich., Caro—School—Bd. Educ. having plans prepared by Cowles & Mutscheller, Chase Blk., Saginaw, 2 story and basement, 176 x 200 ft. rein.-con., brick and steel, plain foundation. $200,000.

Mich., Detroit — Apartment Hotel — R. Finn, archt., 2631 Woodward Ave., preparing plans 4 story and basement, 50 x 160 ft. rein.-con., brick and steel, plain foundation. $200,000. Owners name withheld.

Mich., Port Huron—School—Bd. Educ. having plans prepared by G. L. Harvey, Huron Ave., 2 story and basement, rein.-con., brick and steel, plain foundation, Vaness and 28th Sts. $175,000.

Ill., Chicago — Apartment — Cohen & Weisbaum, c/o J. H. Klafter, archt., 127 North Dearborn St., plans 3 story, 100 x 125 ft., fireproof, Crawford St. near 12th St. $150,000.

Wis., Milwaukee—Lodge—Garfield Lodge K. of P., 326 Grand Ave., plans 3 story, brick and concrete, plain foundation, Grand Ave. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Theatre and Office—Saxe Operating Co., 204 11th St., having preliminary plans prepared by C. W. and G. L. Rapp, 190 North State St., Chicago, 3 story and basement, brick and concrete, plain foundation, North Ave. $500,000.

Wis., Racine — Church — St. Patricks Congregation, c/o W. McCarthy,, pastor, 1109 Douglas Ave., having plans prepared by Barry, Byrne & Ryan, 104 South Michigan Ave., Chicago, 2 story, 98 x 100 ft., brick and stone, plain foundation.

Wis., Wauwatosa—Asylum—Milwaukee Co. Bd. Trustees, W. Coffey, mgr., having plans prepared by R. Messmer & Bro., 221 Grand Ave., Milwaukee, 3 story, brick, tile and concrete addition, plain foundation. $350,000.

Neb., Beatrice — High School — W. M. Morton, supt. Pub. Schools, having plans prepared by J. H. Felt & Co., 802 Grand Ave. Temple, Kanas City, Mo., 2 story and basement, 140 x 140 ft. $250,000.

Neb., Kearny—School—Bd. Educ. having plans prepared by Davis & Wilson, 505 Security Bldg., Lincoln, 2 story and basement, rein.-con., brick and stone, $175,000; also addition to Junior High School $75,000, and 2 grade schools $50,000.

Neb., Lincoln—Business—H. Speier plans 4 story and basement, 10th and O Sts. $200,000. Engineer and architect not selected.

Neb., Omaha—Church—J. F. McCarthy, 709 South 28th St., had plans prepared by J. Latenser & Sons, 732 Peters Trust Bldg., 1 story and basement, 80 x 160 ft. brick and stone, 27th and Leavenworth Sts. $250,000.

Mo., Hannibal—Schools—Bd. Educ. soon takes bids Eugene Field Junior High School, etc., $170,000, also Mark Twain Grade School, $110,000, both 2 story and basement, brick and concrete. M. S. Martin, Odd Fellows Bldg., archt. Noted July 12.

Mo., Joplin—Memorial—City takes bids within 3 to 4 months, 2 story, 140 x 187 ft., rein.-con. and brick, plain foundation. $200,000. A. C. and A. S. Michaelis, 324 Miners Bank Bldg., archts. Noted Aug. 2.

Mo., St. Louis—Theatre and Office—F. Wehrenberg, 3114 Illinois Ave., plans 3 or 4 story, 90 x 145 ft., rein.-con., stone and brick, Grand Blvd. and Bates St. $200,000. Private plans.

Ark., North Little Rock—(Branch of Little Rock) Schools—Bd. Educ., Little Rock soon takes bids 2 story, 8 room, on 18th St.; 8 room, brick, on Levy St.; brick school in Park Hill; 4 room brick, Riverside Dist.; 12 room addition to High School; 8 room brick in Rose City. $200,000. A. Burke, Little Rock, archt.

Tex., Dallas — Auditorium — Southern Methodist University having plans prepared by R. H. Hunt & Co., Southwestern Life Bldg., brick, steel and concrete, 3,500 capacity, on Campus. $325,000.

Tex., Houston—Schools—Election soon $3,000,000 bonds, for schools, probably senior high, junior high and elementary school construction. J. M. Black, Municipal Bldg., superv. schools.

Tex., San Antonio—Office—San Antonio Builders Exch., 206 Bedell Bldg., having plans prepared by G. Willis, Chandler Bldg., 8 story and basement, rein.-con., brick and stone, plain foundation, Pecan and St. Marys Sts. $170,000. Noted Jan. 24.

Tex., Tyler—Bank and Office—Citizens Natl. Bank, G. F. Taylor, pres., soon lets contract 6 story and basement, 54 x 103 ft., rein.-con., steel and brick, North Bway. and East Ferguson Sts. $300,000. Lang & Witchell, 300 Amer. Exch. Bank Bldg., Dallas, archts.

Okla., Oklahoma City—Bank and Office—Bank of Oklahoma having plans prepared by Layton, Smith & Forsyth, 906 Baniff Bldg., 14 story, 75 x 140 ft., brick and steel, plain foundation, Robinson St. $1,000,000.

Calif., Alameda—School—City plans to vote on $150,000 or more bonds for fireproof school to replace Lincoln Grammar School which was destroyed by fire.

Calif., Long Beach—Apartment—W. H. Austin, archt., Pacific Southwest Bldg., preparing preliminary plans 12 story, 100 x 250 ft., brick or rein.-con., East Ocean Blvd. Owner's name withheld.

Calif., Long Beach—School—City having plans prepared by H. H. Lockridge, Markwell Bldg., Long Beach, and G. M. Lindsey, Laughlin Bldg., Los Angeles, 16 room addition to Whittier School. To exceed $200,000.

Calif., Los Angeles—Bank—Pacific Natl. Bank having plans prepared by Morgan, Walls & Clements, Van Nuys Bldg., 12 story and basement, 95 x 224 ft., rein.-con. and steel, 9th and Hill Sts. $1,000,000.

Calif., Los Angeles — Church — South Hollywood Presbyterian Church, c/o R. H. Orr, archt., Corporation Bldg., having plans prepared 80 x 100 ft. with basement, brick, Santa Monica Blvd.

Calif., Los Angeles—Hotel—H. Gensler, archt., 208 Hibernian Bldg., preparing plans 4 story and basement, 75 x 100 ft., brick, Olive and 2nd Sts. $150,000. Owner's name withheld.

Calif., Oakland—Office, etc.—See "Industrial Works."

Calif., Sacramento — Church — Grace Methodist Episcopal Church having plans prepared by Woollett & Lamb, Hagelstein Bldg., 120 x 160 ft., rein.-con., J St. $150,000.

N. S., Halifax—Temple—Masonic Order had plans prepared by A. Dumaresque, Halifax, 2 story, stone, Salter and Barrington Sts. $170,000.

Que., Montreal—Office—Royal Bank of Canada, St. James St., having plans prepared 14 story, 144 x 172 ft., Dollard Lane, Notre Dame, St. James and St. Peter Sts. $1,500,000. Private plans.

Ont., Cochrane—Court House—Provincial Government, Parliament Bldgs., Toronto, having plans prepared by F. R. Heakes, provincial archt., Parliament Bldg., Toronto, 2 story and basement, rein.-con., brick and steel, plain foundation. $200,000.

Ont., St. Thomas — High School — Bd. Educ. plans 3 story and basement, 25 room, rein.-con., brick and steel, plain foundation. $275,000. Engineer and architect not selected.

Ont., Toronto — Office — Manufacturers Life Insurance Co. Ltd., Dominion Bank Bldg., having plans prepared by Sproatt & Rolph, 36 North St., 6 story, 45 x 196 ft. stone, Bloor St. $750,000.

Ont., Toronto—School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation, near Danforth Ave. $150,000.

BIDS DESIRED

N. H. Berlin—High School—Mar. 5, by School Com., 3 story and basement, 125 x 150 ft., rein.-con. and brick, plain foundation. $300,000. T. M. James, 3 Park St., Boston, archt. Noted June 14.

N. Y., Brooklyn—Schools—Mar. 11, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 180, southeasterly side of 16th Ave. from 56th to 57th Sts., also P. S. 212, southeasterly side Bay 49th St., for Bd. Educ., 500 Park Ave., New York.

N. Y., Lockport—School—Mar. 21, by Bd. Educ., 2 story and basement, 100 x 150 ft., rein.-con. and brick, Clinton St. $300,000. Noted Jan. 11, 1923.

N. Y., Troy—Church, School and Rectory—Mar. 17, by L. G. O'Haire, pastor Sacred Heart Church, 2 story, 120 x 140 ft., brick and steel, plain foundation, Pawling Ave. $350,000. Noted Aug. 23.

N. Y., Troy—School—Mar. 1, by Prudential Com. Bd. Trustees Rensselaer Polytechnic Institute, 3 story and basement,

Buildings (Continued)

70 x 140 ft., steel, brick, limestone, rein.-con. and hollow tile, on campus. $200,000. M. F. Cummings & Son, State Bank Bldg., archts. and engrs.

N. J., North Plainfield (Watchung, P. O.)—High School—Mar. 17, by Bd. Educ. new brick high school, Greenbrook Rd. $250,000. John T. Simpson, 622 Essex Bldg., Newark, archt. and engr. Noted Nov. 22.

N. J., Somerville—Hospital—Mar. 26, by Crow, Lewis & Wick, archts., 200 5th Ave., New York City, 3 story and basement, 43 x 153 ft. and 33 x 41 ft., brick, steel and limestone, plain foundation, Rehill Ave., here, for Somerset Hospital. $300,000. Noted Jan. 3.

Pa., Bradford—High School—Mar. 15, by School Bd., 2 story and basement, 250 x 300 ft. brick and steel, plain foundation. $1,000,000. Laurie & Green, 116 Locust St., Harrisburg, archts.

Pa., Phila.—Church—Mar. 1, by H. D. Dagit & Sons Co., archts., 34 South 17th St., 1 story and basement, 62 x 175 ft. steel, plain foundation, 55th and Cedar Sts., for Church of Transfiguration. $400,000. Noted Jan. 17.

W. Va., Huntington—Bank—Feb. 25, by Meanor & Handloser, archts., Professional Bldg., 14 story, 59 x 90 ft., rein.-con., brick and steel, for Union Bank & Trust Co., 4th Ave. and 9th St. $800,000. Noted Feb. 7.

W. Va., Huntington—Office—Feb. 27, by Coal Exchange Bldg. Co., c/o Meanor & Handloser, archts., Professional Bldg., 14 story, 70 x 124 ft., concrete, brick and steel. $1,000,000. Noted Jan. 10.

N. C., Burlington—Schools—Feb. 25, by Superintendent Bd. Educ., 2 brick schools. $150,000. H. B. Hunter, High Point, archts.

N. C., Durham—Auditorium—Mar. 1, by City Manager, 3 story, 70 x 160 ft., fireproof, concrete foundation. $250,000. Milburn, Heister & Co., Union Savings Bank Bldg., Wash., D. C., archts. Noted Feb. 7.

S. C., Sumter—Schools—Mar. 11, by Bd. School Trustees erecting following, Boys High School, $95,000, Girls High School, $128,000, Primary School $10,000, Negro School $35,000. Wilson, Berryman & Kennedy, Columbia, archts.

Ala., Ensley—Church—Feb. 25, by D. M. Gardener, pastor Ensley Baptist Church, 2 story, 75 x 125 ft., brick and stone, Ave. E and 22nd St. $200,000.

O., Cleveland—Apartment—Elworthy-Helwick Co., 733 Prospect Ave., taking bids 3 story, brick, Eddy Rd. G. A. Ebefing, Hunkin-Conkey Bldg., archt. Noted Jan. 24.

O., Cleveland—Office—Union Square Co., c/o W. F. Lewis, Williamson Bldg., taking bids altering and constructing 1 and 2 story, 17 x 104 ft., brick, steel and concrete addition, Euclid Ave. and East 8th St. $200,000. H. D. Hughes, 920 Citizens Bldg., Noted Sept. 6.

O., Cleveland Heights (Warrensville P. O.)—Apartment—M. Lewin, 11401 Hopkins Ave., and D. Kauffman, 876 Lakeview Rd., Cleveland, taking bids 3 story and basement, 47 x 150 ft., brick, Cornell Rd., here. $175,000. M. Altschild, 5116 Woodland Ave., Cleveland, archt.

O., Columbus—Bank and Office—Mar. 5, by F. L. Packard, archt., 16 East Broad St., 4 story and basement (ultimately 12 story), 91 x 187 ft., rein.-con. and brick, Gay and Pearl Sts., for Columbian Building & Loan Co., 22 East Gay St. $500,000. Noted Jan. 17.

O., Garfield Heights (Cleveland P. O.)—Feb. 25 by Bd. Educ., 2 story and basement, brick, steel and concrete additions. $190,000. W. H. Nicklas, 1900 Euclid Ave., Cleveland, archt. Noted Dec. 25.

Mich., Detroit—Hotel—Feb. 25, by H. Selzer, 1020 Detroit Savings Banks Bldg., 6 story and basement, 33 x 100 ft. brick, steel and stone, plain foundation, Cass and Columbia Aves. $150,000. E. T. Knopke, 416 Book Bldg., archt.

Mich., Detroit—Morgue—Mar. 10, by W. H. Green, secy. Wayne Co., County Bldg., 2 story and basement, 85 x 136 ft. rein.-con., brick and steel, plain foundation, Lafayette Ave. $150,000. A. H. Gould & Son, 602 Empire Bldg., archts. Noted Oct. 25.

Mich., Flint—School—Feb. 27, by A. J. Wildanger, secy. Bd. Trustees Union School Dist., 2 story and basement, 67 x 210 ft. and 92 x 114 ft. rein.-con., brick and steel, plain foundation, Corunna Rd. $250,000. Malsomson & Higginbotham, 1217 Griswold St., Detroitfi archts.

Ill., Evanston—Apartment—R. F. France, 155 North Clark St., Chicago, taking bids 3 story, 98 x 175 ft., fireproof, Sherman and Washington Sts., here. $200,000.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, taking bids 3 story and basement, 100 x 168 ft., fireproof, Hinman St. near Kedzie St., here, for C. Pegler, c/o Architect. $200,000.

Wis., Milwaukee—Church—Mar. 1, by Riesch & Hess, archts., 302 West Water St., 2 story, 130 x 138 ft., brick, concrete and stone, 11th and Clarke Sts., for St. Boniface Congregation, H. Stemper, pastor, 1118 Clarke St. $250,000.

Wis., Milwaukee—Clubhouse—A. D. Koch, archt. 120 Wisconsin St., taking bids 2 story, 50 x 200 ft., brick, plain foundation, for Tripoli Country Club, J. D. Bird, pres., 596 Summit Ave. $150,000.

Neb., Falls City—Hotel—Mar. 12, by Falls City Hotel Co., A. J. Weaver, pres., rein.-con., brick and stone. $150,000. J. H. Craddock & Co., 315 South 15th St., Omaha, archts. Noted Jan. 31.

Mo., Hannibal—School—Feb. 28, by Bd. Directors School Dist., Hannibal Trust Bldg., 2 story and basement, 125 x 140 ft., rein.-con., brick and stone, 6th and North Sts. $150,000. M. S. Martin, Odd Fellows Bldg., archt. Noted July 12.

Calif., Los Angeles—Temple—Mar. 3, by Supervs. Los Angeles Co., general contract for Temple of Justice, incl. concrete work, fireproofing, hollow tile, vault construction, brick work, etc. To exceed $150,000. Noted Jan. 24.

Calif., Stockton—Bank and Office—C. H. Snyder, engr., 251 Kearny St., San Francisco, receiving bids 600 tons structural steel for 10 story, Class A, for Stockton Savings & Commercial Bank, here. Bakewell & Brown, 251 Kearny St., San Francisco, archts. Total cost $500,000. Noted Oct. 18.

Ont., Mimico—School—Feb. 28, by Burden & Gouinlock, archts., 101 King St. W., Toronto, 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation. $150,000. Noted Feb. 7.

BIDS RECEIVED

Mass., Watertown—High School—City, 3 story and basement, 125 x 175 ft., Russell Ave., from J. Bowen Co., 184 Dudley St., Boston, $623,790.

Del., Claymont—School—Bd. Educ., general contract 3 story and basement, 60 x 196 ft. and 46 x 60 ft., school, from Bennett-McLaughlin Co., 21 South 17th Pl., Phila., $203,857. Noted Jan. 24.

Md., Baltimore—Church—St. Johns Concordia Evangelical Lutheran Church, c/o F. J. Heldrich, archt., 1156 Longwood St., 1 and 2 story, 71 x 175 ft., stone, Reistertown Rd., and Elgin Ave., from T. Hicks & Son, 106 West Madison St., $150,000. Noted Jan. 24.

O., Mayfield (South Euclid, P. O.)—School—Bd. Educ. Mayfield Rural School Dist., 2 story and basement, brick, steel and concrete, from C. Peterson Co., 4500 Euclid Ave., Cleveland, $174,900. Noted Dec. 20.

Wis., Green Bay—Warehouse—Joannes Bros. Co., 118 South Washington St., 6 story and basement, 44 x 156 ft., brick and concrete, plain foundation, from H. J. Selmer Co., 310 Walnut St., $77,275. Noted Jan. 31.

Calif., Long Beach—Club—Y. W. C. A., Commercial Bldg., 5 story, rein.-con., from W. G. Reed, Brock Bldg., $359,000. Noted Dec. 27.

Calif., Los Angeles—Hall—Los Angeles Co., granite work for Hall of Justice, from McGillivray-Raymond Granite Co., 678 South Utah St., $1,585,735 for exterior, $41,685 interior; Raymond Granite Co., 1350 Palmetto St., $1,725,594 for exterior granite, $34,200 for interior stone work; Furst-Cut Stone Co., Bedford, Ind., $1,380,000 for Indiana limestone. Noted Jan. 24.

Calif., Santa Ana—Jail—Orange Co., 100 x 125 ft., rein.-con., general contract from J. A. Creighton Co., 5617 Hollywood Blvd., Los Angeles, $92,909. Total cost to exceed $150,000. Noted Jan. 24.

CONTRACTS AWARDED

N. Y., Bellaire (Jamaica P. O.)—School—Bd. Educ., 500 Park Ave., New York, P. S. 109, brick, steel and stone, plain foundation, 92nd Ave., here, to Lustbader Constr. Co., 423 Madison Ave., New York, $979,000 deduct $24,000. Noted Feb. 14.

N. Y., Brooklyn—Apartment—P. Schonfeld, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., New York, will build 6 story, brick, steel and stone, plain foundation, Marcy Ave., here, by day labor. $150,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York City, P. S. 201, brick, steel and concrete, plain foundation, 12th Ave. from 80th to 81st Sts., here, to T. A. Clarke Co., 122 Livingston St., $796,300, deduct $14,000. Noted Feb. 14.

N. Y., Creedmoor (Jamaica P. O.)—School—Bd. Educ., 500 Park Ave., New York, P. S. 33, brick, steel and stone, 222nd St., here, to Frymier & Hanna Co., Inc., 25 West 45th St., $798,900, deduct $15,000. Noted Jan. 31.

N. Y., Jamaica—School—Bd. Educ., 500 Park Ave., New York City, P. S. 116, Wren Pl., to Dooley-Stapleton Co., $[illegible]7,000, deduct $21,000. Noted Jan. 31.

N. Y., New York—Apartment Hotel—T. C. Du Pont, c/o McKim, Mead & White archts. and engrs., 101 Park Ave., brick, steel and stone, plain foundation, 5th Ave. and 59th St., to Todd, Robertson & Todd, 347 Madison Ave. Archts. est. $18,000,000. Noted Jan. 24.

N. Y., New York—Exchange—New York Telephone Co., 15 Dey St., altering and constructing 9 story, brick, steel and stone rear addition, plain foundation, East 167th St., to White Constr. Co., 95 Madison Ave. Archts. est. $800,000. Noted Sept. 20.

N. Y., New York—Church—Calvary Methodist Episcopal Church, c/o J. Gregory, archt. and engr., 49 West 45th St., brick, steel and stone, plain foundation, University Ave., to Miller-Reed Co., 103 Park Ave. Archts. est. $400,000.

N. Y., New York—Office, Loft and Store—Forty-Six to Fifty West 29th St. Corp., 5 West 29th St., brick, steel and stone, plain foundation, West 29th St., to Magoba Constr. Co., 103 Park Ave. Archts. est. $500,000.

N. Y., New York—Office—Ninety-Nine Worth St. Corp., 321 Bway., 13 story, 55 x 180 ft., brick, steel and stone, plain foundation, to G. Richard Davis & Co., Inc., 30 East 42nd St. Archts. est. $2,000,000.

N. J., East Orange—Apartment—J. Krieger, 336 Main St., will build 5 story, 160 x 180 ft., brick, steel and stone, plain foundation, South Munn Ave., by day labor. $350,000. E. V. Warren, Essex Bldg., Newark, archt. and engr.

Pa., Lancaster—School—School Bd., Administration Bldg., Prince and Chestnut Sts., 3 story and basement, 39 x 210 ft., 42 x 70 ft. and 48 x 93 ft., brick and steel, Walnut and Nevin Sts., general contract to D. S. Warfield, 34th and Grant Sts., $199,717; heating and ventilating to Mechanical Equipment Co., 214 South 12th St., Phila., $53,580. Noted Jan. 31.

Pa., Lancaster—Store—Watt & Shand, 2 East King St., 4 story and basement, 59 x 102 ft., brick and steel, plain foundation, 2 East King St., to H. Wohlsen, Woolworth Bldg. Archts. est. $150,000. Noted Feb. 7.

Pa., Phila.—Sales—J. F. Brown, c/o C. A. Mitchell, Lancaster Bldg., will build 2 story and basement, 141 x 200 ft. brick and steel, 32nd and Arch Sts. $250,000. Work will be done by separate contracts.

Pa., Phila.—Synagogue and Community—Congregation B'Nai Jeshurum, c/o M. Heber, 1011 Chestnut St., 2 story and basement, 140 x 150 ft., brick and steel, plain foundation, 33rd St. between Diamond and Susquehanna Aves., to P. Halbach Contg. Co., 1261 North 26th St. Archts. est. $200,000. Noted Jan. 31.

Pa., Pottsville—Bank and Office—Schuylkill Trust Co., 7 story and basement, 50 x 120 ft. brick and steel, plain foundation, to Clough-Bourne Corp., 101 Park Ave., New York City.

D. C., Wash.—School—Dist. Comrs., Room 509 Dist. Bldg., 20 room addition to Western High School, to Parsons & Hyman, Equitable Bldg., $478,300. Noted Feb. 14.

W. Va., Charleston—Hospital—St. Francis Hospital, 333 Lindley St., 3 story and basement, 90 x 141 ft., to J. H. Phillips, Charleston, $185,000. Noted May 17.

N. C., Statesville—Church—First Presbyterian Church 1 and 2 story, steel, concrete and brick, to J. P. Little & Sons, Realty Bldg., Charlotte, $150,000. Noted Mar. 29.

Fla., Miami Beach—Hotel—J. P. Stoltz, Hotel McAllister, Miami, 14 story hotel, here, to G. B. Langford Constr. Co., Columbia Bldg., Louisville, Ky. To exceed $1,000,000.

Ky., Louisville—Office—Famous Players Lasky Corp., Pioneer St. and Bway., 3 story, 76 x 105 ft., brick, 1st and Chestnut Sts., to R. N. Struck Constr. Co., 101 East Main St., $155,000. Noted Feb. 14.

O., Cleveland—Apartments—L. Duchon, 515 Ulmer Bldg., two 3 story and basement, 28 x 92 ft. and 31 x 92 ft., brick, East 91st St. and Stewart Ave., to I. and B. Dolinsky, 2214 East 83rd St. Archts est. $150,000. Noted Feb. 14.

O., Cleveland—Apartment—L. Pulin, 10725 Bryant Ave., 3 story and basement, 38 x 160 ft., brick, 785 East 88th St., to M. Kahn, 201 Ulmer Bldg. Archts. est. $150,000. Noted Jan. 24.

O., Columbus—Church—Miller & Reaves archts., 20 South 3rd St., 1 story and basement, 100 x 100 ft., stone, 69 East Mound St., to E. H. Latham, 60 East Broad St., for St. Johns Evangelical Congregation $150,000. Noted Jan. 17.

Buildings (Continued)

O., Dayton—Church—Holy Family Church, 2 story and basement, brick and stone, plain foundation, 5th and Findlay Sts., to Danis-Hunt Constr. Co., 907 Schwind Bldg., $250,000.

O., Willoughby—High School—Bd. Educ., 2 story and basement, 73 x 93 ft., brick, concrete and metal lumber, to Payne & Beymar, Painesville, $115,000. Noted Jan. 24.

O., Youngstown—Office—Stanley & Scheible, archt., 1301 Wick Bldg., 12 story and basement, 51 x 72 ft., steel, concrete and terra cotta, East Federal St. and Central Sq., to Mellon-Stuart Co., Oliver Bldg., Pittsburgh, for Realty Guarantee & Trust Co. Archts. est. $500,000. Noted Jan. 10.

Ill., Evanston—Apartment—D. G. Wallace, archt., 22 West Monroe St., Chicago, 3 story, 185 x 300 ft., fireproof, Central St., here, to E. Edlund, 1747 Highland Ave., Chicago, for J. N. Lott, c/o architect. Archts. est. $250,000. Noted Sept. 20.

Wis., Kenosha—Temple—Masonic Temple Building Assn., general contract 3 story and basement, brick and concrete, plain foundation, to Hutter Constr. Co., 128 Western St., Fond du Lac. $134,850. Archts. est. $170,000. Noted Jan. 31.

Wis., Milwaukee—School—Zion Lutheran Congregation, W. Matthes, pastor, 818 21st St., 2 story and basement, 90 x 107 ft., brick, tile and concrete, plain foundation, Fond du Lac Ave., to R. Hoeppner, 2602 Kilbourn Ave. Archts. est. $150,000. Noted Jan. 24.

Neb., Lincoln—Store—Gold & Co., 11th and O Sts., 6 story, 75 x 142 ft. terra cotta, 11th and O Sts., to Olson Constr. Co., 205 Chapin Bldg. Noted Jan. 17.

Mo., St. Louis—Apartment—J. W. Kopman, University, 3 story and basement, 100 x 200 ft., rein.-con., brick, tile and marble, Kingsbury Rd., here, to V. Chinberg, 808 Chestnut St. Archts. est. $175,000.

Mo., Webster Groves—Administration, etc—T. P. Barnett Co., archts., Arcade Bldg., St. Louis, general contract 2 and 3 story and basement administration, study hall, dormitories, dining hall and boiler plant, rein.-con., brick and stone, Lockwood St., here, to Humes-Deal Constr. Co., Century Bldg., St. Louis, for Eden Seminary, 6700 Eastern Ave. Archts. est. $600,000. Noted Nov. 22.

Tex., Beaumont—Church—First Baptist Church, 1 story and basement, 50 x 137 ft., brick and concrete, to C. S. Hudgens, Bomas St., Ft. Worth, $200,000. Noted Nov. 15.

Tex., Houston—Temple—Grand United Order of Odd Fellows, 5 story, rein.-con., steel and brick, Louisiana St. and Prairie Ave., to C. K. Smith, Houston, $247,500.

Ore., Portland—Apartment—Mulberry Investment Co., 2 story and basement, 109 x 152 ft., concrete and stucco, plain foundation, East 12th and Mulberry Sts., to W. Friberg, 3rd and Columbia Sts., $150,000.

Calif., Long Beach—Hotel—Long Beach Hotels Co., 5 story, 160 x 200 ft., rein.-con., to Stradley & Newton, Detwiler Bldg., Los Angeles, $2,000,000. Noted Feb. 7.

Calif., Los Angeles—Apartment—Roland Apartment Co., c/o Walker & Eisen, archts., Pacific Finance Bldg., 100 x 150 ft., approximately 12 story and basement, rein.-con. and brick, Wilshire and Ardmore Sts., to Palmer & Clinton, Monadnock Bldg., San Francisco. To exceed $750,000. Noted Dec. 27.

Calif., Oceanpark (Santa Monica, P. O.)—Casino and Office—Casino Building Co., 4 story, brick, to Lynch-Cannon Eng. Co., 1027 Chapman Bldg., Los Angeles, $300,000.

Calif., Palo Alto—Hotel—Palo Alto Improvement Co., 600 Embarcadero Rd., 3 story and basement, to contain 150 rooms, rein.-con., general contract, to J. Madsen, 619 Fulton St., $106,250.

Calif., San Francisco—Apartment—L. J. Neal, 364 Page St., will build 6 story and basement, rein.-con., O'Farrell St. near Leavenworth St., by day labor. $155,000. E. H. Denke, 1317 Hyde St., archt.

Calif., San Francisco—Office and Store—Marion Realty Co., 1171 Market St., 2 and 4 story and basement, steel and rein.-con., Market St. near 8th St., to A. Arras, 185 Stevenson St., $75,000 each.

Calif., Stockton—Bank and Office—Union Safe Deposit Bank, 30 North San Joaquin St., 1 story and basement, Class A, general contract to J. A. Allen, 111 Kensington Way, $128,600. Noted Jan. 31.

CONDUIT—NEW YORK, N. Y.

Following are lowest three bids opened by Bd. Water Supply, Municipal Bldg., Jan. 22, for construction of Clove Conduit of Catskill Aqueduct, Richmond Boro., Contr. 199, (A) P. F. Connolly Co., 2029 East 102d St., Cleveland, O., (awarded contract); (B) Beaver Eng. & Contg. Co., 51 Chambers St., New York; (C) P. McGovern, Inc., 50 East 42d St., New York. The unit bids were as follows:

	A	B	C
52,000 cu.yd. earth excavation and refilling	$3.00	$3.00	$2.40
4,000 cu.yd. rock excavation	2.00	2.00	2.40
50 M.ft. b.m. timber and lumber	70.00	25.00	70.00
16,600 lin.ft. 66-in. steel pipe, $\frac{1}{16}$-in. plate, lap-joints	27.40	29.93	32.30
35 ton cast-iron pipe, straight hub-and-spigot	90.00	100.00	80.00
40 ton cast-iron hub-and-spigot specials	150.00	200.00	160.00
15 ton cast-iron flanged pipe and specials	200.00	300.00	225.00
20 ton cast-iron valve-boxes, manhole heads and covers	150.00	100.00	130.00
18,000 lb. steel castings	.25	.25	.25
100,000 lb. caring for and setting metal-work furnished by the city	.015	.01	.02
10,000 lb. structural and reinforcing steel	.10	.10	.07
5,000 lb. miscellaneous cast iron, wrought iron and steel	.10	.20	.15
500 bbl. portland cement	3.00	3.50	2.75
100 cu.yd. concrete masonry as cradles for sewers and drains	10.00	8.00	12.00
300 cu.yd. brick and concrete masonry	20.00	25.00	27.50
70 changing water services 2-in. and smaller	7.00	5.00	10.00
50 cu.yd. crushed stone and gravel for drains and ballast	5.00	3.50	4.00
3,500 lin.ft. vitrified pipe, 3 to 8 in. in diameter	.70	.50	.70
300 lin.ft. vitrified pipe, 9 to 20 in. in diameter	1.50	1.00	1.75
50 cu.yd. rubble paving in mortar	7.00	10.00	5.00
10,000 sq.yd. bituminous concrete pavement	1.75	2.00	3.00
700 sq.yd. bituminous macadam pavement	1.50	2.00	3.00
1,500 sq.yd. macadam pavement	1.00	.50	2.50
Extended totals	$677,530	$722,863	$748,005

BRIDGE—ST. LOUIS, MO.

Following are lowest three bids opened by Bd. Pub. Serv., Jan. 22, for concrete bridge over River Des Peres on Gravois Ave., (A) H. A. Henske, 1504 St. Louis Ave.; (B) Higgins-Wall-Dyer Co., International Life Bldg.; (C) T. F. Hogan, Melbourne Hotel. The unit bids were as follows:

	A	B	C
5,130 cu.ft. removing old masonry	$0.085	$0.10	$0.15
Removing pavements, curbs, walks (lump sum)	1,216.00	1,325.00	7,500.00
4,630 cu.yd. grading	.90	2.25	1.25
24,630 cu.ft. excavation, class A	.40	.10	.30
6,810 cu.ft. excavation, class B	.12	.05	.07
1,840 cu.ft. excavation, class C	.90	.40	.40
Drainage and bank protection (lump sum)	562.50	1,250.00	750.00
36,545 cu.ft. concrete, class A	.70	.50	.68
23,025 cu.yd. concrete, class B	.65	.98	.64
9,039 cu.yd. concrete, class C	.60	1.10	.50
398,200 lb. steel reinforcement	.054	.03$\frac{8}{10}$	.045
10,700 sq.ft. surface finish	.06	.10	.05
Expansion joints and waterproofings (lump sum)	1,100.00	1,800.00	500.00
Brick railing (lump sum)	2,250.00	4,148.00	3,600.00
Filling and shaping subgrade (lump sum)	1,350.00	1,000.00	300.00
465 lin.ft. new curbing	1.40	2.00	3.00
315 lin.ft. resetting old curbing	.68	.50	1.00
5,500 cu.ft. cinder concrete	.245	.28	.40
7,120 cu.ft. roadway foundation	.33	.50	.50
18,650 sq.ft. brick paving	.25	.20	.35
Electric conduits and pole foundation (lump sum)	787.50	1,800.00	750.00
Concrete lamp posts (lump sum)	400.00	1,000.00	600.00
1,925 sq.ft. concrete walks, class A	.28	.22	.34
3,970 sq.ft. concrete walks, class B	.225	.221	.30
Extended totals	$104,756	$105,178	$108,806

Federal Government Work

PROPOSED WORK

Pa., Phila.—Hospital—Spec. 4949—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon opens bids permanent foundations for frame buildings at hospital, here.

Va., Hampton Roads—Breakwater Pier—Spec. 4944—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon opens bids, repairs to north breakwater pier at Submarine Base, here. Noted Jan. 24.

Ky., Addison—Cement—U. S. Engineer, P. O. Box 72, Louisville, opens bids about April 1, 25,000 bbl. cement for Dam 45, f.o.b. Addison. Noted Jan. 10.

BIDS DESIRED

D. C., Wash.—Reservoirs—Mar. 21, at U. S. Engineer office, 250 Old Land Office Bldg., Wash., D. C., 1st and 2nd high reservoirs for Dist. of Columbia water supply; adv. E. N.-R. Feb. 21.

Tenn., Memphis—Sand Pump, Boiler and Boiler Feed Pump—Mar. 14, at office Mississippi River Comn., 1st and 2nd Dists., Room 1006 McCall Bldg., one centrifugal sand pump and engine, also one horizontal boiler and one boiler feed pump; adv. E. N.-R. Feb. 21.

Ky., Pikesville—Hospital—March 11, by U. S. Veterans Bureau, Room 791, Wash., D. C., constructing complete one hospital building, one double officers quarters, brick and frame, one brick and frame well house, one steel water tank and one drilled well at U. S. Veterans Hospital.

Ore., Klamath Falls—Canal—Mar. 17, by Bureau of Recl., Klamath Falls, constructing 15 mi. North Canal, Langell Valley Div. on Klamath Project, Oregon-California, 125,000 cu.yd. excav., 25 mi. east of here in Twps. 39 and 40 south; adv. E. N. R., Feb. 21.

BIDS RECEIVED

Md., Baltimore—Roof—Treasury Dept. Superv. Archts. Office, Wash., D. C., new roof on Court House, here, from W. L. Morrison, Metropolitan Bank Bldg., Wash., D. C., $5,100 for Drawing 317, $6,700 for Draw-318. Noted Jan. 24.

Tenn., Memphis—Post Office—Treas. Dept., Wash., D. C., post office here, from A. Blair, 11 South Lawrence St., Montgomery, Ala., $99,831. Noted Jan. 10.

Tex., Ft. Worth—Mooring Mast—Spec. 4930—Bureau Yards & Docks, Navy Dept., Wash., D. C., erecting mooring mast at U. S. Helium Production Plant, here, from Newport Contg. & Eng. Co., Newport News, Va., $14,700. Noted Jan. 31.

CONTRACTS AWARDED

N. C., Cape Lookout—Boat House, Quarters—Spec. 4906—Bureau Yards & Docks, Navy Dept., Wash., D. C., boat house, remodeling quarters and concrete retaining walls at Naval Radio Compass Sta., here, to H. M. Lucas, 115 Bruce St., Portsmouth, Va., $9,400, (60 days). Noted Feb. 14.

Ga., Augusta—Hospital—Spec. 4922—F. T. Hines, dir. U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., remodeling buildings incl. plumbing, lighting and heating to King Lumber Co., Charlottesville, Va., $78,000, plumbing and heating to C. J. Gleason, 1526 Wilton Way, $130,000, electric work to D. C. Barnett, St. Louis, Mo., $10,707. Noted Feb. 7.

Ind., Leavenworth—Lumber—U. S. Engineer, P. O. Box 72, Louisville, Ky., 80,000 ft. yellow pine for Dam 44, Ohio River, to T. E. Rechtin, 7th and Ingle Sts., Evansville, $45.75 per M. Noted Jan. 31.

Wis., Milwaukee—Scow and Barge—U. S. Engineer, Federal Bldg., 2 steel dump scows and one steel barge to Sturgeon Bay Dry Dock Co., Sturgeon Bay, $47,500. Noted Jan. 24.

Unclassified

PROPOSED WORK

River Wall, etc.—Rensselaer, N. Y.—Grasselli Chemical Co. having surveys made extending river wall, pier, etc. in front of property on Riverside Ave., Hudson River. Work involves 900 cu.yd. rein.-con. $45,000. Private plans. Will mature in spring.

Unclassified (Continued)

Elimination of Grade Crossings—Tonawanda, N. Y.—See "Streets and Roads."

Pier, etc.—Asbury Park, N. J.—City plans alterations and additions to buildings on beach front, incl. extension to pier. $84,000. N. Rogers, Asbury Park, engr.

Coal Plant—Morrisville, Pa.—Fattersall Co., 147 North Warren St., Trenton, N. J., plans 30,000 ton coal plant. $100,000.

Carbarns — Phila., Pa. — Phila. Rapid Transit Co., 810 Dauphin St., plans carbarns, Johnson and 20th Sts. $250,000.

Parks—Louisville, Ky.—Election in November $750,000 bonds for improvements and extensions to city parks.

Gas Main Extension — Paducah, Ky. — Paducah Electric Co. plans extension to gas mains, etc. To exceed $25,000. Stone & Webster, 147 Milk St., Boston, Mass., engrs.

Transmission Line—Terre Haute, Ind.—Indiana Power Co., 413 Main St., Vincennes, plans extensions to electric transmission lines in Wabash River Valley. C. E. Taylor, c/o owner, engr. To exceed $25,000.

Transmission Line — Wisconsin — Luck Light & Power Co., Luck, plans high power transmission line from Luck to Frederic. $25,000. Engineer not selected.

Pipe Line—Texas—W. A. Letson, Lubbock, plans 12 in. gas pipeline from Amarillo to Lubbock, intersecting laterals will be laid serving Canyon, Plainview, etc. $40,000. Private plans.

Pipeline — Texas — Milam County Pipe Line Co., Rockdale, making surveys for pipeline from Isaac Switch to Minerva-Rockdale Oil Fields. $45,000.

Pipe Line — Texas — See "Industrial Works" under Panhandle City.

Lighting System — Beaumont, Tex. — Neches Co. making plans electric lighting system on Beaumont-Port Arthur Highway. $40,000. P. E. McChesney, Beaumont, engr.

Seawall, etc. — Corpus Christi, Tex. — State and Nueces Co. sold $2,000,000 bonds for seawall and breakwater.

Park Improvements—Dallas, Tex.—North Texas Trust Co., c/o C. S. Mitchell, 211 Magnolia Bldg., had plans prepared park improvements in Kessler Park addition. $25,000-$30,000. Koch & Fowler, Central Bank Bldg., engrs.

Wharf—Avalon, Calif.—City had preliminary plans prepared addition to wharf, 20 x 150 ft. with two ells. $150,000.

Flood Control—Stockton, Calif.—Plans to vote on $1,600,000 bonds for flood control project. W. B. Hogan, city engr.

Bulkheads — Long Beach, Calif. — City having plans prepared and will probably vote on over $1,000,000 bonds for new bulkheads, incl. dredging, etc. R. D. Van Alstine, city engr.

Power Line — Ontario — Ontario Hydro Comn., London, plans to extend power line from Essex to Elmstead and install two new switches at Essex transformer. $50,000. E. R. Lawlor, University Ave., Toronto, engr.

Electric Light and Telephone Systems—Fort William, Ont.—Voted $20,000 for electric lighting system and $100,000 for additions and extensions to telephone system. A. McNaughton, city clk.

BIDS DESIRED

Sanitary Work, etc.—Binghamton, N. Y.—Mar. 12, by State Hospital Comn., Albany, sanitary work, renewal of water line and sanitary work, plumbing and sewage disposal, Plymouth Rock Farm Cottage, Binghamton State Hospital. S. W. Jones, Albany, state archt.; adv. E. N.-R. Feb. 21.

Coal Bunker, Scale House, etc.—Horning, Pa.—Crocelius & Phillips, 1308 Hanna Bldg., Cleveland, O., engrs., taking bids 13 x 128 ft. coal bunkers and 14 x 20 ft. scale house, timber and corrugated metal, also timber trestle, here, for Pittsburgh Terminal Coal Co., Wabash Bldg., Pittsburgh.

Dock — Mingo Junction, O. — Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., taking bids and opens same about Mar. 5, coke unloading dock with concrete ice piers, on Ohio River, 50,000 cu.yd. dredging, 75,000 cu.yd. concrete. To exceed $500,000. Noted Oct. 4.

Cement — Madison, Wis. — Taking bids 10,000 bbl. cement f.o.b. here, to be delivered during June, July, August, September and October. E. E. Parker, City Hall, engr.

Street Markers—Ft. Worth, Tex.—City Comn. taking bids 12,000 street name markers. $25,000. D. L. Lewis, city engr.

BIDS RECEIVED

Borings, etc.—New York—Transit Comn., 49 Lafayette St., New York City, land and river borings along North Jane St., Jackson Ave., Manhattan Ave., Roebling St., Bedford Ave. and in Newtown Creek, in Queens and Brooklyn Boros, Agreement "CW"-Route 70, from P. J. Haley, 25 Church St., New York City, $2.70, $0.90, $2.50, $0.70, $6.45, $0.90, $6.45. Noted Feb. 7.

Shaft Superstructure—New York, N. Y.—Transit Comn., 49 Lafayette St., superstructure over ventilating shaft and 2 passageways between tubes of 14th St.-Eastern Rapid Transit R.R., Route 8, Sect. 3, Agreement "CX," from B. T. and J. J. Mack, Inc., 160 Bway., $9,995. Noted Feb. 7.

Electrolier System—Bakersfield, Calif.—Installing electrolier lighting system in portion Chester Ave., etc., from Robinson Electric Co., 1162 Bway., Fresno, $26,600. Noted Jan. 31.

CONTRACTS AWARDED

Heating and Ventilating Apparatus—Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 196, Bushwick Ave., here, to Almirall & Co., Inc., 1 Dominick St., New York City, $111,119. Noted Feb. 7.

Heating and Ventilating Apparatus—New York, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in P. S. 92, West 212th St., and in P. S. 78, Hicks St., to Austin Eng. Co., 124 West 42nd St., $100,772 and $101,468 respectively; in George Washington High School, Audubon Ave., and in P. S. 75, Faile St., to Almirall & Co., Inc., 1 Dominick St., $287,425 and $111,633 respectively. Noted Jan. 31 and Feb. 7.

Electric Signal, etc.—Rotterdam Junction, N. Y.—New York Central R.R., Grand Central Terminal, New York City, electric signal and switch interlocking apparatus, here, to General Ry. Signal Co., Terminal of West Ave., Rochester, to exceed $100,000.

Oil Tank—Baltimore, Md.—Consolidated Gas, Electric Light & Power Co., Lexington Bldg., will build 2 m.g. oil tank, by day labor. Private plans. Noted Jan. 17.

Dock—Ashland, Wis.—Minneapolis St. Paul & Saulte Ste. Marie Rd., 1st Natl.-Soo Line Bldg., Minneapolis, Minn., 900 ft. extension to dock, 150 ft. wide, to contain 150 ore pockets, involves driving 7,000 piles and pouring 12,000 yd. concrete, to Whitney Bros., North 6th St. and Baxter St., Superior, $750,000. Noted Feb. 7.

Wharf—Houston, Tex.—Harris County Navigation Dist., concrete wharf and grain carrier house footings, to Doullet & Williams, Inc., 2nd Natl. Bank Bldg., $176,900. Noted Jan. 17.

Material and Equipment

PROPOSED WORK

Dredge and Scows — Pittsburgh, Pa. — General Contg. Co., Columbia Bldg., plans to purchase 1 steel hull dipper dredge and 2 steel hull scows, $40,000 and $25,000 respectively.

Road Equipment — California — L. R. Smith, purch. agt., State Hy. Comn., Sacramento, plans to purchase ten type B and twenty-four type A graders, with 8 ft. blades, engine steer and hitch complete with controls, etc., weighing not less than 4,000 lbs.

Roal Oil, Stone, etc. — London, Ont. — Soon takes bids 150,000 gal. road oil, broken stone, asphalt, cement, and all c.i. castings required for year. $150,000. W. A. Near, city engr.

BIDS DESIRED

Asphalt Binder Mixture, etc. — New York, N. Y.—Feb. 25, by J. Miller, pres. Manhattan Boro, Municipal Bldg., 400 cu. yd. asphalt binder mixture and 600 cu.yd. asphalt wearing surface mixture.

Granite Paving Blocks, etc.—New York, N. Y.—Feb. 28, by J. Miller, pres. Manhattan Boro, Municipal Bldg., 50,000 new special 5 in. granite paving blocks, 500 tons asphaltic joint filler, 30,000 gal. gasoline, 4,000 cu.yd. coarse aggregate for concrete, 3,000 tons inorganic dust, 3,000 cu.yd. concrete and paving sand, 6,000 cu.yd. binder stone and one 8 ton tandem steam roller.

Rip Rap and Steel—New York, N. Y.—Feb. 25, by Dept. Purch., Municipal Bldg., rip rap to Dept. of Plant and Structures, and corrugated sheet steel to Dept. Street Cleaning. E. W. Buckley, comr.

Crushed Stone, etc.—Freehold, N. J.—Mar 5, by C. E. Cole, clk. Bd. Freeholders Monmouth Co., crushed stone, gravel, slag, 100,000 gal. bituminous surface dressing, and 300,000 gal. binder. G. A. Allen, Jr., 60 Broad St., Red Bank, engr.

Crane — Pittsburgh, Pa. — Bessemer & Lake Erie R.R., Carnegie Bldg., taking bids one 25 ton locomotive crane.

Crane—Pittsburgh, Pa.—Carnegie Steel Co., Carnegie Bldg., taking bids one 20 ton locomotive crane.

Crane—Charleston, W. Va.—E. H. Morford & Co., Moore Bldg., taking bids locomotive crane, 12-20 ton capacity.

Jaw Crusher—Woodward, Ala.—Woodward Iron Co. in market for 30 x 42 in. jaw crusher.

Road Oil—Adrian, Mich.—Mar. 3, by G. P. Love, city clk., 60,000 gal. road oil; adv. E. N.-R. Feb. 21.

Motor Truck—Green Bay, Wis.—Bd. Pub. Wks., W. L. Kerr, secy., taking bids 1½ ton motor truck equipped with water tight garbage body and hydraulic hoist.

Road Oil—La Crosse, Wis.—Feb. 26, by J. Hintgen, comr. La Crosse Co., 450,000 gal. road oil.

Truck, etc.—Kenosha, Wis.—Feb. 26, by C. M. Osborn, city mgr., 1½ ton truck equipped with 2 yd. dump body; one 4½ yd. drop frame trailer; one ½ bag concrete mixer; one motor driven street sweeper.

Tarvia—Two Rivers, Wis.—Feb. 25, by Bd. Pub. Wks., H. C. Gowran, chn., 30,000 gal. tarvia "B" or equal.

Lumber, Piling, etc.—Guthrie Center, Ia.—Feb. 26, by Guthrie Co., 172,800 ft. lumber, 6,000 ft. piling and 7,470 ft. bridge caps. A. McKeel, Guthrie Center, engr.

Lumber, Piling, etc.—Red Oak, Ia.—Feb. 28, by Comrs. Montgomery Co., 220,000 ft. lumber, 6,070 ft. piling, 1,000 bbl. cement, 500 tons sand, 500 tons crushed stone, 1,000 tons concrete mixture, 40,000 lb. reinforcing steel, 1,200 ft. concrete pipe, 700 ft. corrugated culvert pipe. P. A. Michel, Red Oak, engr.

Pipe—Okla., Tulsa—Kettle Creek Refining Co., Box 2011; in market for 16 mi. 6-in., 14 mi. 4-in., and 5 mi. 3-in. pipe.

Crane — San Francisco, Calif. — Pacific Gas & Electric Co., 445 Sutter St., taking bids one 25 ton crane.

Supplies—Hamilton, Ont.—Mar. 1, by T. W. Jutten, mayor, City Hall, broken stone and screenings, limestone dust, sand, asphalt, gravel, lime, 8- to 30-in. vitr. and concrete sewer pipe, ordinary and specials castings, c.i. pipe, gate valves, extension boxes, concrete and garbage duck covers, brass brooms, sectional sweepers, ordinary and special bronze and brass castings for Waterworks Dept. $200,000. W. L. McFaul, city engr.

Asphalt, Cement, etc.—Kingston, Ont.—Feb. 27, by H. S. Dick, city engr., asphalt, portland cement, limestone dust, road oil, and vitr. tile sewer pipe. $100,000.

Brick, Castings, etc. — Ottawa, Ont. — Feb. 26, by Bd. Control, furnishing brick, castings, cement, draughting supplies, plank and cedar, sand, vitr. clay or concrete sewer pipe. A. F. Macallum, comr. pub. wks.

Brass Taps, Pipe, etc.—Ottawa, Ont.—Taking bids brass taps, cock fittings, c.i. pipe, 6 in. up, lead pipe, water meters, pig lead, service posts, special castings. $150,000. A. F. Macallum, city engr.

BIDS RECEIVED

Sand Grits—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Feb. 14, 7,500 cu.yd. sand grits, from Ames Building Material Co., 3437 Kingsbridge Rd., $16,800. Noted Feb. 7.

CONTRACTS AWARDED

Culvert Pipe, Lumber, etc.—Clinton, Ia.—Clinton Co., 5,928 ft. 12- to 36-in. corrugated culvert pipe, to Klauer Mfg. Co., 9th and Washington Sts., Dubuque, $5,215; 75,000 ft. 3 x 12 x 16-in. stand sawed Douglas Fir lumber, to Wheeler Lumber, Bridge & Supply Co., 200 South West 9th St., Des Moines, $3,113. Noted Jan. 31.

Lumber and Piling—Harlan, Ia.—Shelby Co., 168,460 ft. lumber and 14,000 ft cypress piling, to Wickham Bridge & Pipe Co., 27 South 19th St., Council Bluffs, $12,623.

Lumber, Steel, etc.—Iowa City, Ia.—Johnson Co. 192,840 ft. lumber to Wheeler Lumber, Bridge & Supply Co., 200 South West 9th St., Des Moines, $8,011; 40,000 lb. reinforcing steel, to Clinton Bridge Wks. 101 South 2nd St., Clinton, $1,324. Noted Jan. 31.

Lumber—Tipton, Ia.—Cedar Co., 244,800 ft. lumber, fir, to W. W. Saylor, Waverly $10,276. Noted Jan. 1.

Vitrified Pipe, Brick, Pine, etc.—Minneapolis, Minn.—F. S. Gram, city purch. agt., 400 tons special sewer castings, to Crown Wks. Co., 1229 Tyler St., $67.50 per ton for manhole rings and covers, $68.50 per ton for catch-basin rings and covers; 190,000 vitr. paving brick for sewer construction, to A. C. Ochs Co., 204 South 9th St., $20 per M.; sewer pipe and segment blocks, quantity not stated, for 1924 season, to Red Wing Sewer Pipe Co., Red Wing; 185,000 ft. No. 1 rough Norway pine, to J. Neils Lumber Co., 932 Lumber Exch. $45 per M. for 3 x 12 and $34 per M. for 2 x 8 (small part of order); Virginia & Rainy Lake Co., 1030 Lumber Exch., $48.50 for 3 x 12 and $34 per M. for 2 x 8. Noted Jan. 31.

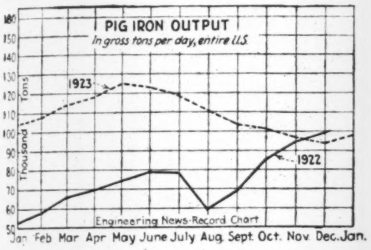
CONSTRUCTION NEWS

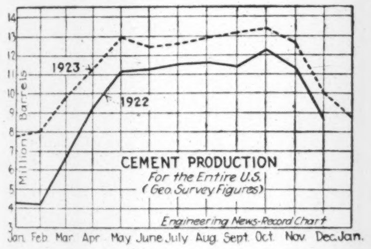
Engineering News-Record, February 28, 1924

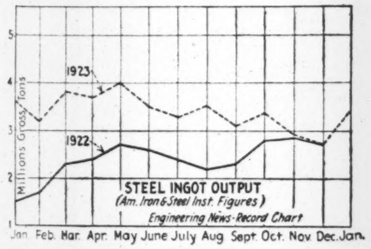
The Construction Barometer

Iron and Steel Situation Optimistic—Cement and Brick Will Probably Follow Other Basic Industries in Increased Spring Production Schedules

THE present situation with regard to the production of pig iron, steel ingots and lumber, as well as the unfilled orders on books of the U. S. Steel Corporation, contrasts sharply with the declining output of cement and common brick. The steel outlook, however, is particularly bright, with current mill operations at 90 per cent of capacity, which rate prevailed a year ago at the outset of the greatest building boom in history. Following the lead of iron and steel, most of the other basic industries will probably continue to maintain active production schedules up until about October, at which time demand normally subsides. Current trends of demand, production and prices are seasonably upward.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Feb. 7	$7,708,000	$20,266,000	$27,974,000
Feb. 14	7,624,000	11,004,000	18,628,000
Feb. 21	15,802,000	38,386,000	54,188,000
3 weeks	$31,134,000	$69,656,000	$100,790,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

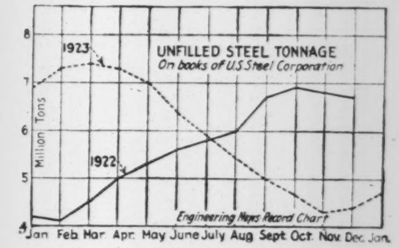
Week Ended	No.	Public Work	No.	Private Work
Feb. 7	13	$4,530,000	27	$12,495,000
Feb. 14	5	1,140,000	24	8,118,000
Feb. 21	7	4,154,000	38	31,438,000
3 weeks	25	$9,824,000	89	$52,051,000

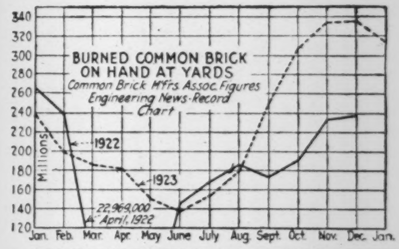
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

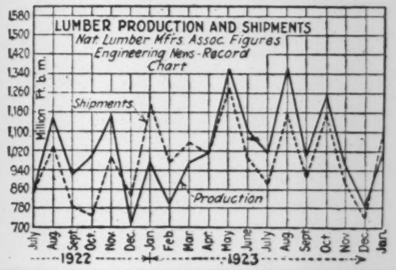
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Feb. 7	40	192	42	40	56
Feb. 14	28	174	40	36	52
Feb. 21	39	192	54	31	56

BASIC MATERIALS PRICES FIRM DURING LAST TWO WEEKS

	Quoted on Feb. 28 at	Price was	On
Structurals, Pittsburgh, 100 lb....	$2.40 @2.50	$2.35 @2.50	Feb. 7
Cement, Chi., net bbl..........	2.20	2.10	Jan. 24
Pine, N.Y., M.ft...	62.00	61.00	Feb. 14
Fir, San Fran., M.ft..........	36.00	38.00	Jan. 24
Common labor, hr.	.54	53	June 28







Proposals will appear next week as usual.

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Conn., North Branford (R. D. Branford)—New Haven Water Co., 100 Crown St., New Haven, plans rein.-con. dam and 10 m.g. reservoir, here. Private plans.

N. Y., Evans Mills—Bd. Village Trustees had surveys made and plans election Mar. 18, $60,000 bonds new water supply system. W. T. Fields, 40 Flower Bldg., Watertown, consult. engr.

N. Y., Parish—Had surveys made new water supply system. To exceed $35,000. W. T. Fields, 40 Flower Bldg., Watertown, consult. engr.

Pa., Phila.—Plans 23,000 ft. 12 in. mains in Castor Ave., Rhawn and Cottman Sts., 2,900 ft. 16 in. mains in Cottman, Margaret and Lackawanna Sts., 6,800 ft. 24 in. mains in Spring Garden and 12th Sts., 16,000 ft. 30 in. mains in Frankford Ave., 9,000 ft. 36 in. mains in Erie Ave., and 10,000 ft. 48 in. mains in Hunting Park Ave. and Roosevelt Blvd. $800,000.

Md., Baltimore—City Council soon takes bids 60-in. supply main east of valve vault at Druid Reservoir $65,000; 16-in. supply main at Roland standpipe, University Parkway, north through Roland Ave. to Linwood Ave., $64,000. V. Bernard Siems, water engr.

Fla., Cocoa—Election Mar. 3, $125,000 bonds, waterworks system. Noted Dec. 27.

Ky., Winchester—Winchester Water Co. plans hydro electric pumping station at Lock 10, Kentucky River, near here. $40,000.

O., Columbus—See "Streets and Roads."

Ill., Jacksonville—Election Apr. 1, $100,000 bonds, 4,000 ft. 16-in. Class B mains, 500,000 gal. elevated tank, 3 m.g. steam turbine, chain grate stoker, etc. Caldwell Eng. Co., Jacksonville, engrs.

Wis., Appleton — Water Comn. making plans excavating and backfilling for 15,000 lin.ft. mains. $15,000. Private plans.

Minn., Brainerd — Water & Light Bd. plans to purchase material for water and light plants, $86,000. W. D. McKay, secy.

Minn., Red Wing—Making plans waterworks improvements, incl. rein.-con. reservoir, 1 m.g. capacity, pump and equipment for deep well. $25,000. S. T. Irvine, clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr.

Mo., Independence—Making plans improving waterworks system, 2 m.g. reservoir, etc. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, engrs.

Ark., Hamburg — Making preliminary plans new pumps, engines, switchboard, distribution lines, etc., for water and electric light plant. $20,000. Engineer not selected.

Ark., Russellville—Soon takes bids 2 mi. 4 and 6 in. mains, 10 mi. sanitary sewer in Dists. 2 and 3, also 4 mi. rein.-con. paving, curbing and guttering in business section

Waterworks (Continued)

and principal residential streets. F. Ellsworth, Russellville, engr.

Tex., Trenton—Defeated $33,000 bonds, waterworks. Elrod Eng. Co., 3124 Elm St., Dallas, engrs. Noted Dec. 5.

Okla., Nowata—Preparing plans storage reservoir, main extensions, filter and pumping equipment. $75,000. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, Mo., engr. Noted Feb. 7.

Ont., Hamilton—Plans 10,000 ft. 6 in. c.i. mains in Burlington St. from Niagara to Hillyard Sts., also to Woodlawn Cemetery. $30,000. E. L. McFaul, city engr.

Ont., Hamilton—Plans to improve water works system, either additional pumps or new reservoir. $25,000 to $50,000. W. L. McFaul, city engr.

Ont., Sandwich—Sandwich Water Comn. having plans prepared water distribution system, c.i. mains, 6 in. up, gate valves and hydrants. Elevated steel water tank may also be installed. $50,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

Ont., Toronto—Plans 2 mi. 6 in. c.i. mains, in Belsize Dr., 8th, Springmount and St. Hildas Ave., Hiawatha, Belcourt, Cheston, Gresham, Manor and Thurston Rds., $28,902. R. C. Harris, city engr.

Que., Three Rivers — Plans filtration plant, 5 m.g. per day. Arthur Surveyor Co., 511 St. Catherine St., engrs. C. E. Gelinad, city engr.

BIDS DESIRED

N. J., Allenhurst — Mar. 5, by Boro Comrs., 110 ft. new metal standpipe, 18 ft. diameter. M. D. Pyle, boro clk.

Pa., Reading — Mar. 12, constructing river crossing south of Schuylkill River Bridge for water supply system. E. L. Nuebling, ch. engr. Water Bureau; adv. E. N.-R. Feb. 28.

Fla., Sanford—Mar. 10, by City Comn., Palmetto Ave., 20 mi. mains with valves, hydrants, etc.; concrete reservoir and tank foundation; pumping station; wells and well pumps; pumping machinery and other equipment; 200,000 gal. steel tank on tower. J. E. Craig, 427 King St., Jacksonville, engr. Noted Jan. 31.

O., Cincinnati—Mar. 4, by C. F. Hornberger, dir. Pub. Serv., c.i. pipe, castings, valves, etc., in Winton Rd., Froome, Edgewood, East Epworth and Mitchell Aves. $65,000. J. A. Hiller, City Hall, engr.

Ill., Villa Grove—Mar. 5, by City Council, pumping station and pumping equipment, drilling 629-ft. well, 1 motor-driven deep well pump head complete, one 20 hp. motor and pumping station building. To exceed $15,000. Holbrook, Warren & Van Praag, 416 Millikin Bldg., Decatur, engrs.

Wis., Kohler—Mar. 17, by E. Albrecht, village clk., 100,000 gal. steel tank on 100 ft. steel tower for water storage. J. Donohue Eng. Co., North 8th St., Sheboygan, engrs. Noted Feb. 15, 1923.

Wis., White Fish Bay—See "Sewers."

Minn., Minneapolis — Mar. 4, by F. S. Gram, city purch. agt., four 48-in., ten 30-in., twenty 24-in., ten 20-in. and ten 8-in. gate valves; one 6 x 6 in. and ten 5 x 5 in. sluice gates; six 14-in., nine 12-in., five 8-in. and five 4-in. mud valves. N. W. Elsberg, city engr.

Mont., Laurel—Mar. 4, by City, 9,200 lin.ft. 6- to 12-in. c.i. water pipe, 14,000 lb. lead, 425 lb. jute. T. A. Rigney, clk. Noted Aug. 23

Tex., Wortham—Mar. 17, by W. J. Bryant, city secy., 300,000 gal. sedimentation basin, mains, etc. $20,000. R. C. Sealy, Wortham, engr.

BIDS RECEIVED

N. Y., Buffalo—W. F. Schwartz, comr. Pub. Wks., Municipal Bldg., Feb. 15, **(1)** c.i. pipe **(2)** special castings **(3)** 150 hydrants with 5 ft. standpipe **(4)** valves **(a)** 6 in. **(b)** 8 in. **(c)** 16 in., **(5)** fittings **(d)** 6- to 16-in. **(e)** 4 in., from U. S. Cast Iron Pipe & Fdry. Co., 957 East Ferry St., **(1)** $56.30 net ton; J. B. Clow & Sons, 534 South Franklin St., Chicago, **(2)** $98.15 per ton; R. D. Wood & Co., 400 Chestnut St., Phila., **(3)** $72.55 each **(5d)** $0.065 per lb. **(5e)** $0.07 per lb.; Kennedy Valve Mfg. Co., East Water St., **(4a)** $24.36 **(4b)** $38.28 **(4c)** $164.14, total $9,834; Michigan Valve & Fdry. Co., 3631 Parkinson Ave., Detroit, Mich., **(4a)** $24.36 **(4b)** $38.28 **(4c)** $164.14, $9,834; Rensselaer Valve Co., Ontario St., Troy, **(4a)** $24.36 **(4b)** $38.28 **(4c)** $164.14, $9,834. Noted Feb. 7.

N. Y., New York—Bd. Water Supply, Gas & Electricity, Municipal Bldg., Feb. 25, 36 in. mains in Jerome Ave., from F. Hanratty, 605 Beach Terrace, $111,000. Noted Feb. 21

Wis., Wauwatosa—For 800 g.p.m. pump, from Aurora Pump & Mfg. Co., Aurora, Ill., $6,881 and $6,000.

Minn., St. Paul—H. W. Austin, city purch. agt., Feb. 13, approximately 120 tons c.i. pipe specials, from South Park Fdry. & Machine Co., 23 East 6th St., $98 per ton; corporation cocks, curb cocks, brass water gate valves, from Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur, Ill., $3,024; furnishing one 60-ft. x 9-ft. steel standpipe and one 12 x 98 ft. steel standpipe, 151 lin.ft. 60-in. steel pipe, 2,367 lb. special iron castings, from James McNeil & Bro. Co., 29th St., Pittsburgh, Pa., $8,499; 800 sq.yd. sandstone blocks, from Sandstone Quarries Co., 510 Plymouth Bldg., Minneapolis, $2.74 sq.yd. Noted Feb. 7.

CONTRACTS AWARDED

Pa., Phila.—Dept. Pub. Wks., Bureau of Water, City Hall, furnishing 2,500 tons 6, 8 and 12 in. c.i. pipe, to R. D. Wood, 400 Chestnut St., $168,000. Noted Jan. 31.

W. Va., Fairmont—Mechanical filtration plant, to Rust Eng. Co., 311 Ross St., Pittsburgh, Pa., $137,458, with Roberts Filter Mfg. Co., Darby, Pa., as sub-contractors for filter equipment.

La., Gibsland — Waterworks and electrical improvements, to McIntosh Constr. Co., Oklahoma City, Okla., $39,466. Noted Jan. 31.

O., Dayton—Montgomery Co. water supply system in Overlook Dist., to Crumley, Jones & Crumley, 2301 Concord St., Cincinnati, $147,470; Lower Belmont Dist., to F. Krumholz, Springfield, $134,280; Upper Belmont Dist., to C. J. Wetzel, Dayton, $126,350. Noted Feb. 14.

Mich., Detroit—Furnishing 2,000 tons 6 in. and 3,000 tons 8 in. c.i. pipe, to Lynchburg Fdry. Co., Peoples Natl. Bank Bldg., Lynchburg, Va., $55.75 per ton.

Wis., Fond du Lac—Furnishing 12,150 lin.ft. 4- to 20-in. c.i. water pipe, to Amer. Cast Iron Pipe Co., 712 Plymouth Bldg., Minneapolis, Minn., $13,493. Noted Feb. 14.

Minn., Hibbing—For 7,000 ft. 6-in. mains connecting city system with fair grounds, to Phelps-Drake Co., 623 Metropolitan Life Bldg., Minneapolis, $15,000.

Minn., Rochester—Bd. Pub. Utilities, 395 tons c.i. pipe and 10 tons specials and fittings, to Amer. Cast Iron Pipe Co., 712 Plymouth Bldg., Minneapolis, $21,215; valves and boxes to Rensselaer Valve Co., 53 West Jackson Blvd., Chicago, $1,304. Noted Feb. 7.

Minn., St. Paul — H. W. Austin, 2 synchronous motor-driven centrifugal pumps for Water Dept., to Commonwealth Electric Co., 417 Bway., $10,005.

Mo., Kansas City — Fire & Water Bd., 7,692 ft. 8 in. and 8,537 ft. 12 in. c.i. pipe, to Natl. Cast Iron Pipe Co., 903 Commerce Bldg., $28,548; 4,000 tons 36 in. and 200 tons 20 in. Class C, and 34 tons Class C and D pipe, to U. S. Cast Iron Pipe & Fdry. Co., 604 Interstate Bldg., $319,971. Noted Jan. 10.

Tex., Corsicana — Spillway, to Mitchell Constr. Co., Abilene, $48,684; filters, to International Filter Co., 333 West 25th Pl., Chicago, $21,200. Noted Jan. 24.

Okla., Canton—New waterworks system, incl. well, tower, pump and motor, and 13,150 ft. 2- to 6-in. c.i. pipe, 10 x 26 ft. brick building, to H. H. Dohe, Okeene, cost plus $2,000. Engrs. est. $30,000. Noted Nov. 8.

Ont., Toronto—Furnishing 60,000 lin.ft. c.i. pipe, 12 ft. lengths, for waterworks, to Natl. Iron Corp., Ltd., Cherry St., 3 in. $7.35 per length, 4 in. $8.10, 6 in. $13.50, 8 in. $18.25, 10 in. $25.65, 12 in. $34.75.

Ont., Toronto—Will repair and maintain water distribution system incl. c.i. pipe, valves, hydrants, etc., by day labor. $380,000. R. C. Harris, city engr.

Sewers

PROPOSED WORK

R. I., Woonsocket—Plans new sewers in various sections of city. $500,000. Address City Eng. Dept., City Hall.

Conn., Hamden—Plans sewerage system throughout town. W. Wright, Town Hall, town engr.

Pa., Phila.—Having plans prepared 35,765 ft. sewers in Erie, Cranford, 76th, Mifflin, Wissahickon, Ithan, Tioga, Sanger, Tyson, Cottman, Winghocking, Government and Bingham Aves., J. Pocker, Oak Lane, Venango, Rock Run, Oakland, Benner and 69th Sts. $2,360,000.

D. C., Wash. — Washington Sanitary Sewerage Comn. plans to expend $500,000 for completing sewerage system in Maryland just outside Dist. of Columbia line.

Fla., Cocoa — Election Mar. 3, $75,000 bonds, sewerage system. Noted Dec. 27.

Fla., Miami Beach — Plans sanitary sewers, S R 20, $38,847, S R 18-19, $42,460; storm sewers, S R 15, 16 and 17, Meridan Ave., 10th and 3rd Sts., $56,113. Van Alen Haines, city mgr.

O., Cincinnati—See "Streets and Roads."

O., Columbus—See "Streets and Roads."

Ill., Lake Zurich—Having preliminary plans prepared modified Imhoff tank with either sand or stone filters, $17,500; also plans extending sewerage system. James Anderson Co., Inc., Lake Forest, engrs.

Wis., Madison—Making plans sewage disposal plant, incl. grit chamber, grease extractor, Imhoff tanks, sludge beds, dosing tanks, sprinkling filters, secondary settling tank. $840,000. Pearse Greel & Hanson, 39 West Adams St., Chicago, engrs.

Ia., Edgewood—Preparing plans sanitary sewerage system, incl. 3.5 mi. 8- to 10-in. pipe, disposal plant. $40,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Ia., Oelwein—Rejected bids sewage disposal plant. Will readvertise. Exceeds $25,000. E. B. Tourtellot, Oelwein, engr.

Minn., St. Paul—Rejected bids sewer in West 7th St. from Palmer St. to Albion Ave. Noted Feb. 14.

Ark., Russellville—See "Waterworks."

Tex., Dallas—J. M. Preston, Sumpter Bldg., and associates, had plans prepared sanitary sewers in Trinity Heights, Edgemont, etc. $25,000. J. M. Preston, engr.

Tex., Floydada—Election Mar. 18, $50,000 bonds complete sewerage system and disposal plant; $10,000 bonds waterworks. G. Baker, First Natl. Bank Bldg., Oklahoma City, Okla., engr. Noted Dec. 6.

Tex., Paris—Rejected bids Imhoff sewage disposal plant. Will readvertise. $26,500. M. C. Welborn, city engr.

Ont., Bridgeburg—Having plans prepared 16,000 ft. sanitary sewers, vitr. tile pipe 8 in. up. $60,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Long Branch—Etobicoke Twp. (Islington) having plans prepared sewerage system in this vicinity, 60,000 lin.ft. vitr. tile pipe, 8 in. up. $250,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. Y., Buffalo—Mar. 1, by J. F. Burke, 577 Ellicott Sq. Bldg., 10,300 ft. 10- to 24-in. sewers in subdivision streets north of Kensington Ave. To exceed $50,000. G. C. Diehl, 577 Ellicott Sq. Bldg., engr.

N. Y., Long Island City—Mar. 4, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Cuthbert Pl., Bleeker, Westside and 110th Sts., Atlantic and Metropolitan Aves., etc.

N. J., Millville — Mar. 7, by Bd. City Comrs., sanitary sewer extensions Numbers 14 and 15, 10,152 ft. 4- to 12-in. vitr. terra cotta pipe, etc. N. B. Wade, city engr.

Pa., Ellwood City — Mar. 10, by Boro Council, sewage disposal plant and intercepting sewerage system. A. Main, engr.; adv. E. N.-R. Feb. 28.

Wis., Milwaukee — Mar. 7, by J. H. Fowles, secy. Sewerage Comn., 508 Market St., superstructure 2 story, 220 x 330 ft., filter and dryer house, brick, steel and concrete, on Jones Island. Steel work and foundation previously let.

Wis., White Fish Bay—Mar. 3, by W. Volkmann, village clk., sewers and water house connections in 9 streets, 8 in. sanitary sewers in 9 streets, 10 in. storm sewers in 2 streets, vitr. or concrete pipe; 6 in c.i. mains in 5 streets. $70,000-$75,000. T. F. Buckley, Village Hall, engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Feb. 14, sewers in **(1)** East 9th St. engrs. est. $28,143 **(2)** East 18th St. $16,353 **(3)** East 7th St. $8,538 **(4)** Empire Blvd. $2,376 **(5)** West 4th St. $65,885 **(6)** New Utrecht Ave. $10,473 **(7)** 69th St. $5,403 **(8)** Vanderbilt Ave. $16,664 **(9)** Hegeman Ave. $1,400 **(10)** Douglass St. $400 **(11)** Junius St. $400, from A. Mannino, 263 86th St., **(1)** 79½% engrs. est. **(3)** 81% **(4)** 110 % **(5)** 77% **(6)** 86% **(7)** 85%; Fenlen Constr. Co., **(2)** 87%; C. F. Vacharas, 645 40th St., **(8)** 113% **(9)** 84.3% **(10)** 85.3%; Manmill Constr. Co., 2035 Douglass St., **(11)** 89.2%. Noted Feb. 14.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Feb. 25, sewers **(1)** Cooper Ave. **(2)** Market St. **(3)** 85th St. **(4)** 101st St. **(5)** 25th St., from J. W. Murphy, 8866 26th St., Brooklyn, **(1a)** $11,751; Kennedy & Smith, Inc., 93 Amity St., Flushing, **(1b)** $10,030 **(2)** $8,913; D. A. Gross **(3)** $1,976; P. J.

Sewers (Continued)

Greenhoff Eng. Co., (4) $2,345; Merritt-Chapman & Scott Corp., 17 Battery Pl., New York, (5) $121,971. Noted Feb. 21.

Pa., Phila.—Dept. Pub. Wks., Bureau Surveys, removing old sewer and building new sewer in Courtland St., from J. J. McHugh, 1617 Race St., $367,955. Noted Feb. 14.

O., Cleveland—Cuyahoga Co. 9,000 ft. 8-42 in. vitr. tile sewer in Impvt. 36 of Co. Sewer Dist. 1, from Gallagher & Burke Constr. Co., Rockefeller Bldg., $60,510.

Neb., Fremont—Mar. 4, furnishing 9 mi. 27 in. vitr. or cement pipe. Bids later for laying. L. M. Roessler, city engr. Burns & McDonnell Eng. Co., Interstate Bldg., Kansas City, Mo., consult. engrs. Noted Feb. 21.

Nev., Reno—City Council receiving bids and opens same about Mar. 10, sewers. $35,000. H. Chism, city engr.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in 115th and Palmetto Sts., to J. Gallo, 203 Division St., Brooklyn, $58,953 and $3,775 respectively; 85th Rd., to D. A. Gross, $2,364; Way Ave., to Duit, Inc., $16,946. Noted Feb. 21.

D. C., Wash. — Washington Suburban Sanitary Comn., Evans Bldg., New York Ave., pipe and fittings to U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., Phila., $100,000, also special castings, pipe, etc. $58,000; terra cotta pipe to Baltimore Clay Products Co., 2123 West Lafayette Ave., Baltimore, Md., $46,406.

Wis., Milwauke — Sewerage Comn., 508 Market St., intercepting sewer extension in Commerce St., to G. E. Zimmerman, 3402 Grand Ave., 2,400 ft. 30 in. concrete sewer $28.90, 952 ft. 24 in. terra cotta pipe $28.50, 110 vertical ft. manholes $22. Noted Feb. 7.

Wis., Milwaukee—Metropolitan Sewerage Comn., 508 Market St., Cudahy Sewer Sect. 3, Barland Allerton and Lynn Aves., concrete pipe to H. Hohensee, Ludington Ave., Wauwatosa, $273,229; main sewer to No. 2 outfall in Shorewood and Whitefish Bay, Milwaukee Co., to E. M. Gillet, 673 25th St., $15,641. Noted Feb. 7 under Wisconsin.

Tex., Big Springs—For 50,000 ft. 6- to 12-in. sewers, to Irick and Fridell, Plainview, $42,177. Noted Jan. 31.

Tex., Dallas—J. P. Stephenson, c/o Koch & Fowler, engrs., Central Bank Bldg., sewer system in Stephenson Addition, to W. G. Cullum, 4018 Gilbert St., $34,000.

Tex., Houston — Will build Southmore storm sewers, by day labor. $175,000. J. C. McVea, city engr. Noted Feb. 7.

Calif., Oakland—See Streets and Roads.

Ont., Guelph—Will build 16,000 ft. vitr. tile storm and sanitary sewers, 8 in. up, in several streets, by day labor. $65,000. H. S. Nicklin, city engr.

Ont., Toronto — Constructing sewers to Hyland Constr. Co., 72 St., Mary St., sewer in Belsize Dr. $6,910, Tilson Rd. $696; to A. Cavotti, 257 Euclid Ave., Pleasant Blvd. $9,058, Cleveland St. $1,750; to R. Worthington, 57 Lascelles Blvd., Landsdowne Ave. $22,433, Tyrell Ave. $34,983; to W. E. Taylor, 22 Falcon St., St. Clair Ave. $5,927, Douglas Dr. $2,279, Boynton Rd. $1,532, Cheston Rd. $1,597; Thurston Rd. $1,675; to J. H. McKnight Constr. Co., 88 St. Davids Ave., Belcourt Rd. $1,709, outlet to Belsize Dr. $595, Rosethorn Ave. $1,525; to P. Lecastro, 1423 Dufferin St., Garden Ave. $2,170, Heath St. $5,471; to Grant Contg. Co., 50 Front St. E., Manor Rd. $7,298, Tilson Rd. outlet $298; to Murphy Contg. Co., 8 Wychwood Ave., Broadview Ave. $3,365, St. Clair Ave. W. $3,972.

Bridges

PROPOSED WORK

N. Y., Albany — Making plans viaduct across Normanskill Creek. $250,000. J. G. Brennen, city engr.

N. Y., Lackawanna (Buffalo P. O.)—Plans 1,900 ft. viaduct, 70 ft., over Ridge Rd. between Kirby and Cleveland Aves. $1,000,000. Engineer not selected.

N. Y., Lockport — City and New York Central R.R., Grand Central Terminal, New York City, plan viaduct over Transit St. $150,000. G. A. Noren, Grand Central Terminal, New York City, engr.

Pa., Altoona—Plans 140 ft. concrete and steel bridge, 40 ft., over Pennsylvania R.R. tracks at 17th St. $100,000.

Ohio and West Virginia — Interstate Bridge Co., Bellaire, O., plans steel truss highway bridge over Ohio River, between Bellaire, O., and Benwood, W. Va. To exceed $100,000.

Wis., Monroe—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, plans one 60 ft. steel deck plate girder, two 20 ft. rein.-con. slab, eight 40 ft., one 35 ft. and two 28 ft. rein.-con. deck girder spans, etc., over Salt Creek and tracks of Missouri, Kansas & Texas R.R., Howard Co.; one 40 ft. deck girder, on Sta. 49 plus 65, two 30 ft. rein.-con. deck girder spans on Sta. 82 plus 76, six 20 ft. and one 40 ft. rein.-con. deck girder spans, on Sta. 93 plus 30, all over stream, Dade Co.; one 35 ft. rein.-con. deck girder span, on Sta. 14 plus 70, and one 60 ft. steel truss span on Sta. 152 plus 40, Benton Co.; one 60 ft. steel truss span over Muddy Creek, Linn Co.; one 35 ft. rein.-con. deck girder span, etc., over Sequiota Creek, Greene Co.; one 10 ft. rein.-con. slab span over Drainage Ditch, Scott Co.; three 40 ft. rein.-con. deck girder spans over Drainage Ditch, Perry Co.; one 90 ft. steel truss and four 25 ft. I-beam spans over Salt Fork Creek, Saline Co.; two 24 ft. concrete deck girder spans over Brushy Creek, Carter Co. B. H. Piepmeier, state highway engr.

Ark., St. Francis—St. Louis Southwestern R.R., Ry. Exch. Bldg., St. Louis, Mo., plans bridge over St. Francis River, here. $50,000. W. S. Hanley, Tyler, ch. engr.

BIDS DESIRED

Virginia—See "Streets and Roads."

Alabama—Mar. 19, by State Hy. Dept., Montgomery, 802.5 ft. steel superstructure, five 157 ft. 6 in. spans, over Shoal Creek between Killen and Florence, Project 144, Sect. A, Lauderdale Co. W. S. Keller, state highway engr.

Miss., Greenwood — Mar. 19, by Bd. Supervs. La Flore Co., Court House, 290 ft. structural steel swing span bridge over Yazoo River, part Federal Aid Project 156, incl. 1,965 sq.yd. rock asphalt paving. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Miss., Luke—See "Streets and Roads."

Miss., Starkville — See "Streets and Roads."

Kan., Oskaloosa—Mar. 21, by Clerk Jefferson Co., one 220 ft. steel truss span, rein.-con. abutments, ½ mi. from Perry. Earth approach and fill to be let under separate contract. Dodd & Finney, 216 West 6th St., Topeka, engrs. Noted Feb. 21.

Okla., Miami—Mar. 4, by Clerk Ottawa Co. four 40 ft. rein.-con. trestles. $28,000. W. C. Burnham, Capitol Bldg., Oklahoma City, engr.

Wyoming—Mar. 6, by State Hy. Comn., Cheyenne, Federal Aid Project 143, four concrete bridges, 26 to 30 ft. spans, Buffalo-Sheridan Rd., Johnson Co., $25,000; Federal Aid Project 155, eight treated timber, 19 to 83 ft. spans, (State furnishes treated timber) Moorcroft-Carlile Rd., Crook Co., $25,000. J. F. Seiler, Cheyenne, engr.

Wyoming—See "Streets and Roads."

Tex., Austin—See "Streets and Roads."

New Mexico—See "Streets and Roads."

BIDS RECEIVED

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, concrete, steel and timber bridge incl. 114 ft. steel spans and 18 wooden spans, over Roaring River, State Project 135, Jackson Co., to General Constr. Co., 808 Planters Bldg., St. Louis, Mo., $44,734; 14 rein.-con. bridges each over 20 ft. span, Federal Aid Project 100, Haywood Co., to Parham Constr. Co., East St. Louis, Ill., $233,892; two 30 ft. span concrete bridge over McBrides Branch, State Project 151, Coffee Co., to J. B. Ramsey, Lawrenceburg, $6,060; reconstructing steel bridge, one 220 ft. and two 144 ft. spans, over Clinch River, State Project 152, Anderson Co., to Vincennes Bridge Co., Vincennes, Ind., $9,808; rein.-con. overhead grade separation over Southern R.R. near Knoxville, Federal Aid Project 41, Sect. C, Knox Co., to Emory Constr. Co., Knoxville, $18,151. Noted Jan. 24.

Minn., Mendota — A. P. Erickson, aud. Hennepin Co. (Minneapolis), Feb. 4, 4,100 ft. bridge over Minnesota River, 45-ft. roadway with two 6-ft. sidewalks, design (a) concrete arch (b) concrete pier, steel deck trusses and concrete deck, for Hennepin and Dakota Counties, from Greiling Bros. Co., 100 Blk. E. Walnut St., Green Bay, Wis., (a) $1,766,000 (b) $1,989,238. Noted Jan. 24.

CONTRACTS AWARDED

S. C., Abbeville—Abbeville Co., bridges on Federal Aid Project 221, includes two rein.-con. bridges, one rein.-con. steel and creosoted timber bridge and two creosoted timber bridges, to P. S. Minus, Spartanburg, $47,302. Noted Jan. 31.

S. C., Bishopville—Lee Co., 3 bridges over Lynches River, on Federal Aid Project 67-C, incl. 3,500 lin.ft. untreated and 1,500 lin.ft. treated piling, 629 cu.yd. concrete, 91,000 lb. reinforcing and 150,000 lb. structural steel, 1,429 sq.yd. paving, etc., to General Road & Drainage Constr. Co., Columbia, $51,033 Noted Feb. 14 under "Streets and Roads."

Florida—Florida Western & Northern Ry. Co., c/o Seaboard Air Line, Continental Bldg., Baltimore, Md., to Jefferson Constr. Co., Peoples Bldg., Charleston, S. C., 1,300 ft. bridge over Kissimmee River $50,000, and 200 ft. bridge over St. Lucie Canal, $25,000.

Ohio—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, two 80 ft. steel truss and two 30 ft. I-beam spans, 3 rein.-con. piers, etc., over Eleven Points River, also two 70 ft. steel truss spans, 3 rein.-con. piers, etc., over Middle Fork River, Oregon Co., to Campbell Bros., 630 Kemper Bldg., Kansas City, $17,805 and $14,133 respectively; one 160 ft. and two 120 ft. steel truss spans, 4 rein.-con., piers, etc., over Grand River on Sta. 602 plus 80, also thirty-three 20 ft. I-beam spans, etc., on Sta. 597 plus 00, over overflow of Grand River, Livingston Co., to R. P. Harper Constr. Co., Leona, Kan., $28,969 and $71,049 respectively; one 37 ft. rein.-con. deck girder, also two 20 ft. and three 18 ft. rein.-con. slab spans, etc., over tracks of Chicago & Alton R.R., Jackson Co., to Carrothers Co., 310 Walsix Bldg., Kansas City, $8,612; three 30 ft. and two 60 ft. rein.-con. arch spans, 4 rein.-con. piers, etc., over Current River, Shannon Co., to M. E. Gillioz, Monett, $62,964; one 130 ft. steel truss span, etc., over tracks of St. Louis & San Francisco R.R., Phelps Co., to L. E. Wagner, 4615 Tower Grove St., St. Louis, $3,228. Noted Feb. 7.

Ont., Lakefield—Peterboro Co. Council, one 99 ft. and one 74 ft. spandrel arches, rein.-con., 20 ft. roadway, to J. J. McNab, Trenton, $20,993. County will wreck old bridge and supply 24 tons reinforcing steel, for which bids will be asked.

Dams

PROPOSED WORK

Conn., North Branford (R. D. Branford)—See "Waterworks."

Wash., Lake Cushman—See "Unclassified."

CONTRACTS AWARDED

Pa., Phila.—Dir. Pub. Wks., Room 216, City Hall, overflow dam, 1,200 ft. long, 35 ft. high, in southern section of Fairmount Park across Schuylkill River, to Seeds & Durham, 6320 Wissahickon Ave., $604,650. Noted Feb. 21.

Railways

PROPOSED WORK

Ontario—Ottawa Electric Ry., Albert St., Ottawa, plans to purchase 15 double track electric street railway cars, also 1 mi. double track. F. D. Burpee, 248 Albert St., Ottawa, genl. mgr.

Ontario—Toronto Transportation Comn., Ryrie Bldg., Toronto, plans extending electric street car service on Gerrard St., Toronto, 1½ mi. double track, 100 lb. rails. $200,000. H. H. Couzens, ch. engr.

CONTRACTS AWARDED

Florida—Florida Western & Northern Ry. Co., c/o Seaboard Air Line, Continental Bldg., Baltimore, Md., 205 mi. railroad from Coleman south east to coast, to Jefferson Constr. Co., Peoples Bldg., Charleston, S. C., $4,000,000.

Ontario—Toronto Transportation Comn., Ryrie Bldg., Toronto, will build car loop north of Rosedale Bridge, 900 ft. single track electric line on concrete base, by day labor. $25,000. H. H. Couzens, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

La., Shrewsburg — A. T. Christine, member of 4th Jefferson D. D., which is undertaking reclamation 30,000 acres land north of New Orleans, obtained injunction from Judge F. Middleton, forbidding letting of contracts, bids for which were to be opened Feb. 12. Noted Feb. 7.

Minn., Minneapolis — Bd. Park Comrs., City Hall, rejected bids dredging in Powderhorn Lake, 140,000 cu.yd. Will revise plans and readvertise. J. A. Ridgway, secy. Noted Feb. 21.

Excavation, Drainage, Irrigation (Continued)

Mont., Harlowton — Harlowton-Durand Irrigation Dist., A. W. Verheren, dist. mgr., will probably take bids about Apr. 10, 110 mi. open ditches, 1,500,000 cu.yd. excav. $135,000.

Missouri — Little River D. D., Cape Girardeau plans 25,000,000 cu.yd. excav. in 175 mi. of cleanout work and 125 mi. drainage ditches, levees, etc., in various counties. $4,000,000. J. W. Hummelberger, Cape Girardeau, pres. Morgen Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs.

Ont., Chatham—Dept. Pub. Wks., Parliament Bldg., Ottawa, having surveys made of Thames River from here to mouth, with object of dredging same for canal traffic, about 15 mi. involved. $100,000. K. M. Cameron, ch. engr.

Ont., Saulte Ste. Marie—Dept. Pub. Wks., Parliament Bldgs., Ottawa, plans to spend $100,000 or dredge work in St. Marys River, here. K. M. Cameron, ch. engr.

BIDS DESIRED

N. J., Jersey City—Mar. 13, by Mosquito Extermination Comn., Bergen and Sip Aves., Jersey City, 65,000 ft. more or less new drainage ditches, also cleaning and repairing 125,000 ft., more or less old drainage ditches, on salt marsh meadows situate, lying and being within Hudson Co. L. E. Jackson, secy.

N. C., La Grange — Mar 1, by Comrs. Wayne Co. D. D. 1, cleaning out and cutting approximately 15 mi. dredge ditches, containing 200,000 cu.yd. suitable for dragline or floating dredge. W. D. Alexander, 319 West 5th St., Charlotte, engr.

Wis., Oconto — Mar. 18, by Pensaukee D. D. at office of Circuit Court, Courthouse, Green Bay, ditching and tiling in Oconto and Shawnee Counties involving 1,068,000 cu.yd. excav. average depth 7 ft., 107,269 ft. 8- to 30-in. tiling, average depth 5½ ft., 22 bulkheads, 296 acres to be cleared of brush and light timber. $175,000-$200,000.

BIDS RECEIVED

Miss., Charleston—Matthews Bayou D.D., 9 mi. ditches, 108,000 cu.yd., and 5 mi. levee, 73,000 cu.yd., from D. E. Barnett & Co., Memphis, Tenn., $0.1697 per cu.yd. on all classes of work. Noted Feb. 7 under Unclassified.

Streets and Roads

PROPOSED WORK

N. Y., Tonawanda—Making plans paving and repaving various streets, vitr. brick and asphalt. To exceed $35,000. T. Barrally, City Hall, engr

N. Y., Watertown—Making plans paving 7 streets. $150,000. P. B. Sutton, city engr.

New Jersey—State Hy. Dept., Trenton, plans 16 mi. detour Route 9 between Whitehouse and North Branch, Hunterdon Co. $28,840. W. G. Sloan, state highway engr.

N. J., Dover—Morris Twp. plans 1.46 mi. Dover-Mt. Freedom Rd., 3 in. slag penetration on 6 in. rock bottom. State will appropriate toward cost. Engineer not selected.

Pa., Altoona—Plans to resurface pavements, brick and concrete. $200,000. H. J. Baum, city engr.

Pa., Doylestown—Plans to repair various streets. $30,000. C. Boyer, Siegler Bldg., burgess.

W. Va., Parkersburg—Plans vitr. brick paving Washington Ave., et. al. $80,000. J. V. Dunbar, Parkersburg, engr.

N. C., Maxton—Mayor takes bids about Mar. 10, hard surfacing various streets. $35,000. W. H. Booker, Charlotte, engr.

N. C., Morganton—S. W. Pipkin, mayor, takes bids about Mar. 1, hard surfacing streets. $150,000. W. H. Booker, Charlotte, consult. engr. Noted Feb. 21.

S. C., McCall—Plans hard surfacing various streets. $100,000.

Ala., Anniston—City takes bids about April 1, asphalt paving, concrete, guttering and curbing 1.5 mi. Oxford Rd., 20 ft. $150,000. H. P. Harris, city engr.

Ala., Birmingham—City takes bids about Apr. 1, paving 10 blocks 46th and Ensley Sts., 2 in. asphaltic concrete on 5 in. concrete. $26,000. A. J. Hawkins, city engr.

Tenn., Nashville—Plans paving 8 blocks Meridian St., probably granite block and rock asphalt. W. W. Southgate, city engr.

Kentucky—State Hy. Dept., Nashville, plans grading and surfacing with waterbound macadam, or rein.-con., 5 mi. Lexington-Covington Rd., 18 ft., Federal Aid Project 115, Sect. 2, Scott Co. J. S. Boggs, state highway engr.

Ky., Fulton—Fulton Co. voted $450,000 for roads. State will furnish its prorata and work will be in charge of State Highway Dept., Frankfort. Noted Jan. 31.

Ky., Owensboro—Plans resurfacing and constructing 4 mi. streets. $50,000.

Ohio—Dept. Highway and Pub. Wks., Columbus, cancelled bids Feb. 15, grading, bridging and paving 5.28 mi. roads in Columbiana and Cuyahoga Counties. Noted Jan. 31.

O., Canton—Takes bids in spring paving Wells Ave., $27,000; resurfacing and widening 3rd St. N. W., $28,000. W. E. Sarver, City Hall, engr.

O., Cincinnati—Rex Realty Co., 16 East 7th St., plans approximately 2 mi. concrete streets and sewers, for subdivision of 70 acres, on Reading Rd. $200,000. L. G. Leiber, 16 East 7th St., engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 12,724 ft. Torrence Rd., Fulton St., Clifton and 15th Aves., 26 ft., brick $148,831, asphalt $123,243; 3,111 ft. Oakwood Ave., 30 ft., brick $77,604, asphalt $62,796. R. H. Simpson, city engr.

Mich., Detroit — Wayne Co. had plans prepared 9 in. concrete and grading 9 mi. Telegraph Rd. from Dearborn to Redford, 20 ft.; Michigan Rd. from west limits of Dearborn to Telegraph Rd., double roadway each 24 ft.; 18 mi. Plymouth Rd. from here to Plymouth, 20 ft., E. N. Hines, Real Estate Exch. Bldg., chn. Rd. Comn.

Ill., River Forest—Soon takes bids improving Lake St., removing 14,500 sq.yd. vitr. brick, laying 20,500 sq.yd. asphalt on concrete, 14,750 lin.ft. integral curb, grading 14,500 sq.yd. existing macadam foundation, etc. $129,161. Address City Engineer, c/o A. S. Hatch, clk.

Ill., Rockford—Winnebago Co. rejected bids rein.-con. paving Grant Highway south to Seward. $120,000. Will readvertise shortly. A. R. Carter, co. supt.

Wis., La Crosse—Soon takes bids grading 15 streets and various alleys, 85,000 cu.yd. C. C. Congdon, City Hall, engr.

Ia., Iowa City—Plans paving 15,000 sq. yd. various streets. $40,000. G. J. Dohrer, clk.

Ia., Marshalltown—Plans paving various streets, 105,000 sq.yd. concrete, rein.-con., vibrolithic concrete or reinforced vibrolithic. O. G. Herm, city engr.

Minn., Moorhead—Plans paving 6 blocks 1st Ave. N. between 8th and 14th Sts. $25,000. R. G. Price, city clk.

Kan., Newton—Soon takes bids grading and paving with rein.-con. or brick on concrete, ½ mi. Kansas Ave., 26 ft. $25,000.

Kan., Oberlin—Decatur Co. soon takes bids improving 10.472 mi. Federal Aid Project 165, Sect. D, 28 ft. E. W. Wooley Co., Topeka, engrs.

Kan., Troy — Doniphan Co. soon takes bids brick or concrete paving 1 mi. Federal Aid Project 169, Sect. E, 18 to 60 ft. Kansas Eng. Co., Topeka, engrs. Noted Feb. 7.

Kan., Wichita—City Comn., opens bids about Mar. 5, paving, etc., 41 blocks, 460 sq.yd. vertical fibre brick, 21,870 sq.yd. asphaltic concrete, 38,604 sq.yd. concrete, 3,772 sq.yd. sheet asphalt, 20,199 cu.yd. excav., etc. $250,000. P. L. Brockway, City Bldg., engr. Noted Oct. 4.

N. D., Valley City — Plans to pave 7 blocks Front St. $25,000. W. T. Craswell, clk.

Missouri—State Hy. Dept., Jefferson City, plans grading 38.079 mi. roads, 30 ft., in Worth, Putnam, Limm, Benton, Pulaski, Dade, Vernon, McDonald and Greene Counties; grading and graveling 5 mi. Benton-Charleston Rd., 6 ft., Scott Co.; graveling 13.432 mi. roads, 16 ft., in Sullivan, Lincoln, Stoddard, St. Genevieve, Jefferson, and Perry Counties; graveling 5 mi. Jefferson City-Linn Creek Rd., 12 ft., Miller Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis — Plans granite curbing and improving 3,215 sq.yd. Arco St., willite, warrenite, asphalt or asphaltic concrete on concrete, $12,300-$14,200; removing existing brick and concrete base, repairing curb and gutter, and resurfacing 9,435 sq.yd. 18th St., from Lafayette to Chouteau Sts., $43,000-$49,600, also 6,100 ft. 18th St. from Russell to Lafayette Sts., $27,900-$32,400, warrenite, asphalt, willite or vitr. brick on concrete; concrete curbing, guttering and reconstructing 10,205 sq.yd. Lafayette St, $52,200-$56,800, also 10,450 sq.yd. Detonty St. $50,900-$56,000, willite, warrenite or asphalt on concrete; reconstructing and surfacing 5,760 sq.yd. Magnolia Ave., willite, warrenite, asphalt or vitr. brick on concrete, $30,800-$35,300; reconstructing 10,320 sq.yd. Shenandoah St., vitr. brick or vibrolithic Portland cement concrete, $50,700-$58,800; granite curbing and reconstructing 1,170 sq.yd. Potomac St., warrenite, willite, asphaltic concrete or vitr. brick on concrete, $5,500-$7,500. W. W. Horner, City Hall, engr.

Mo., St. Louis—Plans concrete curbing, guttering and paving 1 block Lorraine Ave., 30 ft., $12,600-$14,750; resurfacing 1 block Dickson St., 30 ft., $14,700-$16,300, 2 blocks Fairfax St., 30 ft., $25,350-$28,510, 2 blocks Francis St., 30 ft., $17,500-$20,350; reconstructing 3 blocks Howard St., 30 ft., $32,100-$35,650, 6 blocks Hall St., 36 ft., $52,000-$60,000, 2 blocks Thomas St., 36 ft., $25,900-$28,500, 1 block Randolph St., 30 ft., $15,060-$17,300, 3 blocks Bway., 36 ft., $130,150, all above either willite, warrenite, asphalt, asphaltic concrete or vitr. brick on concrete; recurbing, guttering and resurfacing 6,690 sq.yd. 25th St., $44,000; grading, concrete curbing, guttering and surfacing 4,320 sq.yd. San Francisco St., warrenite on concrete, $30,500. W. W. Horner, City Hall, engr.

Mo., St. Louis—Plans widening 9,000 ft. Olive St. from 60 ft. to 100 ft., $2,350,000, paving same to cost approximately $2,225,000 upwards. H. Bartholomew, Municipal Courts Bldg., engr.

Mo., St. Louis—Soon takes bids grading and paving 13,300 sq.yd. Bates St., Portland cement concrete with macadam shoulders. $55,000. W. W. Horner, city engr.

Mo., Trenton—Soon takes bids grading and paving 25 blocks Laclede, McPherson, 8th, Tindall, Lawn, Lulu, 9th and Princeton Sts., rein.-con. or brick on concrete. $100,000.

Ark., Ashdown—Little River Co. soon takes bids graveling 5 mi. road, Dist. 6, 18 ft. $25,000.

Ark., El Dorado—Soon takes bids grading; paving with rein.-con., concrete curbs and gutters on 5,700 ft. in Street Impvt. Dist. 17. $54,000. Ford & MacCrea, Gazette Bldg., Little Rock, engrs.

Ark., Pine Bluff — Making preliminary plans grading, curbing, guttering and paving with rein.-con. or asphaltic concrete 53,000 ft. in Dists. 71, 72, 73, 74 and 78. $500,000. F. R. Allen, City Hall, engr.

Ark., Russellville — Making preliminary plans grading and paving with rein.-con., asphaltic concrete or asphalt on concrete, etc. 3 mi. Jefferson, River, St. Mary, Torrence, Oak, Maple, Russell, David and Madison Sts., 26 and 28 ft.

Ark., Russellville—See "Waterworks."

Tex., Aransas Pass — San Patricio Co. voted $70,000 bonds surfacing State Highway 12. Address County Commissioners.

Tex., Austin—Travis Co. making plans grading 22 mi., and gravel surfacing 10 mi. Austin-Cameron Rd., 16 ft., $115,000; 3 mi. crushed stone base with bituminous topping, and 5 mi. gravel surfacing on Pflugerville Rd., 16 ft., $100,000. O. Leonard, Box 256, engr.

Tex., Austin—Travis Co. making plans grading and gravel surfacing 17.5 mi. Webbeville Rd., 16 ft. $125,000. O. Leonard, Box 256, engr.

Tex., Baird—Callahan Co. making plans and soon takes bids grading and surfacing with macadam base and bituminous topping 9.62 mi. State Highway 1, 18 ft., $248,000. T. H. Webb, co. engr.

Tex., Benjamin—Knox Co. election Mar. 1, $250,000 bonds, grading 65 mi. and surfacing with macadam or gravel 20 mi. State Highway 30, 24 ft. grading, 16 and 18 ft. surfacing, bonds to be supplemented by State and Federal Aid for construction 10 mi. State Highway 30. Total $300,000. N. S. Kilgore, co. judge.

Tex., Canton—Van Zandt Co. making plans and soon takes bids grading and concrete surfacing 7.14 mi. State Highway 15, 9 and 18 ft. $148,925. J. H. Bray, co. engr.

Tex., Colorado — Mitchell Co. election Mar. 22, $325,000 bonds concrete paving Bankhead Highway. $650,000. Federal aid. F. F. Dubose, co. engr.

Tex., Dallas—Plans 40 ft. concrete roadway or bituminous topping on concrete on Lancaster Blvd. $40,000. E. A. Kingsley, city engr.

Tex., Dallas—Dallas Co. making plans paving, etc., 2 mi. extension of Jefferson Ave. to Cockrell Hill. $40,000. Nagle Witt & Rollins, Court House, co. engrs.

Tex., Linden—Cass Co. making plans and soon takes bids grading and concrete paving 5 mi. State Highway 48, 9 ft. $113,165. F. E. Hess, Box 640, Medical Arts Bldg., Dallas, engr.

Tex., Menard—Menard Co. making plans improving 9 mi. State Highway 23, near

Streets and Roads (Continued)

Abilene, 18 ft. $140,000. H. J. Batjer, 833 Cedar St., Abilene, engr.

Tex., Vernon—Wilbarger Co. voted $150,000 bonds grading and rein.-con. paving 5 mi. State Highway 5, Harrold Precinct, 18 ft. $150,000. J. B. Nabors, co. engr.

California—Siskiyou Co. (Yreka), appropriated $25,000, Shasta Co. (Redding), $12,500, and United States Bureau of Public Rds., $12,500, for improving Sisson-Falls River Rd.

Calif., Oakland—Had plans prepared improving Monticello, Birdsdall Sts., etc., 84,899 sq.ft. grading, 3,170 lin.ft. concrete curb, 6,327 sq.ft. concrete gutter, 42,172 sq.ft. oil macadam, 1,420 lin.ft. of 6 in. sewer, etc. W. W. Harmon, city engr.

Calif., Pomona—Plans paving 5th St., to exceed $100,000; West Holt St., $28,000; resurfacing East Holt St., $20,000, widening same $11,186; resurfacing South Gary St., $11,550. F. C. Troehde, city engr.

Que., Outremont—Plans paving 3,375 ft. Hutchison St. from Bernard Ave. to St. Joseph Blvd., 30 ft., asphalt, $25,000, also 1,690 ft. Van Horne Ave. from Hutchison to Outremont Sts., 50 ft., $15,000. J. A. Duchastel, city mgr.

Ontario—Dept. Highways, 110 University Ave., Toronto, plans to expend $161,240 on provincial highways in Lambton Co., gravel and macadam. G. Hogarth, ch. engr.

Ont., Birch Cliff—Scarboro Twp. making plans 5 mi. gravel and macadam roads. $55,000. C. E. Fraser, Stop 19 Kingston Rd., Toronto, engr.

Ont., Bridgeburg—Plans to repave various streets, asphalt and brick, to exceed $25,000. J. T. James, ch. street com.

Ont., Chatham—Kent Co. plans improving streets in Thamesville, Bothwell and Highgate, macadam, gravel and concrete. $30,000. W. G. McGeorge, Chatham, engr.

Ont., Chatham—Kent Co. having plans prepared gravel and macadam roads. $172,300. W. G. McGeorge, Chatham, engr.

Ont., Elora—Wellington Co. (Guelph), plans 18,000 sq.yd. concrete pavements on main streets, here. $50,000.

Ont., Hamilton—Plans asphalt pavement on Sanford Ave. from Main to Barton Sts., with granite blocks between car tracks, $50,000; concrete sidewalks on Homeside Survey, Whitton Rd., Dromore and Haddon Crescents, also steps up mountain, $10,000. W. L. McFaul, city engr.

Ont., Kingston—Plans 30,000 yd. paving on Pine, York, Barrie, Queen, King, Sydenham, Ordanance, Johnson, William, Rideau, Earle and Frontenac Sts., asphalt on concrete with concrete curbs and gutters. $125,000. H. S. Dick, city engr.

Ont., Ottawa — Suburban Roads Comn., Thistle Bldg., plans paving Russel Rd., 16,000 sq.yd. waterbound macadam. $32,000. A. K. Hay, Thistle Bldg., engr.

Ont., Toronto—Plans 1,300 ft. concrete curbs on Lloyd Ave. $289 and Norwood Rd. $883; 60,000 sq.ft. concrete sidewalks on Blake St. $1,772, Dawes Rd. $1,183, Duplex Ave. $8,514, Norwood Rd. $479, Riverview Dr. $1,919, York Rd. $2,849, Evalyn Ave. $1,368, Henning Ave. $1,497, and Indiana Grove $778; 14,000 sq.yd. asphalt pavement on concrete, Hiltz Ave. $24,563, Swanick Ave. $9,223, Norwood Rd. $11,023, Weatherall Ave. $2,464, Henry St. $9,917, Lloyd Ave. $10,302, Enderby Rd. $9,223; 25,000 sq.yd. asphalt resurfacing Markham St. $20,526, St. Patrick St. $19,458, Robinson St. $8,095; asphaltic concrete on Dufferin St. $4,777, Langley Ave. $20,757; concrete pavement on lane east of Bond St. $3,120 and lane east of Victoria St. $7,685; grading Winthorpe Rd. $17,075, Cavendish St. $9,423, Harriet St. $922, Duplex Ave. $6,326, Foreman Ave. extension $22,000, Redpath Ave. extension $9,850, lane near Sarauren Ave. $9,600, lane near Marchmont Rd. $15,500, lane near Ulster St. $8,250, lane near Perth Ave. $4,400; widening Glen Echo Rd. $1,500. R. C. Harris, city engr.

BIDS DESIRED

New York—Mar. 14, by L. Grossman, comr. State Hy. Dept., Albany, constructing and reconstructing highways in Allegany, Chautauqua, Columbia, Livingston, Oneida, Putnam, Saratoga, Sullivan, Washington and Wyoming Counties; adv. E. N.-R. Feb. 28.

N. Y., Buffalo—Mar. 4, by Commissioner Pub. Wks., paving, repaving and widening Shirley Ave., Franklin, Pearl and Ellicott Sts., vitr. brick or asphalt on 6 in. concrete. To exceed $30,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., Buffalo—See "Material and Equipment."

N. Y., Corning — Mar. 4, by Bd. Pub. Wks. at office W. O. Drake, supt., for 6,386 sq.yd. pavement, etc.; adv. E. N.-R. Feb. 28.

N. Y., Syracuse—Mar. 12, by Sedgwick Farm Land Co., 401 Sunset Ave., curbing and 19,000 sq.yd. pavement on Sedgwick Farm tract. A. G. Card, 211½ Elk St., civil engr.; adv. E. N.-R. Feb. 28.

N. Y., White Plains—Mar. 10, at office of F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, improving Anderson Rd.; adv. E. N.-R. Feb. 28.

Pennsylvania — Mar. 17, by State Hy. Dept., Harrisburg, 52 mi. road in 14 counties; adv. E. N.-R. Feb. 28.

Pa., Cresson—Mar. 15, by J. A. Lynch, burgess Boro. Council, paving 6,000 ft. Park, Laurel, Pownell, Ashcroft, Columbia and Cathedral Aves., asphalt and brick. $40,000. D. W. Dillman, Altoona Trust Bldg., Altoona, engr. Noted Nov. 15.

Pa., Southmount — Mar. 10, by R. G. Wertz, secy. Boro Council, 5,000 ft. one course rein.-con. pavements on Shady Lane, Hochstein Rd., Harding and Cox Aves. $35,000. S. E. Dickey & Co., 809 Johnstown Trust Bldg., Johnstown, engrs.

Maryland—Mar. 11, by State Rds. Comn., Baltimore, oiling 7 sections of state highway, requiring 1,022,544 gal. J. N. Mackall, chn.; adv. E. N.-R. Feb. 28.

Virginia — Mar. 12, at office State Hy. Comn., Richmond, grading, bridging and surfacing with bituminous macadam 5.1 mi. Project F-118-B, Roanoke and Franklin Counties, 5 mi. Project F-118-E, Franklin Co., 5.1 mi. Project S-317, Mecklenburg Co.; topsoiling and bridging 5.4 mi. Project S-134-A, 5.2 mi. Project S-188-B, Lunenburg Co.; grading 9 mi. Project S-293, Giles Co., incl. 129 ft. rein.-con. bridge over Sinking Creek; concrete surfacing and bridging 1.8 mi. Project S-328, Elizabeth City Co., 3.3 mi. Project S-345, Princess Ann Co., 3.2 mi. Project S-349, Gloucester Co.; 2 steel truss and rein.-con. bridges and approaches over Craig Creek, 167 ft. and 142 ft. H. G. Shirley, highway comr.; adv. E. N.-R. Feb. 28.

W. Va., Buckhannon—Mar. 10, by State Rd. Comn. and Upshur Co., grading and bituminous macadam paving 5.89 mi. Cleveland Rd., Meade Dist., Project 3277, Sect. B. E. P. Phillips, clk.

Fla., Apalachicola — Mar. 4, by Comrs. Franklin Co., grading, etc., 19 mi. Sects. A, B and C of State Rd. 10. $26,000. G. K. Aemes, Apalachicola, engr.

Fla., St. Petersburg—Mar. 10, by Director of Finance, 400,000 sq.yd. of brick or asphalt block pavement with granite curb. S. S. Martin, acting dir.; adv. E. N.-R. Feb. 28.

Ala., Decatur—Mar. 15, by E. W. Collier, city clk., asphalt paving 25 blocks Pond, Canal, Line, Oak, Vine, Walnut, Ferry, Church, Railroad and West Vine Sts., 30 ft. $300,000. M. S. Bingham, Decatur, engr.

Miss., Greenwood—See "Bridges."

Miss., Iuka—Mar. 13, by Bd. Supervs. Tishomingo Co., Court House, grading, graveling, bridging, etc., 16.886 mi. Federal Aid Project 164, between Corinth and Alabama line, bridge includes 143,506 ft. creosoted lumber, 7,302 ft. untreated lumber, 58.72 cu.yd. concrete, 8,680 lb. reinforcing steel, etc.; bids same time for 28,227 tons road gravel, f.o.b. Iuka and Burnsville. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Miss., Starkville — Mar. 12, by Bd. Supervs. Okitbbeha Co., Court House, grading, graveling, bridging, etc., 10.562 mi. Federal Aid Project 167, from here to Ackerman, 18 ft., bridges over 20 ft. span incl. 82,656 ft. creosoted lumber, 4,080 ft. untreated lumber, 2,924 lin.ft. creosoted piling, 32,250 lb. reinforcing steel, 2,268 ft. piling, 1,600 ft. stone gutter; bids at same time furnishing gravel f.o.b. all points between Longview and Fulcher on Aberdeen branch I. C. H. C. Dietzer, c/o State Highway Dept., Jackson, engr.

Tenn., Livingston—Mar. 4, by Rd. Comn. Overton Co. 24 mi. limestone road. $300,000. J. Hargrove, chn.

Michigan—Mar. 10, by State Hy. Dept., Lansing, grading and surfacing 5.129 mi. Federal Aid Project 127, Sect. B, 28,042 cu.yd. excav., 60,121 sq.yd. asphalt, concrete or bituminous concrete, 2.827 mi. Federal Aid Project 127, Sect. A, 16,853 cu.yd. excav., 33,034 sq.yd. asphalt, concrete or bituminous concrete, and 8.482 mi. Federal Aid Project 15, Sect. B, 45,796 cu.yd. excav., 99,504 sq.yd. asphalt, concrete or bituminous concrete, Livingston Co. G. G. Dillman, ch. engr.

Ill., Geneva — Mar. 15, by I. F. Stern, engr., 38 South Dearborn St., Chicago, completing concrete paving State Aid Route 1-A, Sect. T-15d, 16,048 sq.yd. concrete, 707 cu.yd. Class A concrete, 14,205 sq.yd. earth shoulders, 4,886 cu.yd. earth excav., etc. Union Indemnity Co., 830 Union St., New Orleans, La., owners. Kane Co. will furnish cement.

Ill., Monticello—Mar. 12, by Bd. Supervs. Piatt Co., constructing 2 sections concrete road on State Aid Route 2. W. J. Day, supt. highways; adv. E. N.-R. Feb. 28.

Wis., Darlington—Mar. 4, by Lafayette Co. Hy. Com., crushed rock surfacing 3,500 cu.yd. commencing at village limits of Blanchardville south for 7 mi.; 2,600 yd. commencing at end concrete pavement on Louisa St. this city, extending east 3.5 mi.; 8,500 cu.yd. commencing at Center Hill and extending west 8.5 mi. on State Trunk 65; 2,500 cu.yd. commencing at end pavement on Ohio St., this city, extending north to Paper School House 2.25 mi.; State Trunk 20, commencing at Village limits of Gratoit to County Trunk Highway K; State Highway 20 commencing at west town line of Wayne and extending east. G. H. Priestley, comr.

Wis., Marshfield — Mar. 5, by J. A. Schindler, city clk., 30,359 sq.yd. paving, curbing, etc., concrete, asphaltic concrete or vitr. brick. $95,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, Minn., engr.

Wis., Monroe—Mar. 6, by Green Co. Hy. Com., grading and surfacing Illinois State Line-Monroe Rd. 2, Town Monroe, Sects. 16, 15, 10 and 3, incl., 16,000 cu.yd. excav., 49,126 sq.yd. concrete, etc.; Monroe-Argyle Rd., Towns Monroe and Jordan, 11,000 cu. yd. earth, 1,000 cu.yd. loose and 3,000 cu. yd. solid rock excav., 28,600 sq.yd. concrete; York Church Rd., Town York, 2,500 cu.yd. fine grading, 12,500 lin.ft. regular grading, 1,000 cu.yd. earth and 500 cu.yd. solid rock excav., 29,400 sq.yd. concrete; Broadhead-County Line Rd., Town Decatur, 700 cu.yd. excav., 5,400 sq.yd. concrete; Broadhead-Juda Rd., Towns Spring Grove and Jefferson, Sects. 4, 5, 6 and 1, 5,500 cu.yd. earth, 500 cu.yd. loose and 1,500 cu.yd. solid rock excav., 26,400 sq.yd. concrete; New-Glarus-Mt. Vernon Rd., Town New Glarus, Sects. 10, 3 and 4, 4,300 cu.yd. excav., 400 cu.yd. loose and 100 cu.yd. solid rock excav., 13,200 sq.yd. concrete; Sugar River Bridge, Village Albany, two 65 ft. concrete deck girder spans, etc. C. J. Smith, highway comr.

Wis., Wisconsin Rapids—Mar. 4, by Bd. Pub. Wks., F. G. Gilkey, city clk., concrete paving, etc., 8th St., 6,270 lin.ft. concrete curb and gutter, 2,030 cu.yd. earth excav., 10,501 sq.yd. concrete. E. H. Aldrich, City Hall, engr.

Wis., Wisconsin Rapids — Mar. 4, by Wood Co. Hy. Comn., at office State Hy. Comn., Citizens Natl. Bank Bldg., grading and surfacing Portage Rd., Town Grand Rapids, 4,638 sq.yd. concrete, etc.; Port Edwards-City Point Rd., Village Port Edwards, 4,361 cu.yd. earth, 2,168 cu.yd. borrow, 8,367 sq.yd. concrete, etc.; Rudolph-Wisconsin Rapids Rd., Town Rudolph, 2,639 cu.yd. earth and 598 cu.yd. loose rock excav., 6,347 sq.yd. concrete, etc.; Wisconsin Rapids-Sherry Rd., Town Sherry, 5,689 cu.yd. earth and 187 cu.yd. borrow excav., 18,686 sq.yd. concrete, etc. E. Morris, comr.

Ia., Indianola—Mar. 7, by Warren Co., excavating 8.357 mi. primary road, Project 44, Sect. A and Norwalk, 121,907 cu.yd. excav., 166,155 sta.yd. overhaul, etc. Iowa Hy. Comn., Ames, engrs.

Minn., St. Paul—Mar. 4, by H. W. Austin, city purch. agt., paving Mississippi River Blvd., 72,827 sq.yd. asphaltic concrete, 972 sq.yd. reset asphaltic concrete, 39,895 lb. reinforcing steel, 37,982 lin.ft. straight and 1,048 lin.ft. radius special concrete curb, 2,420 lin.ft. standard straight curb; Grand Ave. from Milton St. to Cretin Ave., 52,876 sq.yd. 3-in. vertical fiber brick, 315 sq.yd. creosoted wood blocks, 24,296 lin. ft. straight and 353 lin.ft. radius curb; Grand Ave. from Oakland Ave. to west line of Milton St., 16,247 sq. yd. 3-in. vertical fiber brick; Phalen Parkway-East Lake Shore Dr. from bath-house to Larpenteur Ave. and Phalen Park roadway from east Lake Shore Dr. at southerly end of lake to Maryland St., 2,980 sq.yd. 7-in. rein.-con., 16,598 sq.yd. Class A asphaltic concrete, 8,668 sq.yd. Class B asphaltic concrete; Park Ave. from Wabasha St. to Como Ave. and Como Ave. from Park Ave. to Rice St., 11,288 sq.yd. 3-in. vertical fiber brick, 2,461 lin.ft. straight and 494 lin.ft. radius concrete curb, etc.; George St. from Ohio to State Sts., 6,017 sq.yd. brick paving, 5,484 sq.yd. asphaltic concrete, 7,355 lin.ft. straight and 1,337 lin. ft. radius concrete curb. G. M. Shepard, city engr. Noted Nov. 15.

Streets and Roads (Continued)

Minn., St. Paul—Mar. 17, by G. J. Ries, aud. Ramsey Co., grading and paving Lexington Ave. from County Rd. A to County Rd. E, 18,736 cu.yd. excav., 49,832 sq.yd. concrete, 20 ft. wide, or 45,351 sq.yd. in two 9-ft. strips with 9-ft. macadam strip between. $175,000. P. N. Coates, 900 Guardian Life Bldg., surv.

Kan., Kansas City—Mar. 22, by Clerk Wyandotte Co., fine grading and concrete surfacing 0,873 mi. gaps on Federal Aid Project 102, 18 ft. O. K. Williams, co. engr.

S. D., Sioux Falls—Mar. 12, paving and curbing 23 blocks. $90,000. W. C. Leyse, city aud.

Wyoming—Mar. 6, by State Hy. Comn., Cheyenne, Federal Aid Project 64, grading 32.8 mi., 24 ft., and 4 timber bridges. Casper-Rawlins Rd., Carbon Co., $130,000, R. J. Templeton, Rock Springs, engr.; Federal Aid Project 143, grading and surfacing 5.84 mi., Buffalo-Sheridan Rd., Johnson Co., $50,000, C. R. Wood, Sheridan, engr.; Federal Aid Project 157, grading and surfacing 7.62 mi. Torrington-Henry Rd., Goshen Co., $475,000, F. S. Seward, Torrington, engr.; Federal Aid Project 155, grading 7.47 mi. Moorcroft-Carlisle Rd., Crook Co., $63,000, W. D. Keeney, Upton, engr.

Tex., Angleton—Brazoria Co. taking bids bituminous topping on shell and macadam 10.88 mi. State Highway 19, Federal Aid Project 367-B, Rd. Dist. 16, 18 ft. $206,000. H. W. Munson, Jr., Angleton, engr.

Tex., Ft. Worth—Mar. 4, by City Com., paving Vickery Blvd., bituminous type. $40,000. D. L. Lewis, city engr. Noted Feb. 7.

Okla., Comanche — Mar. 3, by L. C. Rankel, clk., grading and paving 4 blocks Oak Ave., 12,000 sq.yd. 7 in. concrete, 2,860 lin.ft. curbing, 3,700 cu.yd. excav. $51,500. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Feb. 21.

New Mexico — Mar. 10, by State Hy. Comn., Santa Fe, **(1)** Federal Aid Project 123, Otero Co., 18.241 mi. across the Mescalero Indian Reservation on Roswell-Alamogordo Rd., 96,488 cu.yd. Class 1 excav., 6,828 cu.yd. Class 3 excav., 19,198 cu.yd. Class 1 borrow, 12,949 sta.yd. overhaul, 49,392 cu.yd. 2 course crushed stone surfacing 6,295 cu.yd. sledge stone base, bridges, 313 cu.yd. concrete, 16,135 ft. wooden superstructure **(2)** Federal Aid Project 110, Luna Co., 13.974 mi. between Deming and Columbus, 26,859 cu.yd. Class 1 excav., 27,018 cu.yd. Class 1 borrow, 29,239 cu.yd. 2 course gravel surfacing, etc. **(3)** Federal Aid Project 63, Sect. B, Curry Co., 4.51 mi., between Clovis and Grady, 7,814 cu.yd. Class 1 excav., 7,832 cu.yd. Class 1 borrow, 11,969 cu.yd. 2 course caliche surfacing, etc. **(4)** Federal Aid Project 63, Sect. D, Curry Co., 11.959 mi., south of Grady, 18,160 cu.yd. Class 1 excav., 25,917 cu.yd. Class 1 borrow, 31,598 cu.yd. 2 course caliche surfacing, etc. **(5)** Federal Aid Project 63, Sect. E, Curry Co., 5.757 mi., immediately north of Clovis, 11,176 cu.yd. Class 1 excav., 9,138 cu.yd. Class 1 borrow, 15,279 cu.yd. two course caliche surfacing, etc. **(6)** Federal Aid Project 119, Bernalillo Co., 9.268 mi., between Albuquerque and Tijeras, 19,358 cu.yd. Class 1 and 2 excav., 13,179 cu.yd. Class 3 excav., 1,653 cu.yd. Class 1 borrow, 10,459 sta.yd. overhaul, 1,245 cu.yd. plating (decomposed granite), 17,223 cu.yd. cement concrete, 5,404 cu.yd. decomposed granite shoulders **(7)** Federal Aid Project 111, Santa Fe Co., 8.859 ci., between Pojuaque and Santa Cruz, 47,545 cu.yd. Class 1 excav., 1,465 cu.yd. Class 3 excav., 22,358 cu.yd. Class 1 borrow, 4,514 sta.yd. overhaul, 20,511 cu.yd. 2 course gravel surfacing, 13,014 cu.yd. plating, bridge 545 cu.yd. concrete, 105,118 lb. reinforcing steel, etc. **(8)** Federal Project 128 Rio Arriba Co., 6.204 mi. between Santa Cruz and Alcalde, 17,983 cu.yd. Class 1 excav., 17,834 cu.yd. Class 1 borrow, 1,077 sta.yd. overhaul, 14,214 cu.yd. two course gravel surfacing, 873 cu.yd. plating. J. A. French, state highway engr.

Washington — Mar. 11, by State Hy. Comn., Olympia, surfacing with crushed rock 7.1 mi. State Highway 3 from Indio to Pomona, Kittitas Co.; concrete paving 4.64 mi. State Rd. 9, Olympic Highway, and 6 mi. Olympic Highway from Perry Creek west, Thurston Co.; heavy clearing on 6.62 mi. State Rd. 8, from Queets River southeast, Grays Harbor-Jefferson Co. J. Allen, state highway engr.

Washington — Mar. 25, by State Hy. Comn., Olympia, grading and gravel surfacing 3 mi. Methow Valley Highway from Carlton Bridge north, Okanogan Co., 4 mi. Tonasket-San Poll Highway, Okanogan Co., 4 mi. State Rd. 22, south of Harvey, Stevens Co.; grading 4 mi. and gravel surfacing 10 mi. North Central Highway, Kittitas Co. J. Allen, state highway engr.

Calif., Colfax—Mar. 11, by City Trustees, improving various streets, 86,000 sq.ft. 5 in. concrete or 4 in. willite. J. A. Barieau, Auburn, engr.

Calif., Modesto—Mar. 10, Supervs. Stanislaus Co., improving 3½ mi. highway between Newman and Hills Ferry Bridge, incl. 273,654 sq.ft. concrete, 7,000 cu.yd. excav. J. H. Hoskins, co. surv. Noted Sept. 27.

Calif., Oroville—Mar. 8, by City Trustees, improving portion Lincoln, Oak and Pine Sts., 170,400 sq.ft. Warrenite bitulithic on 2½ in. asphalt concrete. S. J. Norris, city engr. Noted Jan. 10.

Ontario—Mar. 18, by S. L. Squire, deputy minister of highways, Toronto, 2.3 mi. asphalt pavement, Contr. 1019, $125,000; 0.95 mi. crushed stone concrete pavement, Contr. 1052, $40,000; 20.5 mi. washed gravel concrete pavement, Contrs. 1021, 1032 and 1050, $600,000; 0.6 mi. bituminous macadam Contr. 1023, $15,000; 39.8 mi. waterbound macadam Contrs. 1021 and 1022, 1024 to 1030 inclusive, $500,000; 130.3 mi. oil and repair surface treatment to macadam roads, Contrs 1031 to 1046 inclusive, $150,000; 7½ mi. grading Contrs. 1047 to 1049 inclusive $35,000; concrete bridges and culverts Contr. 1081, $15,000. G. Hogarth, 110 University Ave., Toronto, ch. engr.

BIDS RECEIVED

New Hampshire—State Hy. Dept., Concord, Mar. 15, rein.-con. paving 2.415 mi. Projects 158 and 175, in Derry, Rockingham Co., from O. Morino, Swampscott, Mass., $94,965; 0.994 mi. Projects 168 and 169 in Peterboro, Hillsboro Co., (a) all field stone (b) field stone and gravel, from R. E. Bull, 151 Harrison Ave., Fitchburg, Mass. (a) $27,643 (b) $26,798.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Feb. 20, sheet asphalt paving **(1)** Brooklyn Ave. **(2)** East 38th St. **(3)** Rutherford Pl. **(4)** Sheffield Ave., curbing and flagging **(5)** Ave. M **(6)** Ovington Ave. **(7)** Rutherford Pl., curbing and sheet asphalt paving **(8)** West 10th St., from Borough Asphalt Co., 1301 Metropolitan Ave., **(1)** $10,382 **(2)** $7,201 **(4)** $8,180; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., **(3)** $7,970 **(8)** $20,843; W. G. Grimm, **(5)** $409; W. J. McHale Contg. Co., 1250 Jefferson St., **(6)** $2,249; Galecor Contg. Co., 507 Greenwich St., New York City, **(7)** $3,663. Noted Feb. 14.

Pa., Phila.—Dept. Pub. Wks., Bureau Highways, asphalt paving Luzerne St. and asphalt repaving Wharton St., from Eastern Paving Co., 401 Colonial Trust Bldg., $14,163 and $46,651 respectively; repaving with asphalt on Chelten and Sprague Sts., also 54th St., from Barber Asphalt Paving Co., 239 North 30th St., $82,288 and $31,331 respectively; redressed granite block repaving on Callowhill St., from Union Paving Co., 30th and Locust Sts., $44,192; on Frankford and Front Sts., from F. Beckius, Jr., 4050 Kensington Ave., $64,140 and $25,459 respectively; on Germantown Ave., from J. F. Nolan & Sons, 64 Church Lane, $59,347; 7th Ave., from Acchione & Canuso, 804 South 12th St., $29,473; 60th St., from M. J. McCrudden, 1134 Real Estate Trust Bldg., $47,408. Noted Feb. 14.

Mo., St. Louis—Bd. Pub. Wks., 208 City Hall, Feb. 19, from Webb-Kunze Constr. Co., 5927 Fyler Ave., 6,016 sq.yd. Garrison St. $36,934, engrs. est. $37,300, 9,195 sq.yd. Laclede St. $65,917, $69,300, 2,260 sq.yd. Maffitt St. $19,678, $18,800, 4,640 sq.yd. Sacramento St. $29,612, $29,800, 4,475 sq.yd. Stoddard St., $27,612, $27,700, all above asphalt on concrete base; from Granite Bituminous Paving Co., Ry. Exch. Bldg., improving 11,550 sq.yd. Kossuth St. $59,487, $59,200, 1,550 sq.yd. Reber Pl. $9,657, $9,200, both warrenite on concrete, 11,500 sq.yd. Loughborough St., bitulithic on concrete, $66,848, $68,500; from Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., improving 14,380 sq.yd. Meramec St., willite on concrete, $82,927, $86,800, resurfacing 8,770 sq.yd. Pendleton St., willite on old bitulithic, $23,436, $27,500. Noted Jan. 24.

Wash., Seattle—Bd. Pub. Wks., Feb. 8, grading, curbs and walks North 59th St. et al., from Fiorito Bros., 3950 6th St. N. W., 2,660 ft. asphaltic concrete curb $0.55, 12,000 ft. concrete curb $0.30, 420 sq.yd. concrete sidewalk $1.50, 5,800 cu.yd. earth excav. $0.60, total $56,757. Engrs. est. $64,987.

Calif., Bakersfield—Kern Co., resurfacing with 3 to 5 in. asphaltic concrete 38 mi. various highways and constructing 3 mi. 6 in. asphaltic concrete in 2 courses, from California Constr. Co., 58 2nd St., San Francisco, $841,000, engineers est. $942,923. Noted Jan. 17.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, asphalt paving Bay 28th St., Bay 38th St., East 7th St., Highland Ave., Homecrest Ave., West 8th, 40th, 57th, 70th and 81st Sts., also curbing and asphalt paving Elmore Pl., Ave. I and West 7th St., to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $8,181, $5,477, $9,247, $14,079, $9,935, $8,474, $8,146, $8,[illegible], $10,683, $8,745, $10,660, $16,259 and $9,767 respectively; asphalt paving Blake Ave., East 34th St., Lefferts Ave. and Union St., to Borough Asphalt Co., 1301 Metropolitan Ave., $4,048, $8,331, $23,444 and $4,724 respectively; grading, curbing and flagging East 7th, East 18th, East 34th and West 8th Sts., to T. B. Scott, 671 Halsey St., $3,963, $7,853, $4,356 and $4,571 respectively; grading, curbing and flagging East 37th St., and paving, laying sidewalks, etc., on 70th St., to A. E. Castle, 3313 Tilden Ave., $7,056 and $1,338 respectively; grading, curbing and laying sidewalks on Lenox Rd. and Ave. M, also curbing and laying sidewalks on Liberty Ave., to W. G. Grimm, $3,335, $1,916 and $1,108 respectively; grading, curbing and flagging West 13th St., also grading, curbing and laying sidewalks on Ave. S, to G. M. Mandatto, 129 29th St., $4,436 and $7,113 respectively; grading, curbing and flagging 82nd St., to F. Persicano, 350 Fulton St., $5,371; grading, curbing and flagging 57th and 70th Sts., to Galecor Contg. Co., 507 Greenwich St., New York, $3,755 and $5,121 respectively; grading, curbing and flagging 76th St., to L. Mangieri, 190 31st St., $5,482; paving with second-hand granite Jerome Ave., to F. T. McMillan Contg. Co., $7,220; sodding malls and spaces on Kingshighway, to P. Deichler, $6,198. Noted Feb. 14.

N. Y., New York—Park Bd., Municipal Bldg., paving and repaving, asphaltic mastic walks in Central Park, to L. DiMinna, $29,590; grading and curbing, etc., new roadway entrance to Central Park at 6th Ave. and 59th St., also drain pipe in music stand in mall in Central Park, to Fleming & Sheppard, Inc., 116 Broad St., $20,880 and $3,673 respectively; drain pipe and completing roads and paths in connection with construction of Rice Memorial on Pelham Bay Parkway, to J. Paladino, Inc., $111,742. Noted Feb. 7.

N. J., Morristown—Morris Co., concrete paving 47,480 sq.yd. Long Valley-Hunterdon Co. Rd., to Public Service Production Co., Park Pl., Newark, $163,623. Noted Feb. 7.

N. J., Salem—Salem Co., reconstructing Sect. 1 Carlls Corner Rd., concrete, to C. T. Kavanaugh, Prospect Ave. and 32nd St., Bayonne, $85,054. Noted Jan. 31.

Md., Towson — Baltimore Co., concrete paving 1.5 mi. Graystone Rd., Group 1, and 2 mi. Middletown Rd. from end of concrete east, to A. C. Cantell & Sons Co., Towson, $96,617. Noted Feb. 21.

Fla., Tampa—Hillsborough Co. improving 4⅓ mi. in Palma Cara Dist., grading, paving, curbs, 47,000 sq.yd. asphalt, to Cone Bros., Tampa, $85,000.

Ala., Fairfield — Asphalt paving ½ mi. Parkway, 20 ft., to Barrett Mfg. Co., Fairfield, $35,000.

La., New Orleans — Comn. Council awarded contracts for paving and subsurface work for 1924 program. Total cost about $1,000,000. Names of contractors, etc., will be published in later issue.

Tennessee — Dept. Hys. & Pub. Wks., Nashville, grading and surfacing with 2½ bituminous macadam on course stone base 13 mi. Sparta-Warren Co. line Rd., 18 ft., Federal Aid Project 201, White Co. incl. vitr. clay pipe and one concrete bridge, over 20 span, to Boyd Williams Co., Murfreesboro, $376,971. Noted Feb. 21.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 4.45 mi. Sect. "A" West Union-Manchester Rd., Adams Co., waterbound macadam, to Burris, Hanlon, Jones & Park, Hammersville, $67,992; 3.794 mi. Sect. "B" of above road, waterbound macadam, to Pringle & Buerkle, Batavia, $70,208; 6.22 mi. Sects. "B and E" Delaware-Newark Rd., Delaware Co., rein.-con., to Lynn Constr. Co., Paulding, $161,122; 1.55 mi. Sect. "B" Cleveland-Burton Rd., Geauga Co., waterbound macadam, to W. Sousley, Ada, $25,833; 0.997 mi. Sects. "A and Beloit West" Alliance-Salem Rd., Mahoning Co., brick, to City Constr. Co., Youngstown, $38,672; 2.392 mi. Sect. "S-2" Ashland-Medina Rd., Medina Co., rein.-con., to G. Mellert-Weidner Co., Medina, $68,991; 3.477 mi. Sect. "D" Defiance-Paulding Rd., Paulding Co., asphaltic macadam, to Blauser & Schultz, Paulding $98,426; 2.939 mi. Sect. "S" New Lexington-Athens Rd., Perry Co.,

Streets and Roads (Continued)

rein.-con., to W. F. Payne, Springfield, $11,357; 1.966 mi. Sect. "Williamsport" Cincinnati-Zanesville Rd., Pickaway Co., asphaltic macadam, and 0.972 mi. of above road, brick and asphaltic macadam, to C. J. Uible, Hillsboro, $45,674 and $37,812; 5.312 mi. Sect. "B" Canton-Navarre Rd., Stark Co., oil macadam to P. Christiansen, 1355 Yale Ave. N. W., Canton, $199,148; 3.04 mi. Sect. "H" Cleveland-Massillon Rd., Summit Co., brick furnished by state, to Guilford-Wright Co., Akron, $19,979; 2.53 mi. Sect. "P" Cuyahoga Falls-Chagrin Falls Rd., Summit Co., bituminous concrete, oil, to McCourt Constr. Co., Akron, $92,539; concrete widening 1.648 mi. Sect. "O" Mansfield-Ashland Rd., Richland Co., to C. F. Willmore, Middletown, $17,767; grading, etc. 0.833 mi. Sect. "A-2" Gallipolis-Crown City Rd., Gallia Co., to Miller Bros., Gallipolis, $28,758, 2.24 mi. Sect. "K" McArthur-Logan Rd., Vinton Co., to Mariner & Co., Athens, $18,276. Noted Jan. 31.

O., New Philadelphia—Tuscarawas Co. graveling 1.2 mi. Sect. 1 Sugar Creek Rd., 18 ft., to Leroy Springer & Co., New Philadelphia, $28,850, engrs. est. $30,000; 2.4 mi. Div. 3 Sugar Creek Rd., 18 ft., limestone on sandstone, to Holmes Constr. Co., Millersburg, $107,939, $120,000.

Michigan — State Hy. Dept., Lansing, grading and gravel surfacing 2.957 mi. County Rd. 3, and 2.633 mi. County Rd. 1, Ingham Co., to Wilkes & Van Dosler, Ney, O., $18,966 and $18,796 respectively; 2.775 mi. County Rd. 2, to C. A. Diehl, Dansville, $19,785, 3.364 mi. County Rd. 6 to Briggs & Warden, Dansville, $24,658, 3.491 mi. County Rd. 1, to McKenzie Co., Cass City, $23,348.

Kan., Salina — Paving, etc. various streets, to C. P. Barrington, Salina, 10,300 cu.yd. excav. $1, 12,200 ft. curb and gutter $0.90, 25,000 sq.yd. brick paving $3.23, 7,000 sq.yd. brick paving between street railway tracks $4.10, total $130,750. Noted Jan. 21.

Missouri—State Hy. Dept., Jefferson City, grading 2.717 mi. Opolis-Asbury Rd., Jasper Co., and 1.669 mi. Kansas Harrisonville Rd., Cass Co., also concrete paving 17,924 sq.yd. Kansas City-Harrisonville Rd., Cass Co. and 20,544 sq.yd. Opolis-Asbury Rd., Jasper Co., to V. E. Koch, 14th and Texas Sts., Joplin, $6,140, $9,452, $23,302 and $30,405 respectively; grading and graveling 10,453 sq.yd. Tipton-Sedalia Rd., Moniteau Co., and 46,132 sq.yd. road from Buffalo west, Dallas Co., to N. A. Christy, Warsaw, $11,249 and $19,741 respectively. 13,618 sq.yd. road from Curryville west, Pipe Co., and 23,466 sq.yd. New London-Paris Rd., Ralls Co., to F. T. O'Dell, Hannibal, $13,653 and $16,105 respectively; graveling 46,033 sq.yd. Potosi-De Soto Rd., Washington Co., to W. A. Reynolds, Marble Hill, $31,059, 21,848 sq.yd. California-Jefferson City Rd., Moniteau Co., to Newton Constr. Co., California, $11,686, 29,335 sq.yd. road from Branson east, Taney Co., to Cox & Chaney, Branson, $7,981, 31,802 sq.yd. Edina-Memphis Rd., Knox Co., to Kerby Rainer & Co., Fayette, $12,602; grading 4.35 mi. Lebanon-Linn Creek Rd., 26 ft., Laclede Co., to Pioneer Constr. Co., Springfield, $17,697, 0.999 mi. Unionville-Lancaster Rd., 24 ft., Putnam Co., to R. L. Thompson, Carrollton, $7,009, 4.969 mi. Salem-Eminence Rd., 24 ft., Dent Co., to Muskogee Constr. Co., Tulsa, Okla., $25,141. Noted Feb. 14.

Tex., Dallas—Paving 7 streets, 41,152 sq.yd. willite asphaltic concrete, to Fuller Constr. Co., Southland Bldg., $163,320; 7 streets, 35,270 yd. Uvalde rock asphalt, to Uvalde Paving Co., 1001 Main St., $135,829; 31 streets, 178,285 yd. Willite asphaltic concrete, to Smith Bros. Co., Sumpter Bldg., $656,606; 12 streets, 71,990 yd. warrenite bitulithic, to Central Bitulithic Co., Praetorian Bldg., $279,340. Noted Jan. 31.

Tex., Dallas — Dallas Co., bituminous macadam surfacing 22 mi. Belt Line Rd., 18 ft., to Hill, Wilson & Watson, Sumpter Bldg., $200,000. Noted Jan 31.

Tex., Eastland — Paving 10,980 sq.yd. Moss, White and Mulberry Sts., 5,709 ft. curb and gutter to Chapin-Kemp Co., 910 Austin St., San Antonio, $3.70 per ft. 3 in. brick on 5 in. macadam. Engrs. est. $45,000. Noted Jan. 31.

Oklahoma—State Hy. Dept., Oklahoma City, grading and paving 1.3 mi. Ozark Trail, 13,700 sq.yd. concrete, Federal Aid Project 115, Sect. A, Cleveland Co., to Gudgel & McVay, Stillwater, $40,347; paving around State Capitol grounds, 60,000 sq.ft. sidewalk, etc., to W. L. Eby, 321 East 8th St., Oklahoma City, $12,523. Noted Jan. 31 and Feb. 7 respectively.

Okla., Oklahoma City—Grading and paving 9 blocks Florence, 15th, Western, Oklahoma and Madison Sts., 9,860 sq.yd. concrete, 4,750 lin.ft. curbing, 3,100 cu.yd. excav., to M. A. Swatek Co., Security Bldg., $52,527; widening 9 blocks Robinson Ave., 4 to 10 ft., 3,600 sq.yd. asphalt, 7,900 lin.ft. curbing, to Western Paving Co., Tradesmen's Bldg., $53,039. Noted Feb. 14 and Nov. 15, respectively.

Okla., Oklahoma City—Paving 1.5 mi. G Avenue Rd., 18 ft., 15,900 sq.yd. vertical fibre brick on concrete, to M. A. Swatek, Security Bldg., $59,016; 2.3 mi. Eastern Ave. to Lincoln Park, 24,300 sq.yd. vertical fibre brick, 15,900 sq.yd. concrete base, to Green-Beekman Co., 1st Natl. Bank Bldg., $92,111. Noted Feb. 14.

Okla., Pawhuska — Osage Co., grading and paving 1 mi. Tulsa-Hominy Rd., 10,600 sq.yd. concrete, 3,700 cu.yd. excav., to Tibbets & Pleasant, Daniels Bldg., Tulsa, $30,622.

Okla., Tahlequah—Concrete paving various streets, to H. Tidd, Hutchinson, Kan., $30,000.

Wash., Seattle—Filling 6th Ave. S., 114,000 cu.yd. earth excav., to J. B. Stilwell, 3220 9th St. S., $64,800. Noted Feb. 7.

Calif., Oroville—Butte Co., improving 3.46 mi. Biggs-Princeton Rd., incl. 6,500 tons broken stone surface, 236 tons E asphalt road oil, and 7.87 mi. Gridley-Colusa Rd., 15,500 tons broken stone surface, 470 tons E asphalt, to Skeels & Hudson, P. O. Box 477, Auburn, $16,807 and $38,965 respectively. Material furnished by county, $15,423 and $35,443. Noted Feb. 21.

Calif., San Diego—Improving Redwood, Palm and Bancroft Sts., incl. 10,230 cu.yd. earth excav., 10,912 cu.yd. earth embankment, 7,942 lin.ft. cement concrete curb, 38,253 sq.ft. cement concrete sidewalk, etc., to Pioneer Truck Co., 954 3rd St., $39,957; Guy St., Alameda Dr., Alameda Pl., etc., 74,947 sq.ft. of 1½ in. asphaltic concrete on 4 in. concrete, 11,270 sq.ft. of 4 in. cement concrete, 110,885 sq.ft. 5 in. cement concrete, 2,802 sq.ft. cement concrete sidewalk, 1,221 lin.ft. cement concrete curb, to California Constr. Co., Union Bldg., $55,182. Noted Feb. 14.

Calif., Santa Ana—Orange Co., Rd. Dist. Impvt. 27, Chapman Ave., 6,637 cu.yd. concrete, etc., to Basich Bros., 3788 Vermont Ave., Los Angeles, $67,900. Noted Feb. 14.

Industrial Works

PROPOSED WORK

Mass., Roxbury (Boston, P. O.)—Bakery—Berwick Cake Co., 2220 Washington St., having plans prepared by C. T. Main, archt. and engr., 200 Devonshire St., Boston, 4 story, 70 x 128 ft., brick, steel and concrete, Washington St. $100,000.

Mass., Worcester—Mill—Amer. Steel and Wire Co., Clinton St., had plans prepared 1 story, 60 x 800 ft., brick and timber. $500,000. Private plans.

Conn., New Haven—Ice Plant—Hygienic Ice Co., 881 State St., plans 2 story addition. $100,000. Engineer and architect not announced.

Conn., Waterbury — Factory — Amer. Crystal Co., 51 Randolph Ave., having plans prepared by T. M. Freney, 51 Leavenworth St., 1 story, 90 x 185 ft., brick and timber, South Main St. $50,000.

N. Y., New York—Plant—North Kensington Refinery, 214 East 22nd St., having plans prepared by M. M. O'Brien, archt. and engr., 49 East 19th St., rein.-con., brick and steel addition, plain foundation. $100,000.

N. Y., Ogdensburg — Foundry — A. H. Coplan Co., Hull, Que., Can., plans iron foundry, west of here. $50,000-$60,000.

Md., Baltimore—Plant—W. Knabe & Co. Div. of Amer. Piano Co., Eutaw and West Sts., had plans prepared by Parker, Thomas & Rice, Union Trust Bldg., 1 story, 111 x 247 ft., brick, plain foundation. $60,000.

Md., Baltimore — Plant — Schluderberg-Kurdle Co., Baltimore and 5th Sts., having plans prepared by C. B. Comstock, engr., 110 West 40th St., New York City, 3 story, 60 x 225 ft., rein.-con. and brick, plain foundation, Baltimore and 5th Sts. $250,000. W. T. Schluderberg, pres.

N. C., Charlotte—Plant—Ford Motor Co., Highland Park, Mich., having plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 1 story, 301 x 800 ft. assembly plant, also tank foundation, 1 story, 62 x 114 ft. oil house, 63 x 63 ft. power house, rein.-con., brick and steel, plain foundation, Statesville Rd., here.

N. C., Hemp — Weave Mill — County Moore Mills having plans prepared by Lockwood Greene & Co., engrs., Piedmont Bldg., Charlotte, 1 story mill. $300,000.

Ala., Tallassee — Mill — Mount Vernon Woodberry Mills having plans prepared by J. E. Sirrine & Co., South Main St., Greenville, S. C., 30,000 spindle weaving mill, incl. 4 story, 144 x 367 ft., rein.-con. main building, 80 x 100 ft. opener building, warehouses and mill village with 175 houses.

Ky., Ashland—Refinery—Ashland Refining Co. having plans prepared by T. A. Coombs, engr., Lexington, refinery, near here. $75,000 to $100,000.

Ky., Hickman — Factory — Mengel Co., 11th and Dumesnil Sts., Louisville, plans to rebuild one unit of factory recently destroyed by fire, here. $250,000.

Ky., Louisville—Service Station, etc.—Louisville Gas & Electric Co., 321 West Chestnut St., plans 3 story and basement, 175 x 175 ft., service station (offices, laboratories, work shops, etc.), 7th St. and Ormsby Ave. $250,000. Byllsby Eng. & Management Corp., 208 South La Salle St., Chicago, engrs. Noted Jan. 3.

Ky., Owensboro—Plant—L. E. Whitely, 1548 Frederica St., having plans prepared by J. W. Whitehead, engr., Owensboro, cold storage plant. $50,000.

O., Cleveland—Factory—Fixit Body & Fender Repair Co., 2075 East 65th St., having plans prepared by E. McGeorge, 3030 Euclid Ave., 2 story, brick and steel addition, Carnegie Ave. $40,000. Noted Nov. 22.

O., Cleveland—Factory—Sanymetal Products Co., 6233 St. Clair Ave., plans 1 story, brick and steel factory addition, Urbana Rd. $40,000. R. F. Carpenter, pres. Private plans.

O., Cuyahoga Heights (Cleveland P. O.)—Foundry—Bowler Fdry. Co., 1688 Columbus Rd., Cleveland, having plans prepared by A. G. Simon, 716 Hippodrome Bldg., Cleveland, 1 story, 200 x 500 ft., brick and steel, here. $200,000.

O., Elyria—Factory—Elyria Iron & Steel Co. having plans prepared by E. McGeorge, 3030 Euclid Ave., Cleveland, 1 story, brick and steel extension, here. $60,000.

O., Port Homer—Factory—Ohio Valley Clay Products Co., having plans prepared 4 story, 160 x 200 ft., brick and concrete on 400 acre site. $260,000. H. E. Stratton, pres. Private plans.

O., Uhrichsville—Plant—Evans Pipe Co. plans 1½ story, 100 x 140 ft. addition, east of here. Will mature in spring. $80,000-$100,000.

O., Ironton—Plant—Belfont Iron Wks. Co. plans additional open hearth steel plant. To exceed $50,000.

Ind., Jasper — Factory — Jasper Wood Products Co. plans 2 story plant. $60,000.

Mich., Detroit—Factory—Mazer Cigar Co., 5041 Grandy Ave., plans 3 story, rein.-con., brick and steel, plain foundation, Grandy Ave. $100,000. Architect's name withheld.

Ill., Galesburg — Car Plant — Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, plans car plant, steel, plain foundation, here. $200,000.

Wis., West Bend — Factory — Amity Leather Products Co. had plans prepared by Lockwood Greene & Co., 38 South Dearborn St., Chicago, 2 story, 80 x 130 ft., brick and timber, plain foundation. $50,000.

Kan., Wichita—Factory—Coleman Lamp Co., North St. Francis Ave., soon takes bids 2 story and basement, 60 x 90 ft., rein.-con. and brick. $60,000. Private plans.

Neb., Crete—Mar. 11, to vote on $45,000 bonds for electric power plant. C. E. Beals, city clk.

Mo., Cape Girardeau—Printing Plant—Naeter Bros. Publishing Co. having preliminary plans prepared by R. K. Knox, 215 Liberty Natl. Bldg., 2 story and basement, brick, stone and rein.-con. $75,000 up.

Mo., Kansas City—Factory—Dean Rubber Co. having preliminary plans prepared 2 story and basement, 90 x 100 ft., rein.-con. $150,000. W. J. Dean, 2014 Linwood Ave., pres. Private plans.

Mo., Kansas City — Service — Red Star Yeast & Products Co., 79 Buffalo St., Milwaukee, Wis., having plans prepared by E. R. Liebert, 432 Bway., Milwaukee, Wis., 2 story, 52 x 120 ft., brick and concrete, plain foundation, here. $45,000.

Tex., Coleman—Ice Plant—West Texas Utilities Co., Abilene, plans 3 story, brick and concrete, 25 ton capacity, here. $75,000. G. W. Fry, supt. and ch. engr.

Tex., Ft. Worth—Flour Mill—See "Unclassified" under Contracts Awarded.

Industrial Works (Continued)

Tex., Sourlake—Light Plant—W. E. Lee, N. M. Morrison, and associates, Sourlake, plan electric light plant. $75,000. Engineer and architect not selected.

Calif., Fresno—Substation—Fresno Traction Co., 1st Ave., had plans prepared 1 story, fireproof, Blackstone Ave. $45,000. E. A. Deveraux, 335 South Angus St., genl. supt. Private plans.

Calif., Oakland—Factory and Foundry—Hoyt Heater Co. and Marchant Fdry. Co., Powell and Landegran Sts., having plans prepared by Ruggles & McKee, engrs., 1429 Bway., 1 story, frame and corrugated iron, 10th and High Sts. Noted Feb. 14.

Calif., San Francisco—Factory—Fisher-Gaffney Body Co., 555 Bryant St., plans 2 story, 115 x 150 ft., rein.-con.

Calif., San Francisco—Plant—Kleiber Co., Inc., 1480 Folsom St., plans 2 story, 125 x 300, rein.-con., Howard and 10th Sts.

Calif., Woodland—Ice Plant—Union Ice Co., 354 Pine St., San Francisco, preparing plans 1 story, rein.-con., Lincoln Ave. and 6th St., here. $42,000. Private plans. Noted Oct. 18.

BIDS DESIRED

R. I., Providence—Boiler House—Jenks & Ballou, engrs., 1035 Grosvenor Bldg., taking bids 1 story, 60 x 100 ft., rein.-con., brick and steel, plain foundation, Eddy St., for Narragansett Electric Lighting Co., Turks Head Bldg. $1,000,000.

N. Y., Corning—Factory—Mar. 13, by Corning Industries, Inc., 1 story, 100 x 300 ft., rein.-con. and steel; adv. E. N.-R. Feb. 28.

Wis., Racine—Tannery—E. B. Funston Co., archts., Janes Bldg., taking bids 3 story, 40 x 92 ft., brick and timber addition, plain foundation, for B. D. Eisendrath Tanning Co., West 6th St.

Tex., Beaumont—Plant—Southwestern Gas & Electric Co. taking bids brick and concrete buildings and machinery. $200,000. M. T. Walker, mgr.

CONTRACTS AWARDED

Mass., Boston—Foundry and Shop—New England Iron Wks., Summer St., 1 story, 130 x 180 ft. addition, rein.-con. and brick, wood pile foundation, Summer St., to T. Mulcare, 1 Exeter Park, Cambridge (Boston, P. O.), $100,000.

R. I., Providence—Warehouse and Tanks—Sun Oil Co., Finance Bldg., Phila., 2 and 3 story and basement, 90 x 100 ft. warehouse and tankroom, 60 x 70 ft. garage and boiler-room, 2 tanks, 150,000 and 1 m.g. capacity, here, to Balchin Constr. Co., 75 Westminster St., $100,000.

N. Y., Brooklyn—Laboratory—Standard Oil Co. of New York, 26 Bway., New York City, 1 story, rein.-con., brick and steel, plain foundation, 394 Greenpoint Ave., here, to H. D. Best & Co., 949 Bway., Uew York City. Archts. est. $50,000.

Pa., Phila.—Abattoir—Duffy Bros. Inc., 3255 North Front St., 2 story, 63 x 80 ft. and 1 story; 33 x 119 ft. brick and steel, plain foundation, Front and Venango Sts., to F. A. Stoutenburgh, 452 North Amer. Bldg. Archts. est. $75,000. Noted Jan. 17.

Pa., Phila.—Plant—Ballinger & Co., archts., 12th and Chestnut Sts., 1 story and basement, 600 x 740 ft. rein.-con., brick and steel plant, plain foundation, Wissahickon and Abbottsford Aves., to Irwin & Leighton, 12th and Cherry Sts., for Atwater Kent Mfg. Co. $1,000,000. Noted Jan. 31.

Pa., Phila.—Plant—Heintz Mfg. Co., Front and Olney Sts., 1 story, 70 x 200 ft., rein.-con. and brick, plain foundation, Front and Olney Sts., to W. F. Newberry, Otis Bldg. Archts. est. $100,000.

Pa., Phila.—Plant—W. H. Gravel, archt. and engr., 112 South 16th St., 2 story and basement. 130 x 133 x 174 x 205 ft. brick and steel, plain foundation, Westmoreland and 25th Sts., to Wark Co., 16th and Walnut Sts., for C. H. Elliott Co., 11th and Lehigh Sts. Archts. est. $375,000.

Pa., Phila.—Substation—Phila. Electric Co., 10th and Chestnut Sts., 1 story, 64 x 98 ft. and 2 story, 29 x 45 ft. brick and steel, 11th St. between Arch and Cherry Sts., to J. N. Gill Constr. Co., City Centre Bldg.

Pa., Pittsburgh—Plant—Mine Safety Appliance Co., Chamber of Commerce Bldg., 4 story and basement, 62 x 145 ft., rein.-con., brick and tile addition to plant, Braddock Ave., to West Bros. Co., 430 Tremont Ave., Wilkinsburg. Archts. est. $150,000.

Pa., Wilmerding—Foundry—Westinghouse Air Brake Co., 3 story, 56 x 465 ft. foundry with 35 x 80 ft. cupola, and 3 story, 81 x 450 ft. machine shop, steel and brick, to Stone & Webster, Inc., 147 Milk St., Boston, Mass., under direction B. Prack, archt. and engr. for owner.

S. C., Lancaster—Weave Shed—Lancaster Cotton Mills, 3 story, 104 x 108 ft., brick and timber, to Potter & Shackleford, Greenville, $70,000.

Ky., Henderson—Factory—Kentucky Box & Crate Co., 1 and 2 story, 85 x 101 ft., to W. T. Overby, Henderson. Est. cost $65,000.

O., Canton—Plant—Timken Roller Bearing Co., Dulber Ave. S. W., 1 story, 230 x 240 ft., fireproof addition, to Melbourne Bros. Constr. Co., 1220 9th St. N. E. Archts. est. $85,000 or more. Noted Nov. 8.

O., Cincinnati—Plant, etc.—Merkel Bros. Co., Canal and Jackson Sts., 3 story, 100 x 320 ft. mill, 2 story, 100 x 220 ft. pipe building, garage, boiler room, cold storage plant, etc., to Austin Co., 16112 Euclid Ave., Cleveland, $500,000.

O., Cleveland—Factory and Boiler House—Ohio Confection Co., 5305 Sweeney Ave., 1 and 2 story, brick and steel, Kinsman Rd., to Dresser-Minton Co., The Arcade. Archts. est. $40,000.

O., Cleveland—Factory—J. Roemer Heating Co., 1808 East 22nd St., 1 story, 80 x 132 ft., brick and steel addition, to J. L. Hunting, Discount Bldg. Archts. est. $40,000.

O., Cleveland—Foundry—Nickel Plate Fdry. Co., 14915 Woodworth Rd., 1 story, 96 x 160 ft., brick and steel, to A. A. Lane Constr. Co., 1869 East 55th St. Archts. est. $50,000.

Wis., Milwaukee—Distribution—Texas Oil Co., Battery Pl., New York, 1 story, brick and concrete oil distribution plant, here, to McKelvey Constr. Co., Hammond Bldg., Detroit, Mich. $50,000.

Minn., Hibbing—Gas Plant—City, constucting new unit to municipal gas plant, incl. 2nd generating unit, additional boiler, etc., to Phelps-Drake Co., 623 Metropolitan Life Bldg., Minneapolis, $44,000.

Tex., Texas City—Refinery—Knox Process Corp., oil refinery, to Amer. Constr. Co., Carter Bldg., Houston, $500,000. Noted Jan. 3.

Calif., Hanford—Plant—Benham Ice Cream Co., 1420 H St., 1 story, brick, East 7th St., to Trewhitt-Shields Co., Rowell Bldg., Fresno, $42,000. Noted Feb. 7.

Calif., Long Beach—Power Plant—Southern California Edison Co., 306 West 3rd St., Los Angeles, constructing Long Beach Power Plant 2, pile foundation, steam generating equipment, etc., to Stone & Webster, 58 Sutter St., San Francisco. $8,000,000. Plans installation 100 ton traveling crane.

Calif., San Francisco—Publishing Plant—Leader Publishing Co., 95 9th St., 2 story and basement, rein.-con., 9th St. near Mission St., to J. J. Leonard, 1158 Dolores St., $42,000.

Buildings

PROPOSED WORK

Mass., Roxbury (Boston, P. O.)—School—Boston Schoolhouse Dept., City Hall, having plans prepared by McLaughlin & Burr, 88 Tremont St., Boston, 3 story, 50 x 50 x 120 ft. $150,000.

Mass., Someville (Branch of Boston)—Apartment—J. E. Locatelli, Inc., 46 Cornhille, Boston, plans 4 story, 30 x 90 ft., brick, 155-157 Summer St. $150,000. Private plans. Work will probably be done by day labor.

R. I., Newport—Courthouse—Newport Co. Courthouse Comn. having plans prepared by A. Stearns, 53 State St., Boston, courthouse, probably stone exterior, Washington Sq. $300,000. Noted Jan. 17.

R. I., Newport—Hotel—Newport Chamber of Commerce plans 200 room hotel. $500,000. H. A. Titus, pres.

R. I., Pawtucket—Memorial—Citizens Memorial Com., c/o J. F. O'Malley, archt., Fanning Bldg., had plans prepared 2 story and basement, 150 x 210 ft., with 38 x 38 ft. tower, 160 ft. high, limestone, brick and steel, plain foundation. $500,000.

R. I., Providence—Church—A. J. Murphy, archt., 146 Westminster St., soon lets contract 1 story and tower, brick and stone, plain foundation, Atwells Ave., for Our Lady of Lourdes Roman Catholic Parish. $150,000.

R. I., Providence—Court House—City plans 4 story and basement, brick and stone, South Main St. $3,564,500. Jackson, Robertson & Adams, 1216 Turks Head Bldg., archts. Noted Jan. 3.

R. I., Woonsocket—Theatre—Whitin Realty Co., S. P. Whitin, c/o [illegible] Home having plans prepared by Perry & Whipple, Hospital Trust Bldg., 2 story and basement 140 x 150 ft., brick and steel. $150,000. Noted Aug. 9.

Conn., Bristol—School—Third School Dist. plans 2 story, brick and steel addition, Church St. $200,000. E. Funk, City Hall, chn. Engineer and architect not selected.

Conn., Hartford—Apartment—I. Sherman, 749 Albany Ave., having plans prepared by F. C. Walz, 407 Trumbull St. 4 story, 80 x 110 ft., brick and stone, plain foundation, Capital Ave. $175,000.

Conn., Hartford—Apartment—Tyschen Bros., 1093 Farmington Ave., West Hartford, having plans prepared 3 story, 50 x 185 ft., brick and semi-fireproof, Washington St. $150,000. Private plans.

Conn., Litchfield—High School—Town plans brick high school, $263,000. J. L. Buel and G. J. Switzer, Litchfield, on com. Engineer and architect not selected.

N. Y., Brooklyn—Exchange—New York Telephone Co., 15 Dey St., New York City having plans prepared by McKenzie, Voorhies & Gmelin, archts. and engrs., 342 Madison Ave., New York City, altering existing building and constructing 4 story brick, steel and stone addition, plain foundation, Ocean Ave., here. $550,000.

N. Y., Brooklyn—School—Bd. Educ., 500 Park Ave., New York City, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., 5 story, 162 x 193 ft., brick, steel and stone, plain foundation, 16th Ave. and 56th St., here. $1,250,000.

N. Y., Canton—School—Bd. Educ. plans 2 story and basement, brick, stone and concrete. $250,000-$300,000. Address J. Bird, member Building Com. Bd. Educ.

N. Y., Dolgeville—School—Bd. Educ. having plans prepared by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, brick, steel and stone, plain foundation, South Main St. $200,000. Noted Dec. 13.

N. Y., Gouverneur—Hospital—Directors and Building Com. Stephen B. Van Duzee Hospital plan 2 story and basement, brick and stone. $150,000-$200,000. Address J. O. Sheldon.

N. Y., Long Island City—School—Bd. Educ., 500 Park Ave., New York City, having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 126, brick, steel and stone, plain foundation, Van Alst Ave. and Camelia St., here. $850,000.

N. Y., Middleville—School—Bd. Educ. plans 2 story and basement, brick and stone. $250,000. Engineer and architect not selected.

N. Y., New York—Apartment—West End Ave. and 75th St. Corp., c/o. R. T. Lyons, archt. and engr., 342 Madison Ave., having plans prepared 15 story, brick, steel and stone, plain foundation, 315 West End Ave. $1,000,000. L. B. Behrman, pres.

N. Y., Ogdensburg—Bank—Bd. Directors Ogdensburg Bank and St. Lawrence Trust Co. had plans prepared by Thomas Bruce Boyd, Inc., engrs., 286 5th Ave., New York City, 42 x 100 ft., 32 ft. high, brick, Ford St. $200,000. Address Building Comn. Ogdenburg Bank.

N. Y., Ogdensburg—Schools—Election Mar. 15, $350,000 bonds, 2 brick, stone and concrete. Address J. C. Howard, chn. building com. Bd. Educ. Noted Jan. 18, 1923.

N. Y., Saranac Lake—Hotel—S. D. Matthews, c/o Hustace B. Simonson, archt. and engr., 342 Madison Ave., New York City, having plans prepared brick, steel and stone, plain foundation, here. $600,000.

N. Y., Watertown—Hospital—St. Joachims Hospital had plans prepared by D. D. Kieff, Flower Bldg., 4 story and basement, brick, concrete and steel. $500,000. Noted Apr. 19.

N. J., Hackensack—Y. M. C. A., 245 Union St., having plans prepared by Jallade, Lindsey & Warren, archts. and engrs., 129 Lexington Ave., New York City, brick, steel and stone, plain foundation, Main St. $400,000.

N. J., Newark—Warehouse and Service—L. Bamberger & Co., Market St., soon lets contract 5 story, rein.-con., concrete pile foundation, Plain St. $1,000,000. A. Merkt, 175 5th Ave., New York City, archt. and engr.

N. J., Orange—Church—St. Pauls African Methodist Episcopal Church, 93 South St., having plans prepared by N. Myers, archt. and engr., 7 Nelson Pl., Newark, brick, steel and stone, plain foundation, Central Ave. $200,000.

Buildings (Continued)

N. J., Passaic—Hospital—St. Marys Hospital having plans prepared by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York City, 4 story, brick, steel and stone, plain foundation, Pennington Ave. $300,000.

N. J., Red Bank—School—Bd. Educ. having plans prepared by E. A. Arend, archt. and engr., 105 West 40th St., New York City, 3 story, brick, steel and stone addition, plain foundation, River St. $300,000.

Pa., Altoona—Bank—First Natl. Bank, 11th Ave. and 12th St., having plans prepared by J. A. Dempwolf, York, and takes bids about middle of March or April, 4 story and basement, 60 x 120 ft, brick, steel and stone, 11th Ave. $250,000. Noted Oct. 25.

Pa., Hanover — Hotel — Hanover Chamber of Commerce having plans prepared by C. W. Sterns, 64 West Randolph St., Chicago, Ill., 4 story and basement, 52 x 214 ft. $275,000.

Pa., Hanover—Store and Apartment—A. Jordan having plans prepared by Gemmill & Billmeyer, Rosewater Bldg., York, 4 story and basement, 28 x 180 ft. brick and steel, plain foundation. $150,000.

Pa., Johnstown—High School—Bd. Directors Johnstown School Dist., 601-602 Swank Bldg., takes bids in 4 or 6 weeks, 4 story and basement, 140 x 300 ft., rein.-con., brick and steel, Somerset St. $1,000,000. J. E. Adams, Nemo Bldg., archt. E. L. Tilton, 141 East 45th St., New York City, consult. archt.

Pa., Phila.—Apartment—Nineteen Hundred Rittenhouse Sq. Corp., c/o Sugarman, Hess & Berger, archts., 16 East 43rd St., New York City, had plans prepared 15 story and basement, 42 x 95 ft. brick and steel, plain foundation, 19th and Rittenhouse Sts. $350,000.

Pa., Phila.—Apartment—Hoffman-Henon Co., archts., Finance Bldg., preparing plans 9 story and basement, brick and steel, plain foundation, 19th and Panama Sts. $400,000. Owner's name withheld.

Pa., Phila. — Bank and Office — Liberty Title & Trust Co., Broad and Arch Sts., having plans prepared 18 story, Broad and Arch Sts. Architect not selected.

Pa., Pittsburgh — Apartment — L. A. Burnett Co., 225 4th Ave., having plans prepared by Rutan, Russel & Wood, Century Bldg., 9 story and basement, 40 x 140 ft. brick, steel and terra cotta, Melwood St. $500,000.

Pa., Somerset—Business—Somerset Drug Co. takes bids about April 1, 4 story and basement, 66 x 112 ft. rein.-con. and brick, Somerset St. $150,000. E. H. Walker, Somerset, archt. Noted Feb. 21.

Pa., Williamsport — Church — Redeemer Lutheran Church, C. H. Brosius, pastor, plans 1 story and basement, 80 x 120 ft., brick and stone, Sherman St. $150,000.

Pa., Williamsport — Bank — First Natl. Bank, rescinded contract for altering old structure and building new 5 story and basement, 51 x 109 ft. rein.-con., brick and steel addition, Front, 3rd and Curt Sts. Will readvertise in early spring. Noted Feb. 14.

Pa., Williamsport—Garage—D. M. Page Motorcycle Co. takes bids about April 1, 2 story, 50 x 110 ft., rein.-con. and steel, 10th Ave. $150,000.

Pa., Windber—High School—Bd. Educ. having plans prepared by H. Reinhold, Jr., 1513 Walnut St., Phila., 2 story and basement, 56 x 112 ft. brick and tile. $170,000.

Md., Cumberland—Y. M. C. A., c/o J. M. Patterson, having revised plans prepared by Shattuck & Layer, 19 LaSalle St., Chicago, 4 story and basement, 104 x 191 ft., rein.-con., brick and steel, Baltimore Ave. $400,000.

Md., Cumberland — Church — St. Lukes Lutheran Church plans church. $175,000. H. Sharp, pastor. Engineer and architect not selected.

W. Va., Bluefield — Temple — Bluefield Masonic Trust Assn. having plans prepared by Mahood & Van Dusen, Bluefield, 4 story and basement. $250,000.

W. Va., Bluefield—Theater—G. Brown and others plan 3 story, 84 x 120 ft., rein.-con. and brick, Federal St. $200,000. Architect not selected.

W. Va., Fairmont—Lodge—Elks Lodge having plans prepared by J. C. Burchinal, Fairmont, 7 story, 80 x 157 ft., Main St. $300,000. Noted July 12.

N. C. Albermarle—High School—Voted bonds for $200,000 high school. Enginer and architect not selected.

N. C., Hickory—Hotel—Hickory Hotel Co. having plans prepared by C. C. Hartmann, Greensboro, 6 story. $250,000.

ROAD WORK—CALIFORNIA

Following are lowest three bids opened by State Highway Comm., Sacramento, Jan. 21, for highway in Ventura Co., Div. 7, Route 2, Sects. A & B, (A) G. R. Curtis, 2440 East 26th St.; (B) E. Johnson & Sons; (C) G. H. Oswald; contractors all of Los Angeles. The unit bids were as follows:

	A	B	C
32,000 cu.yd. roadway excavation without classification	$0 80	$1 00	$1 00
6,100 sta.yd. overhaul (2 stations or less)	02	02	02
211,500 sta. yd. overhaul (greater than two stations)	01	01	01
1,000 cu.yd. structure excavation without classification	1 50	2 00	1 50
21,750 cu.yd. class "A" portland cement concrete (pavement and shoulders)	14 25	14 40	15 00
400 cu.yd. class "A" portland cement concrete (structures)	25 00	30 00	30 00
357 cwt. bar reinforcing steel in place (structures)	6 00	6 00	6 00
45,680 sq.yd. reinforcing steel in place (pavement)	30	30	325
90 lin.ft. 12 in. corrugated metal pipe	1 00	1 00	1 00
282 lin.ft. 18 in. corrugated metal pipe	1 25	1 00	1 00
208 lin.ft. 24 in. corrugated metal pipe	1 50	2 00	2 00
26 lin.ft. 36 in. corrugated metal pipe	3 00	3 00	3 00
150 cu.yd. removal of broken concrete in existing base	3 50	3 00	3 00
Extended totals	$366,478	$378,599	$392,291

ROAD WORK—NEW YORK

Bids were opened by State Dept. Pub. Wks., Bureau of Highways, Albany, Feb. 5, for reconstruction of Peekskill-Fishkill Rd., Part 5, State Highway No. 5150, Dutchess Co., from (A) Mascetti & Holley, 60 Main St., Torrington, Conn.; (B) O'Day & Ambrose, Binghamton. The unit bids were as follows:

	A	B
Clearing and grubbing (lump sum)	$200 00	$200 00
6,375 cu.yd. earth excavation	1 25	1 00
2,150 cu.yd. rock excavation	3 00	2 75
60,500 cu.yd. overhaul	01	0025
100 lin.ft. 6 in. porous tile underdrain	20	20
1 M.ft. b.m. timber and lumber	70 00	10 00
4,833 bbl. portland cement	3 30	3 60
105 cu.yd. first-class concrete	8 65	8 65
113,700 sq.ft. metal reinforcement for pavement	03	03
38,600 lb. bar reinforcement for pavement (edge, end and center)	05	05
1,700 lb. metal reinforcement for structures	10	10
100 lb. miscellaneous iron and steel	08	08
1,600 lin.ft. concrete cable guide railing	1 25	1 25
100 cu.yd. foundation course (R. C. B. gravel)	2 45	2 45
710 cu.yd. bottom course (broken stone)	5 40	5 40
530 cu.yd. top course (bitulithic penetration method)	6 45	6 45
2,455 cu.yd. cement concrete pavement 1-1½-3 mix	6 80	7 70
6,285 lin ft. trimming road shoulders	10	10
12 cu.yd. broken stone L.M. No. 2	2 85	2 85
15 cu.yd. broken stone L No. 3	2 85	2 85
14,250 gal. bituminous material "A"	12	12
6,285 lin.ft. of road maintaining traffic	15	15
Extended totals	$67,240	$68,254

Fla., Clearwater—Schools—Pinellas Co., election Mar. 17, $225,000 bonds for school buildings.

Fla., Miami—Hotel—Buena Vista Hotel Co. having plans prepared by G. E. Mayer, Hippodrome Bldg., 6 story, Buena Vista Suburb between 35th Terrace and 36th St. $500,000.

Fla., Miami—Hotel—A. H. Hurff having plans prepared by J. H. Sculthorpe, 206 Townley Bldg., 5 story, 50 x 150 ft., rein.-con., at 243 North East 5th St. $500,000.

La., New Orleans—Office—Louisville & Nashville R.R., 10th Ave. and Bway., Louisville, Ky., plans 2 story and basement, here. $150,000. W. H. Courtenay, ch. engr.

O., Cleveland—Apartment—C. Richland, 1119 Guardian Bldg., having plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, brick, 1851 East 81st St. $250,000.

O., Cleveland—Church, Gymnasium and Sunday School—First Evangelical Church of Cleveland, 841 Thornhill Dr., having plans prepared by Lensky & Corbusier, 2136 B. F. Keith Bldg., 1 story, brick, steel and concrete, Thornhill Dr. $150,000.

O., Cleveland — Commercial — Cleveland United Realty Co., 822 Leader-News Bldg., plans 3 story, brick, steel and concrete on 155 x 164 ft. site, East 46th St. and Carnegie Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Court House and Jail—Cuyahoga Co. election April 29, $3,500,000 bonds, 7 story, brick, steel and concrete, East 3rd St., Ontario and St. Clair Aves. A. J. Hieber, clk. Engineer and architect not selected.

O., Columbus—Office—Amer. Insurance Union, 44 West Broad St., having sketches made 7 or 8 story and basement, 187½ x 187½ ft., West Broad St. $750,000 or more. Architect not selected. H. A. Hopf Co., 40 Rector St., New York City, engrs.

O., Cleveland Heights (Warrensville P. O.)—Apartment—Dolinaft Realty Co., c/o J. Dolinsky, 2210 East 69th St., Cleveland, plans 3 story and basement, 56 x 114 ft., brick, Mayfield Rd., here. $150,000. Private plans.

O., Cleveland Heights (Warrensville P. O.)—Apartment—M. Wolk, 10718 Earle Ave., Cleveland, having plans prepared by M. Weis, 617 Union Bldg., Cleveland, 3 story and basement, 100 x 150 ft., brick, Mayfield and Coventry Rds., here. $250,000.

O., Columbus — Railway Y. M. C. A., Goodale and High Sts., having sketches made 6 story and basement, 150 x 165 ft., rein.-con., brick and stone, 521-27 Park St. $450,000. Engineer and architect not selected.

O., Youngstown—Bank and Office—First Natl. Bank, West Federal St., having plans prepared by Walker & Weeks, 1900 Euclid Ave., Cleveland, 12 story, brick, steel and concrete. $1,500,000.

Mich., Detroit—Apartment, Store and Garage—J. W. Wilson, archt., 17 Campus Martius, preparing plans 7 story, 200 x 240 ft., rein.-con., brick and stone, plain foundation, Woodward Ave. Owner's name withheld.

Mich., Detroit — Apartment — R. Finn, archt., 2631 Woodward Ave., preparing plans 4 story and basement, 70 x 190 ft. brick and steel, plain foundation, 2nd Ave. $175,000. Owners name withheld.

Mich., Detroit—Bank—First State Bank, Griswold and Lafayette Aves., having plans prepared by A. Kahn, 1000 Marquette Bldg., 5 story and basement, 65 x 74 ft. rein.-con., brick and steel, plain foundation, Griswold St. $400,000.

Mich., Detroit—Office—R. H. Marr, archt., 2631 Woodward Ave., preparing plans 7 story and basement, 50 x 80 ft. rein.-con., brick and steel, plain foundation, Cass Ave. and Brainard St. $150,000. Owner's name withheld.

Mich., Detroit — Temple — Findlater Masonic Lodge 475, 437 Artillery Ave., having plans prepared by G. W. Graves, 233 John R St., 2 story and basement, rein.-con., brick and steel, plain foundation, Waterman Ave. and Lafayette Blvd. $200,000.

Mich., Grosse Pointe Shores (Mail at Grosse Pointe, branch of Detroit P. O.)—Clubhouse—Lochmoor Club, D. F. Altland, pres., 203 Lakeshore Ave., having plans prepared by W. B. Stratton, 1103 Union Trust Bldg., Detroit, 3 story, brick and steel, plain foundation, Vernier Rd. $200,000.

Mich., Highland Park (Detroit, P. O.)—Hospital—Highland Park General Hospital plans 3 story, rein.-con., brick and steel, plain foundation. $150,000. Architect not selected.

Mich., Flint—School—Bd. Educ. having plans prepared by Malcomson & Higginbotham, 1217 Griswold St., Detroit, 2 story and basement, 20 room, rein.-con., brick and steel, plain foundation, Fenton Rd. $350,000.

Buildings (Continued)

Ill., Chicago—Apartment—J. Glasser, c/o D. S. Klafter, archt., 64 West Randolph St., plans 4 story, fireproof, 931 Leland St. $175,000.

Ill., Chicago—Apartment—Owner, c/o Dubin & Eisenberg, archts., 14 West Washington St., plans 3 story and basement, 125 x 150 ft., fireproof, Trumbull and 18th Sts. $225,000.

Ill., Lake Bluff—Store, Office and Apartment—Owner, c/o Wolf, Sexton, Harper & Trueax, Inc., archts., 7 West Madison Ave., Chicago, plans 3 story, 100 x 125 ft., fireproof. $150,000.

Ill., Rogers Park—Apartment—C. E. Davis, c/o Wolf, Sexton, Harper & Trueax, Inc., archts., 7 West Madison Ave., Chicago, plans 3 story and basement, 50 x 172 ft., fireproof. $200,000.

Wis., Green Bay—High School—School Bd., I. H. McIntire, supt., plans 2 story and basement, brick, tile and concrete, plain foundation. $300,000. Engineer and architect not selected.

Wis., Madison—Sanitorium—Madison Sanitorium Corp., c/o R. Ingersoll, Lakeside St., having plans prepared by F. Riley, Conklin Bldg., 2 story and basement, 60 x 110 ft., brick, rein.-con. and steel, plain foundation. $150,000.

Wis., Milwaukee—Apartment and Business—B. M. Weil Co., 390 Bway., (owner's representatives) plans 4 story and basement, L shaped, 200 x 260 ft., brick and concrete, plain foundation, Wells St. $350,000. Engineer and architect not selected.

Wis., Milwaukee—Store and Office—Voelz & Siebert, archts., 373 Bway., preparing preliminary plans 2 story and basement, 117 x 122 ft., brick and tile, plain foundation, 8th Ave. $150,000. Owner's name withheld.

Wis., Oshkosh—Temple—Auler & Jensen, archt., F. R. A. Bldg., soon takes bids 4 story and basement, 90 x 100 ft., brick, tile and concrete, plain foundation, for Local Masonic Organization, F. A. Fuller, chn. Building Com. $250,000.

Ia., Indianola—High School—Bd. Educ. having plans prepared by Keffer & Jones, 204 Masonic Temple, Des Moines, Ia., 2½ story and basement, brick. $150,000. Noted Feb. 21.

Ia., Indianola—School—Election Mar. 10, $175,000 bonds, for school.

Minn., Duluth—Hotel—Hotel Wisconsin Realty Co., 86 Michigan St., Milwaukee, Wis., having revised plans prepared by M. Tullgren & Sons, 425 East Water St., Milwaukee, Wis., 13 story and basement, brick, concrete and terra cotta, plain foundation, 3rd Ave., here. $1,500,000. Noted Jan. 10.

Minn., Minneapolis—School—Bd. Educ. rejected bids opened Feb. 15, 3 story and basement addition, 15th Ave. N. and 4th St. $150,000. Noted Feb. 28.

Minn., St. Paul—School—Dept. Educ., will revise plans and take bids in spring 3 story and basement, 150 x 250 ft. with 2 story, 48 x 90 ft. wing, rein.-con., brick, tile and stone, Albert St. and Pascal Ave. Former bids rejected. L. R. S. Ferguson, City Hall, comr. Noted Feb. 7.

Neb., Holdredge—Home—Our Orphan Home, c/o I. Johnson, 516 Hancock Ave., having preliminary plans prepared by E. O. Bostron, 621 Reliance Bldg., Kansas City, Mo., 3 story and basement, brick and stone. $150,000.

Neb., Omaha—Bank—Federal Reserve Bank, 10th and Grand Sts., Kansas City, Mo., having preliminary plans prepared 3 or 4 story and basement, rein.con., brick and stone branch bank, here. $500,000.

Mo., Cape Girardeau—Hospital—Cape Girardeau Hospital Assn., c/o R. L. Dearmont, Liberty Natl. Life Bldg., soon takes bids fireproof, West Bway. $175,000. Private plans.

Mo., St. Louis—Hospital—Central Institute for Deaf, Kingshighway and Papin St., plans 4 story and basement, rein.-con., brick and stone addition. $200,000. Engineer and architect not selected.

Mo., St. Louis—Hospital—St. Louis Mullanphy Hospital, Garrison and Montgomery Sts., soon takes bids 7 story, 40 x 176 ft., rein.-con., brick and stone, Union Blvd. $1,000,000. Lee & Rush, Syndicate Trust Bldg., archts.

Mo., St. Louis—Temple—United Hebrew Congregation, Kingshighway and Enright Ave, plans 2 story and basement, 202 x 274 ft., brick, stone, marble and rein.-con., Skinker Rd. $350,000.

Mo., St. Louis—Central Y. M. C. A., c/o B. W. Moser, pres., 6186 McPherson Ave., plans 11 or 12 story and basement, 137 x 155 ft., brick, stone, marble and rein.-con., Locust St. $1,500,000. Engineer and architect not selected. Noted July 26.

Mo., St. Louis—St. Louis Y. M. C. A., c/o B. W. Moser, pres., 6186 McPherson Ave., plans 4 or 5 story and basement for West End, $450,000, 4 story and basement addition to railroad Y. M. C. A., 21st St., $200,000, addition to negro Y. M. C. A., Pine St., $100,000, permanent outing camp in Merame Valley, $25,000, 4 story and basement, for South St. Louis probably on Grand Blvd., $400,000, 3 story and basement for Carondelet, $100,000-$150,000, also 4 story and basement addition to North Side Y. M. C. A., Grand Blvd. and Sullivan Ave., $200,000, all rein.-con., brick and stone.

Ark., El Dorado—Schools—Bd. Educ. making preliminary plans 2 and 3 story, rein.-con., brick, and stone high school, and brick and concrete grade school. $350,000-$400,000.

Tex., Dallas—Auditorium—State Fair Assn. and City plan brick, concrete and steel, 6,000 capacity, incl. art gallery, at Gaston Park. $750,000. E. A. Kingsley, city engr. Architect not announced.

Okla., Tulsa—Church and Office—First Baptist Church Congregation, 4th and Cinn Sts., plans 8 story and basement. $800,000. W. O. Anderson, 912 South Denver St., pastor. Architect not selected.

Okla., Waurika—Court House—Jefferson Co. plans 3 story and basement, rein.-con., brick and stone. $250,000. Architect not selected.

Ore., Portland—Apartment, Store and Garage—C. L. Linde, archt., Artisans Bldg., takes bids about Apr. 7, 4 story, 200 x 400 ft., rein.-con., plain foundation, 19th, 20th, Flanders and Glison Sts., for Coe & McKinna, Chamber of Commerce Bldg. $640,000.

Ore., Portland—Bank—A. E. Doyle, archt., Worcester Bldg., preparing plans and takes bids about Mar. 15, 6 story, 100 x 100 ft., rein.-con. and marble, plain foundation, Stark St. and Bway., for U. S. Natl. Bank, 6th and Stark Sts. $750,000.

Ore., Portland—Office—Houghtaling & Dougan, archts., Elks Temple, take bids about May 12, 6 story, 100 x 200 ft. office, for Physicians & Dentist's Assn., A. C. Smith, Medical Bldg., pres. $725,000.

Ore., Portland—Store and Office—Schacht & Bergen, archts., Yeon Bldg., take bids about May 12, 7 story or more, 100 x 100 ft., rein.-con., Bway and Oak St., for Western Bond & Mortgage Co., 82 4th St. $700,000 or more.

Calif., Glendale—Apartment—Endicott Arms Apartment Co. having plans prepared by A. F. Priest, Fay Bldg., Los Angeles, 14 story and basement, 104 x 150 ft., Class A, steel and concrete, Lexington Dr. and Brand Blvd. $1,500,000.

Calif., Los Angeles—Apartment—Simpson & Childs, Citizens Natl. Bank Bldg., had plans prepared by S. B. Birds, Frost Bldg., 4 story and basement, 50 x 115 ft., brick, 3rd St.

Calif., Los Angeles—Hotel and Store—L. L. Jones, archt., Grosse Bldg., soon takes bids 4 story and basement, brick, Los Angeles St. and Ferguson Way, for T. Quinn, et. al., c/o architect $150,000.

Calif., Los Angeles—Office—Local Syndicate having plans prepared by Walker & Eisen, Pacific Finance Bldg., 13 story, 100 x 184 ft., rein.-con., 8th and Francisco Sts., for physicians and dentists.

Calif., Los Angeles—Office and Store—P. S. Wright Co., et al., 3981 West 6th St., plans 12 story, rein.-con., on 60 x 170 ft. site, 5th and Figueroa Sts.

Calif., Los Angeles—Theatre and Store—Hill-Friedman Co., 1812 West 7th St., having preliminary plans prepared rein.-con. on 200 x 200 ft. site, West Adams St. Private plans.

Calif., Los Angeles—Warehouse—Reo Motor Co. of California, 1200 South Hope St., plans 1 story, 100 x 200 ft., brick and concrete, 49th St.

Calif., Ocean Park (Santa Monica P. O.)—Theatre—J. Sams, 2607 Washington Blvd., Santa Monica, interested in company financing erection fireproof theatre, here. To exceed $150,000. Engineer and architect not selected.

Calif., Sacramento—Church—St. Pauls and Trinity Cathedral Parishes of Episcopal Church, c/o F. A. S. Foale, archt., Ochsner Bldg., having plans prepared 1st unit, fireproof, 27th and M Sts., $100,000, total $400,000.

Calif., San Francisco—School—City and San Francisco Co. having plans prepared by J. G. Howard, 1st Natl. Bank Bldg., fireproof school, incl. 24 class rooms and auditorium, Harrison St. To exceed $150,000.

Calif., Santa Cruz—Hotel—Miller & Warnecke, archts., Perry Bldg., Oakland, preparing plans 2 story, rein.-con., in mountains, here. • $200,000. Owner's name withheld.

Que., Montreal—Church—St. François Soloris Church, Dandurand St., having plans prepared by J. A. Karch, 502 St. Catherine St. E., new church [illegible].

Que., Montreal—Hospital—Notre Dame Hospital, Notre Dame St., plans to convert building on Sherbrooke St. E. into hospital. $300,000. Stevens & Lee, 62 St. Charles St., Toronto, and A. H. Lapierre, 20 St. James St., archts.

Que., Outremont—Church—St. Madeleine of Outremont Church, 40 Duverger St., soon takes bids church. $200,000. Gascon & Paret, 502 St. Catherine St. E., Montreal, archts. Noted Nov. 29.

Que., Three Rivers—Station—Canadian Pacific Ry. Co., Windsor St. Sta., Montreal, plans station here. $1,500,000.

Ont., St. Thomas—School—Bd. Educ. having plans prepared by Hutton & Souter, Bank of Hamilton Bldg., Hamilton, 2 story and basement, 23 room, rein.-con., brick and steel, plain foundation. $320,000. Noted Feb. 21.

BIDS DESIRED

Mass., Chicopee—Clubhouse—Mar. 3, by G. P. Dion, archt., 10 Centre St., 5 story, 70 x 150 ft., brick and steel, Chicopee St., for Polish Natl. Home, J. J. Chmura, 211 Exchange St., chn. $175,000. Noted Feb. 8.

R. I., Slocum—Administration and Service Station—Mar. 6, by State Pub. Welfare Comn., Providence, 3 story, 70 x 200 ft., brick and stone, at Exeter School, here. $250,000. T. S. McLaughlin, 72 Weybosset St., Providence, archt.

Pa., Easton—High School—Mar. 24, at office School Bd., 30 North 2nd St., senior high school, 12th and Spring Garden Sts. Michler & Snyder, 610 Drake Bldg., archts.

Pa., Phila.—Apartment—Mar. 1, by Ballinger Co., archts., 12th and Chestnut Sts. 15 story and basement, 44 x 133 ft., brick and steel, plain foundation, 19th and Spruce Sts., for 19th and Spruce Sts. Realty Corp., c/o Saul, Ewing, Remick & Saul, Land Title Bldg., $900,000. Noted Dec. 20.

W. Va., Clarksburg—Church—Mar. 3, by E. J. Weber, archt., 308 K. of C. Bldg. Pittsburgh, Pa., 1 story and basement, 65 x 160 ft., limestone, East Pike and Maple Sts., for Church of Immaculate Conception, here. $350,000. Noted Dec. 20.

Miss., Biloxi—Schools—Mar. 10, by School Trustees, constructing East End Intermediate School, 2 story, brick and concrete, on East Howard Ave., also new grade school for 4th Ward. $210,000. City Architect prepared plans.

Ky., Greenville—High School—Mar. 4, by Bd. Trustees Greenville Graded School Dist., 3 story and basement, 60 x 150 ft. brick. $150,000. Joseph & Joseph, Francis Bldg., Louisville, archts.

Ky., Louisville—Theatre and Apartment—Mar. 10, by Mammoth Realty Co., 608 West Walnut St., 6 story and basement 78 x 150 ft., brick and steel, Walnut St. $250,000. Joseph & Joseph, Francis Bldg. archts. Noted Jan. 10.

O., Barberton—High School—Mar. 15, by Bd. Educ., 3 story, 16 room addition to Barberton High School, also 10 room addition to Hyland school. $200,000.

O., Cleveland—Apartment—W. S. Ferguson Co., archts., 1900 Euclid Ave., taking bids 3 story and basement, brick, 1908 East 70th St., for C. A. Hanson, c/o architect $300,000.

O., Columbus—Commercial—Mar. 5, by Snyder-Babbitt & Mathews, archt., Hayden Bldg., 4 story and basement, 91 x 188 ft., brick, steel and concrete, for Columbian Building & Loan Co.

O., Portsmouth—Temple—Feb. 29 (extended date) by Building Com. Masonic Temple Assn., 3 story and basement, 84 x 180 ft., brick, stone, concrete and terra cotta, Gallia St. $500,000. Pretzinger & Musselman, 1155 Reibold Bldg., Dayton, archts. Noted Jan. 31.

O., Toledo—School—Mar. 7, by Bd. Educ., 3 story and basement, 64 x 229 ft. school with gymnasium wing 62 x 70 ft., rein.-con. and brick, plain foundation, Toronto Ave. $400,000. E. M. Gee, c/o Bd. Educ., archt.

Mich., Northville—School, etc.—Mar. 10, by Bd. Supervs. Wayne Co., (Detroit) sixteen 2 story, 47 x 86 ft. dormitory buildings, 2 story and basement, 51 x 138 ft. service building, 2 story and basement, 50 x 85 ft. school, 2 story and basement, 50 x 79 ft. administration, 2 story, 34 x 120 ft. boys industrial building, 1 story

Buildings (Continued)

and basement, 87 x 117 ft. power house, all foregoing of rein.-con., brick and steel, plain foundations, 1 and 2 story and basement, 77 x 94 ft. hospital, 1 story, 51 x 117 ft. assembly, rein.-con., brick, steel and stone, plain foundations, 1 story, 34 x 119 ft. girls industrial building, and 1 story, 32 x 89 ft. laundry building, rein.-con. and brick, at Training School on Northville-Plymouth Rd., here. $500,000. M. R. Burrowes, 2631 Woodward Ave., Detroit, archt.

Mich., Owosso—Temple—G. W. Graves, archt., 233 John R St., Detroit, taking bids and opens same about Feb. 29, 5 story and basement, 66 x 120 ft. rein.-con., brick and steel, plain foundation, for Masonic Temple Assn. $150,000.

Mich., Port Huron—School—Mar. 9, by R. R. Kemp, secy. Bd. Educ., constructing Cleveland School, 2 story and basement, rein.-con., brick and steel, Vaness St., $175,000, also 2 story and basement, rein.-con., brick and steel, Garfield and 10th Aves., $200,000. G. L. Harvey, Huron Ave., Detroit, archt. Noted Feb. 21.

Ill., Chicago—Club—J. Hunt, archt., 30 North Michigan St., taking bids 16 story, 125 x 180 ft., fireproof, Lake Shore Dr. and Chestnut St., for Lake Shore Athletic Club, c/o architect. $3,000,000. Noted Feb. 22, 1923.

Wis., Burlington—High School—Mar. 15, by School Bd., N. E. Marcher, clk., 2 story and basement, 185 x 247 ft., brick, tile and concrete, plain foundation. $300,000. Oppenhamer & Obel, Nicollett Bldg., Green Bay, archts. Noted July 26.

Wis., Green Bay.— Mar. 17, by Foeller, Schober & Stephenson, archts., Nicollet Bldg., 6 story and basement, 116 x 157 ft., brick and concrete, plain foundation, for Y. M. C. A., Minahan Bldg. $400,000. Noted Aug. 31.

Wis., Kenosha—Bank and Office—Lindl Lesser & Schutte, archts., 82 Wisconsin St., Milwaukee, taking bids 4 story and basement, 49 x 85 ft., brick and stone, plain foundation, for Merchants & Savings Bank, 252 Main St. $200,000.

Wis., Madison—School—Mar. 15, by Bd. Educ., 2 story and basement, 100 x 150 ft., brick, rein.-con. and steel addition, plain foundation, Brooks St. $175,000. J. R. and E. J. Law, 1st Central Bldg., archts. Noted Dec. 20.

Wis., Madison—School—Mar. 8, by Bd. Educ., T. Gosling, secy., 22 West Dayton St., 2 story and basement, 50 x 95 ft., brick, rein.-con. and steel, plain foundation, Spooner St. $200,000. E. Tough, Washington Bldg., archt. Noted Aug. 23.

Wis., Mendota—Hospital—Mar. 17, by Wisconsin Memorial Hospital Comn., c/o J. D. Mack, 304 Capitol Bldg., Madison, constructing Buildings 2, 4, 9, 10 and 11 at Farwells Point, 2 story and basement, brick and rein.-con., plain foundations, $150,000 A. Peabody, Capitol Bldg., Madison, archt.

Wis., Milwaukee—Apartment—Leenhouts & Guthrie, archts., 424 Jefferson St., taking bids and opens same about Mar. 5, 3 story, 48 x 113 ft., brick and tile, plain foundation, Juneau Ave., for Allied Investment Co., c/o Architects. Noted Jan. 17.

Wis., Milwaukee—Apartment and Business—M. Tullgren & Sons, archts., 425 East Water St., taking bids and opens same about Mar. 1, 7 story and basement, 79 x 165 ft., brick, tile and concrete, plain foundation, West Side. $300,000. Owner's name withheld.

Wis., Milwaukee—Apartment Hotel—R. Razall, archt., 330 Caswell Blk., taking bids 4 story and basement, (2 units), 103 x 118 ft., brick and concrete, plain foundation, Cass Sts., for Milwaukee Apartment Hotel Co., c/o G. W. Adams Building Co., 330 Caswell Blk. $600,000.

Wis., Oshkosh — Apartment — Auler & Jensen, archts., F. R. A. Bldg., taking bids 2 story and basement, 98 x 160 ft., brick and tile, plain foundation. $150,000. Owner's name withheld.

Minn., Brainerd—Hotel—Apr. 1, by A. Taylor, chn. com. for Brainerd Hotel Co., 4 story and basement, 102 x 110 ft., brick and steel. $225,000. A. Hanford, 212 Sellwood Bldg., Duluth, archt. and engr.

Minn., Minneapolis—School—Mar. 17, by Bd. Educ., 2 story and basement, rein.-con., brick and tile, Dartmouth and Ontario Sts. $165,000. G. F. Womrath business supt. Bureau of Buildings, Bd. Educ., City Hall, archts. Noted Jan. 11, 1923.

Minn., Minneapolis—School—Mar. 10, by Bd. Educ., superstructure, 1 story, 150 x 300 ft., rein.-con., brick and tile, Mississippi River Blvd. $170,000. Foundation in. G. F. Womrath, business supt. Bureau Design, Bd. Educ., City Hall, archts. Noted Dec. 13.

Kan., Leavenworth—City Hall—Mar. 12, by Feth & Feth, 419 Delaware St., 2 story and basement, 90 x 125 ft., rein.-con., brick and stone, $200,000. Noted Jan. 10.

Calif., Huntington Park (Branch of Los Angeles) — Theatre, Office and Store — Lindley & Selkirk, archts., Amer. Bank Bldg., Los Angeles, taking bids 3 story, 115 x 150 ft., rein.-con., here, for West Coast Theatres, Inc., Knickerbocker Bldg., Los Angeles.

Calif., Lemoore—High School—Mar. 7, by Trustees Lemoore Union High School Dist., rein.-con. high school, 30 classrooms and auditorium. $325,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted Jan. 31.

Calif., San Jacinto — Hotel, Bathhouse, etc.—J. J. Frauenfelder, archt., Story Bldg., Los Angeles, receiving bids summer resort buildings, hollow tile and wood, incl. hotel, bathhouse, cottages, etc., here, for Soboda Hot Springs, c/o architect. J. B. Althouse, financing project. From $200,000 to $250,000. Noted Dec. 6.

BIDS RECEIVED

N. Y., Albany — Dining Room — State Hospital Comn., Feb. 20, Verplanck dining room addition, from Carleton Co., Inc., 151 West 42nd St., New York City. $179,264.

D. C., Brightwood (Wash., P. O.)—Church, Auditorium and School—Church of Nativity, church auditorium and school, Georgia Ave. N. W., from Schneider-Spliedt Co., 1422 F St. N. W., Wash., $188,876.

W. Va., Bluefield—Municipal—Rein.-con. and brick building, from H. A. Lucas, Bluefield, $186,802. Noted Feb. 7.

O., Akron—High School—Bd. Educ. general contract high school in Firestone Park, from Clemmer & Johnson Co., 406 Metropolitan Bldg., $535,377. Noted Feb. 21.

O., Columbus—Hall—Richards, McCarty & Bulford, archts., 584 East Broad St., 5 story and basement, 120 x 130 ft., brick, steel and terra cotta, East State St., for Knights of Columbus, 6th and State Sts., from Moran Constr. Co., Terminal Bldg., Akron, $405,000. Noted Feb. 14.

Minn., Minneapolis—School—Bd. Educ., City Hall, Feb. 15, general contract rein.-con., brick, tile and stone addition, 15th Ave. N. and 4th St., from M. A. Floyd Co., 908 Andrus Bldg., $139,800. Noted Jan. 31.

Okla., Oklahoma City—Medical, Office and Bank—Medical Assn., 12 story and basement, 75 x 140 ft., rein.-con., brick and stone, general contract from Reinhart & Donovan Co., 801 Tradesman Natl. Bank Bldg., Oklahoma City. Archts. est. $800,000. Noted Jan. 10.

CONTRACTS AWARDED

Mass., Brighton (Boston, P. O.)—Apartment—Kanter & Stineberg, 220 Warren St., will build 3 story and basement, brick, semi-fireproof, plain foundation, Warren St., by day labor. Archts. est. $200,000. Silverman, Brown & Heenan, 51 Cornhill, Boston, archts. Noted Feb. 14 under "Boston."

Mass., Brighton (Boston P. O.)—Garage—Mack Motor Truck Co., 195 Massachusetts Ave., Cambridge, 2 story and basement, 150 x 160 ft. with 133 x 160 ft. ell, rein.-con., brick and steel, North Beacon and Arthur Sts., to Turner Constr. Co., 178 Tremont St., Boston, $200,000.

Mass., Brookline (Boston P. O.)—Apartment— J. Yonkers, 145 Harold St., Roxbury (Boston P. O.), 3 story and basement, 74 x 140 ft., brick and artificial stone, Carlton St., here, to Cherney & Carlin, 193 Warren St., Allston (Boston P. O.), $200,000.

Mass., Cambridge (Boston, P. O.)—Sales and Service—Mack Motor Truck Co., 195 Massachusetts Ave., 2 story, 150 x 160 ft. with 33 x 160 ft. wing, rein.-con. and steel, wood pile foundation, Massachusetts Ave., to Turner Constr. Co., 178 Tremont St., Boston, $300,000.

Mass., Lowell—Store and Office—A. F. Poach, 26 Ash St., 5 story and basement, 50 x 100 ft., brick and timber, 34 Jackson St., to Edwards & Monahan, Hildreth Bldg., $150,000.

Mass., Roxbury (Boston, P. O.)—Apartment—H. Barron, 32 Abbott St., Dorchester (Boston, P. O.), will build 3 story, 125 x 132 ft., brick and stone, plain foundation, Blue Hill Ave., here, by day labor. $150,000. S. S. Levy, 39 Court St., Boston, archt.

Mass., Roxbury (Boston P. O.) — Exchange—New England Telephone & Telegraph Co., 50 Oliver St., Boston, 2 story and basement, 97 x 146 ft., brick and stone, here, to Turner Constr. Co., 178 Tremont St., Boston, $195,000. Archts. est. $200,000.

Mass., Watertown—High School—School Com., 3 story and basement, 125 x 175 ft., rein.-con. and brick, wood pile foundation, Russell Ave., to J. Bowen Co., 164 Dudley St., Boston, $623,790. Noted Feb. 21.

Mass., Worcester—Apartment—I. Katz, 21 Dale St., will build two 3 story, brick and timber, plain foundations, Dale St., by day labor. $150,000. Private plans.

Conn., Bristol—Hospital—Bristol Hospital, 4 story and basement, 130 x 142 ft., brick and stone, to L. A. Miller, 22 Church St., Meriden, $349,000. Archts. est. $400,000. Noted Jan. 31.

Conn., Hartford—Apartment—L. Greensphon, 20 West St., 3 story, 90 x 136 ft., pressed brick, plain foundation, Buckingham St., masonry contract to M. Juster, 78 Franklin Ave. Archts. est. $150,000. Noted Jan. 10.

Conn., New Haven — Apartment — Adelman Bros., 12 Garden St., will build two 2 and 3 story, 100 x 105 ft., brick and timber, plain foundation, Whitney Ave., by day labor. $150,000. J. Weinstein, Metropolitan Bldg., archt.

N. Y., Amsterdam—High School—Bd. Educ. general contract 4 story, 128 x 210 ft., steel, brick stone and tile, to Prahl Constr. Co., Marine Bank Bldg., Erie, Pa., $465,300; heating and plumbing, to C. Dwyer, Amsterdam, $58,284 and $24,887 respectively. Noted Feb. 14.

N. Y., Arlington—School—Union Free School Dist. 7, 2 story and basement, 50 x 125 ft., brick, to G. D. Campbell, 56 Market St., Poughkeepsie, $150,000. Noted Feb. 14.

N. Y., Long Island City—Warehouse—Ludwig Bauman & Co., 500 8th Ave., New York, 15 story, 200 x 300 ft., rein.-con. and steel, plain foundation, Anable St., here, to G. Richard Davis, 30 East 42nd St., New York City. Archts. est. $1,500,000. Noted Feb. 14.

N. Y., Mamaroneck—High School—Bd. Educ., 2 story, brick, steel and stone, Boston Post Rd. and Palmer Ave., to Ackempora Bros., Mamaroneck, $449,000. Noted Feb. 14.

N. Y., New York—Restaurant—P. Anselmo, 165 West 49th St., 4 story, 40 x 100 ft., brick, steel and stone, plain foundation, 157 West 49th St., to Patterson-King Corp., 452 Lexington Ave. Archts. est. $150,000.

N. Y., Yonkers — Apartment — Chandell Court Constr. Co., c/o De Rose & Cavalieri, archts. and engrs., 370 East 149th St., will build 5 story, brick, steel and stone, plain foundation, 82 Carlyle Ave., by day labor. $500,000.

N. J., Millville—High School—Bd. Educ. general contract 2 story and basement, 150 x 220 ft., Broad and 5th Sts., to G. W. Shanner, Palmyra, $243,779; heating, to J. F. Craig, 621 Communipaw Ave., Jersey City, $34,135. Noted Feb. 7.

N. J., Newark—School—Bd. Educ., City Hall, 3 story, brick, steel and stone school for crippled children, Weequahic section, Maple and Goldsmith Aves., to Barr, Phaw & Fraser Co., 13th St., Hoboken. Archts. est. $600,000. Noted Feb. 7.

Pa., Altoona—Store—J. and I. Silverman, 1322 12th Ave., 5 story and basement, 60 x 120 ft. granite, terra cotta and steel, 11th Ave. and 12th St., to C. M. Singiser, Commerce Bldg. Archts. est. $350,000.

Pa., Chester — Office — J. T. Windrim, archt., Commercial Trust Bldg., Phila., 2 story and basement, 41 x 172 ft. brick and steel, plain foundation, 16-18 East 5th St., to Chester Constr. Co., Crozier Bldg., for Delaware Co. Electric Co., Chester. Archts. est. $175,000.

Pa., Emporium—School—Bd. Educ., 2 story and basement addition, to Cramer Constr. Co., Emporium. Archts. est. $150,000.

Pa., Phila. — Church — Muhlenberg Memorial Church, 13th and Rosemount Sts., 1 story and basement, 52 x 89 ft., brick and steel, plain foundation, to Bowden Constr. Co., 1935 Chestnut St. Archts. est. $150,000. Noted Dec. 13.

Pa., Phila.—Schools—Bd. Educ., 3 story and basement, 50 x 120 ft., with 2 wings, 48 x 97 ft., and 1 wing, 50 x 96 ft., B and Wyoming Sts., general contract to Sinclair & Griggs, Medical Arts Bldg., $437,800, plumbing to Thompson Bros., 520 Buttonwood St., $28,780, heating to McClintock Bros., 5608 Race St., $49,995; also alterations and additions to school on Benner and Pitman Sts., general contract to Nelson-Pedley Co., 1615 Spruce St., $215,000, heating to McCullough Bros., 5608 Race St., $36,000. Noted Feb. 14.

Pa., Pittsburgh—Store—Select Furniture Corp., c/o Kaufmann's Dept. Store, 5th and Smithfield Sts., 9 story and basement, steel frame, Penn Ave. near 6th St., to H. Miller & Sons Co., 2535 5th Ave.

Pa., Pittsburgh—Store—Schenck China Co., 432 Penn Ave., 3 story and basement, 40 x 113 ft., Penn Ave., to Feltyberger Reed Constr. Co., Peoples Bank Bldg. Archts. est. $150,000.

Buildings (Continued)

Del., Claymont—School—Bd. Educ., 60 x 196 ft. school, to J. E. Healey, 707 Patnall St., Wilmington. Noted Feb. 21.

N. C., High Point—Dormitories—Methodist Protestant Church, two 3 story brick dormitories, to R. K. Stewart & Son, High Point, $250,000. Noted Aug. 30.

N. C., Wilmington—Courthouse and Jail—New Hanover Co., 4 story, 64 x 118 ft., steel and rein.-con. addition, to U. A. Underwood, East Wilmington St., Wilmington, N. C., $153,540. Noted Jan. 24.

La., Shreveport—High and Grade School—Caddo Parish School Bd., 3 story, concrete, brick and stone, high school, general contract to Stewart-McGehee Constr. Co., A. O. U. W. Bldg., Little Rock, Ark., $615,000, plumbing to Fitzgerald Plumbing and Heating Co., 1412 Texas St., $57,864, heating to Dixie Heating & Ventilating Co., 109 Fannin St., Houston, Tex., $59,578, electric wiring to J. M. Johnson Co., 508 North Askard St., Dallas, Tex., $26,681; 2 story, concrete, brick and stone, grade school on Louisiana Ave., to W. G. Butler, Commercial Bank Bldg $237,000.

O., Cleveland—Commercial and Garage—Bolivar-Prospect Co., c/o J. L. Free, 1004 Prospect Ave., 3 story and basement, 116 x 180 ft., brick and rein.-con., 1300 Bolivar Rd., to Austin Co., 16112 Euclid Ave. Archts. est. $300,000.

O., Cleveland—Restaurant and Office—Waldorf Systems, c/o A. Y. Clark, local mgr., 1730 East 24th St., 2 story, 24 x 180 ft., brick, steel and concrete, Euclid Ave., to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $150,000.

O., Columbus — Academy — Notre Dame Academy, 2 story and basement, 100 x 150 ft., brick and concrete, East Rich St., to D. W. McGrath & Sons, 255 East Broad St., $200,000.

O., Kalida—Church—St. Michaels Roman Catholic Church, building church, to G. S. Wood, Amer. Bank Bldg., Lima, $171,521.

O., Mayfield (South Euclid P. O.) — School—Bd. Educ. Mayfield Rural School Dist., 2 story, brick, steel and concrete, to C. Peterson Co., 4500 Euclid Ave., Cleveland, $174,900. Noted Feb. 21.

O., Piqua—Church—Green St. Methodist Episcopal Church, 2 story, 70 x 130 ft., brick and stone, Green St., to A. M. Frey, Piqua, $175,000. Noted Aug. 2.

O., Youngstown — Hospital — Mahoning Co., 3 story, brick, steel and concrete, Smith Corners, to C. Shutrump & Sons Co., 407 Home Savings & Loan Bldg., $167,095. Noted Jan. 31.

Mich., Grand Rapids—School—Bd. Educ. 3 story, rein.-con., brick, steel and stone, plain foundation on Ottawa Hills site, to Owen-Ames-Kindall Co., 42 Pearl St., $665,400.

Ill., Chicago—Apartment—J. C. Barrett, 6531 Ingleside St., 3 story, 107 x 117 ft., fireproof, 7648-58 Phillips St., to Rune & Son, 6744 Ridgeland St. Archts. est. $200,000.

Ill., Chicago—Bank, Office and Apartment—Devon Safety Deposit Co., Clark and Devon Sts., 4 story, 66 x 95 ft., fireproof, 6347-53 North Clark St., to Math Rauen Co., 111 West Washington St.

Ill., Chicago—Bank and Office—Security Bank of Chicago, 741 Milwaukee Ave., 2 story, fireproof, Milwaukee, Chicago and Ogden Sts., to Avery Brundage, 110 South Dearborn St. Archts. est. $300,000.

Ill., Chicago—Riding Club—Riding Club of Chicago, c/o Rebori, Wentworth & Dewey, 332 South Michigan St., 2 story, 218 x 305 ft., fireproof, McClurg, Erie and Ontario Sts., to Bulley & Andrews, 2040 West Harrison St. Archts. est. $750,000.

Ill., Litchfield — Church and Sunday School—Union Avenue Christian Church, 1 story and basement, 51 x 120 ft., brick, stone and rein.-con., general contract to W. H. Crowe 1303 South Walnut St., Springfield. Archts. est. $150,000.

Ill., Urbana—Library, Gymnasium, etc.—University of Illinois, to English Bros., Champaign, 3 story and basement, 70 x 300 ft. library, $507,750; 3 story, 190 x 300 ft. gymnasium, $349,000; 2 story and basement, commerce building, $336,960; 3 story hospital, $146,500. All rein.-con., brick and stone. Noted Jan. 31.

Ill., Vandalia—Hotel—C. Evans, 4 story and basement, 35 x 90 ft., rein.-con., brick and stone, to R. E. Emerick, Vandalia. Archts. est. $150,000.

Wis., Milwaukee — Business — Ninth & Mitchell Realty Co., 216 West Water St., 2 story and basement, 92 x 140 ft., brick and concrete, plain foundation, Mitchell St., to S. Czaplewski, 878 2nd Ave. Archts. est. $150,000. Noted Feb. 7.

Wis., Wausau—School—School Bd., superstructure 2 story and basement, 55 x 162 ft., and 32 x 43 ft., brick and tile, plain foundation, to F. W. Krause, 1018 South 3rd Ave., $102,584. Noted Jan. 31.

Ia., Ft. Dodge — Hospital — St. Josephs Mercy Hospital, 3 story and basement, 45 x 143 ft., rein.-con., brick, tile and stone addition, to Riesche & Sanborn, 514 Jackson St., Sioux City, $108,500. Noted Feb. 7.

Minn., Northfield — Home — I.O.O.F. of Minnesota, A. L. Bolton, secy., 604 Pittsburgh Bldg., St. Paul, general contract 3 story and basement, 93 x 146 ft., rein.-con., brick, tile and stone, here, to Bracker Constr. Co., 638 Builders Exch., Minneapolis, $105,214. Noted Jan. 24.

Minn., Stillwater — Apartment Hotel — Mutual Hotel Co., 4 story and basement, rein.-con., brick and tile, general contract to Lovering & Longbotham, 312 Endicott Bldg., St. Paul. Cost complete $250,000. Noted Nov. 17, 1921.

Mo., Kansas City—Warehouse—Federal Van & Storage Co., 5 story and basement, 60 x 80 ft., rein.con. and brick, to J. Gosling, Ry. Exch. Bldg. Archts. est. $150,000.

Mo., St. Louis—Garage—Von Hoffman Realty & Investment Co., 109 South 9th St., 2 story and basement, rein.-con. and brick, 9th St., to S. Abramson & Son Constr. Co., Chemical Bldg. Archts. est. $200,000. Down-Town Garage Co., lessee.

Tex., San Antonio—Y. M. C. A., 6 story, 80 x 140 ft., rein.-con., brick and stone, plain foundation, Martin and Navarro Sts., to L. T. Wright & Co., City Natl. Bank Bldg., $259,029. Noted Feb. 7.

Tex., Texarkana—Hotel—Texarkana Hotel Co., 7 story and basement, 65 x 150 ft., brick and concrete, to Stewart-McGehee, A.O.U.W. Bldg., Little Rock, Ark., $600,000. Noted Dec. 20.

Tex., Tyler—Bank and Office—Citizens Natl. Bank, 6 story and basement, 54 x 103 ft., rein.-con., steel and brick, North Bway. and East Ferguson St., to J. E. Johnson Constr. Co., Amicable Bldg., Waco, $250,000. Noted Feb. 21.

Tex., Tyler—Schools—Bd. Educ., 2 story and basement, 120 x 160 ft., brick, stone and concrete, to Crisman & Nesbit, Deer Bldg., Dallas, $146,660. Archts. est. $150,000.

Okla., Oklahoma City — Office — E. H. Price, 310 West 28th St., 12 story and basement, 75 x 140 ft., rein.-con. and stone, plain foundation, Bway., general contract to Reinhart & Donovan, Tradesmens Bldg.; plumbing, to Cook & McDonell, Cotton Exch. Bldg. Archts. est. $1,000,000. Noted Nov. 22.

Okla., Oklahoma City—Store—Kerr Dry Goods Co., 226 West Main St., 8 story and basement, 82 x 140 ft., brick, plain foundation, Main St., to Campbell & Price, 606 West Main St., $750,000.

Okla., Tulsa—Office—Skelly Oil Co., Unity Bldg., remodeling Unity Bldg., adding 2 stories, etc., 4th St. and Boulder Ave., to W. H. Horster, 709 Exch. Natl. Bank Bldg. Est. cost $199,000.

Ore., Portland—School—School Dist. 1, general contract 2 story, 24 room, rein.-con. and timber, plain foundation, to Hansen, Hammond & Clist, Pittock Blk., $161,913.

Calif., Livingston—High School—Merced Union High School Dist., 1 story, rein.-con., general contract to J. E. Fritz, Merced, $100,050. Noted Jan. 24.

Calif., Los Angeles—Office—F. E. Morgan, Union Bank Bldg., (interested), 13 story and basement, 100 x 185 ft., rein.-con., Francisco and 8th Sts., to Macdonald & Kahn, Loew State Bldg.

Calif., Los Angeles — Store — Bullocks, 659 South Bway., 10 story and basement, 40 x 140 ft., steel frame and rein.-con., Hill St., to P. J. Walker Co., Merchants Natl. Bank Bldg., $300,000 to $400,000. Noted Dec. 6.

Que., Montreal — Hall and Office — Des Bardeurs Syndiques Port de Montreal, 4 story and basement, 84 x 96 ft. rein.-con., brick, steel and stone, to Duranceau & Duranceau, 127 Hamilton St., $150,000. Noted Feb. 14.

Federal Government Work

PROPOSED WORK

Del., Wilmington — Steel House — U. S. Engineer, Wilmington, rejected bids Feb. 1, steel house on quarterboat. Noted Jan. 10.

Ind., Jeffersonville — Water-softening Plant—Quartermaster Depot plans water softening plant at depot here.

Ind., Leavenworth—Power Head—U. S. Engineer, P. O. Box 72, Louisville, soon takes bids deep well power head, 15 hp. 18 in. stroke, for Dam 44, here.

Mich., Detroit—Derrick Boat—U. S. Engineer, Detroit, plans to purchase one steel hull derrick boat.

BIDS DESIRED

R. I., Providence—Dredging—Mar. 28, by U. S. Engineer, Providence, maintenance dredging in Connecticut River below Hartford, Conn.; adv. E. N.-R. Feb. 28.

N. J., Killochook Meadows—Dike and Sluice—Mar. 20, by U. S. Engineer, War Dept., Wash., D. C., dike and sluice in Delaware River, here. Noted Jan. 31.

Pa., Dubois—Post Office—Mar. 15, at office Supervising Architect, Treasury Dept., Wash., D. C., constructing post office here; adv. E. N.-R. Feb. 28.

D. C., Wash.—Boat—Mar. 20, (extended date) at office Comr. of Lighthouses, Wash., D. C., lighthouse tender Willow; adv. E. N.-R. Feb. 28.

Ala., Sheffield—Generators—Mar. 22, by U. S. Engineer, War Dept., Wash., D. C., furnishing four 32,500 K.V.A. electric generators, f.o.b. Sheffield.

Calif., Mare Island—Riprapping—Spec. 4941—Mar. 12, by Dist. Pub. Wks. Officer, Navy Yard, Mare Island, 9,000 tons hard stone riprap for embankment along dike here.

BIDS RECEIVED

Ky., Louisville—Crib Timbers—U. S. Engineer, P. O. Box 72, Louisville, furnishing 411 pieces 10 x 12 in. x 20 ft. and 120 pieces 10 x 12 in. x 30 ft. timber for cribwork, from Green Bros., Falls-of Rough, $46.50 per M. Noted Feb. 7.

Ky., Owensboro—Soft Steel Bars—U. S. Engineer, P. O. Box 72, Louisville, furnishing 3,200 soft steel round bars, ¾ in. diam., 22 ft. long, for Dam 46, from Bourne-Fuller Co., 1105 Union Trust Bldg., Cincinnati, O., $2.83 per 100 lb. Noted Feb. 14.

Ky., Owensboro—Steel Forgings, etc.—U. S. Engineer, P. O. Box 72, Louisville, furnishing 44 tons c.i. and 10 tons steel castings, and 28 tons steel reinforcing bars, from J. and J. B. Milholland Co., 714 5th Ave., Pittsburgh, Pa., $11,629. Noted Jan. 17.

Wis., Milwaukee—Cement—U. S. Engineer, Milwaukee, furnishing 19,500 bbl. portland cement, from Western Lime & Cement Co., 68 Wisconsin St., $2.25 per bbl. Noted Jan. 24.

Wis., Milwaukee—Steel Bars—U. S. Engineer, furnishing 672,400 lb. reinforcing steel bars, from Calumet Steel Co., 208 South La Salle St., Chicago, Ill., 1 in., ⅞ in. and ¾ in. $2.27, ⅝ in. $2.37, and ½ in. $2.47. Noted Jan. 24.

Mo., Kansas City — Post Office — U. S. Treasury Dept., Wash., D. C., 4 story and basement, two 67 x 74 ft. wings, rein.-con., steel and stone, from DeVault & Deitrich, Canton, O., $303,933.

Calif., Mare Island — Lumber — Bureau Supplies & Accts., Navy Dept., Wash., D. C., furnishing 396,000 ft. Douglas fir for Navy Yard here, from C. R. McCormick Co., 17 Battery Pl., New York City, $29.17 per M. Noted Jan. 31.

CONTRACTS AWARDED

N. Y., New York—Storehouse—U. S. Engineer Office, War Dept., Wash., D. C., hollow tile and concrete storehouse at Fort Tilden, here, to Rufus H. Brown, 356 Pearl St., Brooklyn, N. Y., $10,876.

Fla., Jacksonville—Jetty—U. S. Engineer, Jacksonville, repairing jetty at entrance to St. Johns Harbor, to Seaboard Dredging Co., Durkee Bldg., $117,120. Noted Jan. 24.

Ala., Florence—Steel Roof Trusses—U. S. Engineer, Florence, structural steel for powerhouse, to Strupp Bros. Bridge & Iron Co., St. Louis, Mo., $24,986. Noted Jan. 17.

Ky., Addison—Steel Sheet Piling—U. S. Engineer, P. O. Box 72, Louisville, furnishing 300 tons steel sheet piling, to Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., $57 per ton. Noted Feb. 14.

Ky., Louisville—Steel Sheet Piling—U. S. Engineer, P. O. Box 72, furnishing steel sheet piling for Dams 45 and 46, Ohio River, to Carnegie Steel Co., Carnegie Bldg., Pittsburgh, $88,657. Noted Jan. 10.

Ky., Uniontown—Lock—U. S. Engineer, P. O. Box 72, Louisville, lock for Dam 49, Ohio River, near here will be done by hired labor, no general contract. $1,500,000.

Tex., Ft. Worth—Mooring Mast—Spec. 4939—Bureau Yards & Docks, Navy Dept., Wash., D. C., erecting mooring mast here, to Newport Contg. & Eng. Co., Newport News, Va., $14,700. Noted Feb. 21.

Tex., Galveston—Motor Tug—U. S. Engineer, War Dept., Wash., D. C., one 65 ft. steel motor tug, to Togg Ship & Dry Dock Co., Mobile, Ala., $44,950.

Ore., Portland—Sand Pumps—U. S. Engineer, Portland, 2 sand pumps to Smith & Watson Iron Wks. Inc., 400 Front St., $7,791. Noted Jan. 24.

Calif., San Diego—Dredging—Spec. 4885—Bureau Yards & Docks, Navy Dept., Wash., D. C., dredging at Marine R.R. Naval Operating Base, here, to San Francisco Bridge Co., 14 Montgomery St., San Francisco, $7,500.

H. T., Pearl Harbor—Storehouse—Spec. 4911—Bureau Yards & Docks, Navy Dept., Wash., D. C., extension to paint and oil

Federal Government Work (Continued)

storehouse, at Naval Operating Base, here to L. R. Smith, 1576 Pensacola St., Honolulu, $63,517 (210 days). Noted Feb. 14.

Unclassified

PROPOSED WORK

Transmission Line—New York—Niagara, Lockport & Ontario Power Co., Lafayette Bldg., Buffalo, making surveys and plans approximately 40 mi. double 3 phase steel tower transmission line from Altmar to Solvay. Address H. W. Church, 703 Lafayette Bldg., Buffalo.

Transmission Line, etc.—New York—Twin States Gas & Electric Co., Hoosick Falls, had plans prepared 3 mi. transmission line from power plant at Hoosick Junction to Eagle Bridge with distribution lines, etc., in Eagle Bridge. $35,000. C. W. White, Hoosick Falls, mgr.

Road Machine—Ballston Spa., N. Y.—Saratoga Co. Road Com. plans to purchase road machine for use with tractor. $1,600.

Undergrade Crossing—Huntington, W. Va.—City and Chesapeake & Ohio R.R. Co. plan undergrade crossing at West 14th St. $67,000.

Transmission Line—Waxhaw, N. C.—City soon takes bids 15 mi. transmission line, substation, etc. $30,000. H. Bloxam, Salisbury, engr.

Hydro-electric Project and Dam—Falmouth, Ky.—Kentucky Northern Power Co. soon takes bids 36,000 hp. hydro-electric project and dam 250 ft. high, on Licking River. Est. cost over $500,000. R. A. Tescher, c/o Manfield Eng. Co., 1011 Fletcher Trust Bldg., Indianapolis, Ind., engr. Noted Jan. 10.

Terminal Facility, etc.—Louisville, Ky.—Inland Waterways Co., 316 West Jefferson St., plans extensive terminal facility on river front between Clay and Floyd Sts., incl. concrete retaining wall, 25 x 1,100 ft., 150 ft. pile railroad trestle, yard tracks, etc. $100,000. Rogers & Read, 310 Realty Bldg., engrs. Noted Feb. 14.

Subway — Cincinnati, O. — Plans 5 mi. subway from Mitchell Ave. to Oakley. Work consists of preparing subgrade for track by grading and constructing approximately 1,700 ft. rein.-con. subway and several other underpasses. This section of subway system will be mostly in open cut. $750,000. F. Raschig, City Hall, engr.

Track Elevation—Indianapolis, Ind. — Chicago, Indianapolis & Louisville R.R., 608 South Dearborn St., Chicago, plans elevation of tracks from East to Alabama Sts., here. $150,000. A. S. Kent, ch. engr.

Levee—Princeton, Ind.—Patoka-Wabash Levee Dist. plans levee along left bank of White River, to protect 65,000 acres. T. N. Jacob, Railway Exch. Bldg., St. Louis, Mo., engr.

Pipeline — Texas — R. B. Jones, Staley Bldg., Wichita Falls, and associates, making plans 25 mi. 6 in. oil pipeline from Wichita Falls to Archer Co. fields. $500,000.

Power Development — Lake Cushman, Wash.—City of Tacoma takes bids about Mar. 15, first unit of proposed Lake Cushman Power Project, developing 50,000 hp., $5,250,000. Ultimate capacity 140,000 hp. In addition to power houses in Skykomish River Valley, 2 large dams will be constructed, and concrete-lined tunnel, 2.5 mi. long will be driven. The larger of 2 dams, the Lake Cushman, will be 275 ft. high, and contain 86,000 cu.yd. concrete, this will raise waters of Lake Cushman to elevation of 745 ft. above sea level. Noted Nov. 1 under "Dams."

Subway—Yakima, Wash.—City had plans prepared double subway each 10 ft. high, 18 ft. wide, on Main St., underneath Northern Pacific R.R. $260,000. C. F. Wilson, city engr.

Gas Container—Colton, Calif.—Southern California Gas Co., 950 South Bway., Los Angeles, plans gas container, to contain 3,000,000 cu.ft., here. $250,000.

Electrolier System—Fresno, Calif.—Had plans prepared 258 electroliers, Kern and Inyo Sts. To exceed $25,000. W. Stranahan, city engr.

Traveling Crane—Long Beach, Calif.—See Industrial Works, under "Contracts Awarded."

Power Development—High Falls, Que.—Great Northern Power Co. Ltd., New Liskeard, Ont., plans to develop water power on Frederich House River, here, from 5,000 to 7,500 hp. at approximately 40 ft. head, incl. concrete dam and power house turbine, generators, exciters, transformers, oil and water pumps, etc. $1,000,000. Sutcliffe & Neelands, engrs., New Liskeard, Ont., will prepare all plans, let contracts and purchase equipment.

Tunnels—Montreal, Que.—City plans 2 tunnels under Grand Trunk Ry. tracks, one at Shearer St., $16,000 and other at Green Ave., $13,000, both 8 x 8 ft. rein.-con. E. Gauthier, asst. city clk.

Transformer—Sarnia, Ont.—Hydro Electric Power Comn., 190 University Ave., Toronto, plans to install transformer, here. $250,000. F. A. Gaby, ch. engr.

Street Lighting System—Toronto, Ont.—City plans to improve lighting systems on Queen and Bloor Sts. $100,000. R. C. Harris, city engr.

BIDS DESIRED

Tunnels, etc.—Sonyea, N. Y.—Mar. 11, by P. L. Lang, pres. Bd. Mgrs. Craig Colony, tunnels, bridge and heating work, additional heating system for Villa Flora group, school and laundry. S. W. Jones, state archt.; adv. E. N.-R. Feb. 28.

Grand Stand—Dallas, Tex.—City taking bids grand stand in Reverchon Park. $25,000. E. A. Kingsley, city engr.

Tunnel—Seattle, Wash.—Mar. 7, by Bd. Pub. Wks., completing concrete lined tunnel, 8 ft diam., 400 ft. long, 1st Ave. S., under west waterway. Shafts at each end of tunnel have been sunk and 40 ft. of tunnel bored. Former contract forfeited. Noted May 17.

BIDS RECEIVED

Levee—Charleston, Miss.—See "Excavation, Drainage, Irrigation."

CONTRACTS AWARDED

Borings, etc.—New York—Transit Comn., 49 Lafayette St., New York City, land and river borings along North Jane St., Jackson Ave., Manhattan Ave., Roebling St., Bedford Ave. and Newtown Creek, in Queens and Brooklyn Boros, Agreement "CW"-Route 70, to P. J. Haley, 25 Church St., New York City, $2.70, $0.90, $2.50, $0.70, $6.45, $0.90, $6.45. Noted Feb. 21.

Shaft Superstructure—New York, N. Y.—Transit Comn., 49 Lafayette St., superstructure over ventilating shaft and 2 passageways between tubes of 14th St.-Eastern Rapid Transit R.R., Route 8, Sect. 3, Agreement "CX," to B. T. and J. J. Mack, Inc., 160 Bway., $9,995. Noted Feb. 21.

Lighting System—Austin, Minn.—City, 76 double standards, 15 ft. high, cast iron and pressed steel, to Austin Fdry. Co., Austin, $27,005; 7,000 lin.ft. No. 8 solid lead and rubber-covered wire, 40,000 lin.ft. No. 6 standard lead and rubber-covered wire and 8,000 lin.ft. No. 10 rubber-covered wire, to Northern Electric Co., 41 South 11th St., Minneapolis, $13,000.

Storage Tanks — Kansas City, Mo. — Washburn-Crosby Mining Co., Chamber of Commerce Bldg., Minneapolis, Minn., will build rein.-con. storage tanks, 750,000 bu. capacity, 3100 Guinotte Ave., here, by day labor. $200,000. Private plans.

Levee—Jonesboro, Ark.—Cane Island D. D. 26, 427,000 cu.yd. excavation in levees and 148,000 cu.yd. excavation in ditches, to F. C. Morgan, 709 Lemcke Bldg., Indianapolis, Ind., $79,293. Engrs. est. $90,000. Noted Jan. 31.

Grain Elevator—Ft. Worth, Tex.—Kimbell Milling Co., Sherman, 500,000 bu. concrete grain elevator, 70 tanks, here, to Jones Hettelsater Constr. Co., Mutual Bldg., Kansas City, Mo. Flour mill, 1,000 bbl., will be erected soon. $1,000,000.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co. Ltd., Craig St. W., will lay 3,200 ft. 20 in. c.i. gas mains from Rosedale Ave. and Sherbrooke St. to Beaumont Sta., by day labor. $251,702.

Material and Equipment

PROPOSED WORK

Crane—Cincinnati, O.—Cincinnati River-Rail Transportation, Front and Harriet Sts., plans to purchase large gantry crane for river terminal at foot of Harriet St. To exceed $25,000.

BIDS DESIRED

Cement, etc.—Brooklyn, N. Y.—Mar. 5, by E. Riegelmann, boro pres., Boro Hall, 10,000 bbl. Portland cement and 7,000 cu. yd. steam cinders.

Paving Stone, etc.—Buffalo, N. Y.—Mar. 7, by Commissioner Pub. Wks., paving stone, curbing, sand, gravel and crushed stone, also repairing and constructing concrete sidewalks for year ending Dec. 31, 1924. C. E. P. Babcock, Municipal Bldg., engr.

Cranes — Blaw Knox, Pa. — Blaw Knox Co., taking bids two 10 ton 70 ft. span, 3 motor cranes, and one motor driven transfer car.

Crane — Brackenridge, Pa. — Allegheny Steel Co. taking bids 25 ton, 75 ft. span, 3 motor overhead crane.

Concrete Mixer, Shovel, etc.—Elyria, O.—W. H. Evans Constr. Co. in market full line of contractors equipment, concrete mixer, steam shovel, etc.

Reinforcing Bars—Indianapolis, Ind.—Chicago, Indianapolis & Louisville R.R., Louisville, Ky., receiving bids 400 tons reinforcing bars for freight station, here, to exceed $150,000.

Road Materials, etc.—Lansing, Mich.—Mar. 4, at office F. F. Rogers, state highway comr., Lansing, furnishing 2,632,750 gal. road materials, and 7,600 tons calcium chloride; adv. E. N.-R. Feb. 28.

Street Flusher, etc.—Oshkosh, Wis.—Bd. Pub. Wks., J. Voss, chn., taking bids 1,500 gal. motor driven street flusher. Noted Jan. 3.

Lumber, Steel, etc.—Algona, Ia.—Mar. 5, by Kossuth Co., 150,000 ft. lumber, 700 butt treated posts, 8,000 ft. corrugated culvert pipe and 40,000 lb. reinforcing steel. H. M. Smith, Algona, engr.

Road Oil, Trucks, Shovel, etc.—Minneapolis, Minn.—Mar. 5, by F. S. Gram, city purch. agt., 1,750,000 gal. road oil; two 1½ to 2-ton trucks with dump bodies; one ¾ cu.yd. steam shovel; one four-wheel trailer, 22-ton capacity. N. W. Elsberg, city engr.

Stone Crusher, Road Roller, etc.—Minneapolis, Minn.—Mar. 6, by F. S. Cram, city purch. agt., 1 stone crusher, 1 gasoline driven road roller, 2 bucket loaders for gravel. N. W. Elsberg, city engr.

Paving Mixer, Trailers, Tractors—St. Paul, Minn.—Mar. 4, by H. W. Austin, city purch. agt., 1 gasoline power paving mixer, non-tilting type, for Water Dept.; thirteen 2½-ton drop frame steel trailers and two 10-ton truck tractors. G. M. Shepard, city engr.

Paver—Pittsburg, Kan.—Dubois & Co. in market for large steam power street paver.

Road Oil—Clayton, Mo.—Mar. 5, by H. Jablonsky, Clayton Co. highway comr., 100,000 gal. road oil for use on roads as needed during 1924.

Pipe—Montreal, Que.—Mar. 8, furnishing 25 lengths 4 in., 25 lengths 6 in., 2,500 lengths 8 in., 50 lengths 10 in. and 200 lengths 12 in. c.i. pipe. L. O. Pion, supt. Purch. Dept.

Supplies—Oshawa, Ont.—W. C. Smith, engr., Town Hall, taking bids furnishing 4,000 ft. 4 in., 8,000 ft. 6 in. and 1,000 ft. 8 in. c.i. pipe, ten 4 in., twenty 6 in. and four 8 in. gate valves, 10,000 ft. ¾ in., 1,000 ft. 1 in., 500 ft. 1¼ in., 500 ft. 1½ in., and 500 ft. 2 in. galvanized iron pipe, water meters, brass works, 8,000 ft. 4 in., 1,000 ft. 6 in., 8,000 ft. 9 in. and 1,000 ft. 12 in. vitr. sanitary sewer pipe, 1,000 ft. 10 in., 2,000 ft. 12 in. and 4,000 ft. 15 in. concrete or tile sewer pipe. $50,000.

BIDS RECEIVED

Rip Rap, Steel, etc.—New York, N. Y.—Dept. Purch., Municipal Bldg., rip rap to Plant & Structures, from O'Brien Bros., Inc., 80 South St., $17,600; corrugated sheet steel to Street Cleaning Dept., from Eggleston Bros., $1,418; 400 cu.yd. asphalt binder mixture, from Brusstar Constr. Co., Harlem River and 150th St., $37,400. Noted Feb. 21.

Wood Block, etc.—St. Paul, Minn.—H. W. Austin, city purch. agt., Feb. 13, 1,200 sq.yd. 3½-in. creosoted wood block, from Republic Creosoting Co., St. Louis Park, Minneapolis, $2.60 per sq.yd.; 200 tons asphalt, from Carson Petroleum Co., 208 South La Salle St., Chicago, $20 per ton; 170 tons limestone dust, from Gopher Stone Co., 1500 Johnson St. N.E., Minneapolis, $5.50 per ton; (a) 72 manhole frames Diam. A, (b) 50 manhole covers, Diam. B, (c) 75 manhole covers Diam. C and (d) 24 manhole covers Diam. D, from Smith & Kenaley, 328 Globe Bldg., (a) $67.50 per ton (b) $67.50 per ton, Washington Fdry. & Machine Wks., Washington and Eagle Sts., (a) $8.15 each, (b) $3.50 each (c) $3.50 each (d) $4 each. Noted Feb. 7.

Asphaltic Cement, etc.—St. Louis, Mo.—G. H. Oetting, supply comr., City Hall, Feb. 15, 1,200 tons asphaltic cement for use of St. Louis Street Dept., from New Orleans Refining Co., Maison Blanche Annex, New Orleans, La., $18.20 per ton f.o.b. St. Louis; 500,000 gal. more or less, road oil for above during 1924, from East St. Louis Gasoline Co., 8th and State Sts., East St. Louis, Ill., $4.82 per gal. f.o.b. St. Louis.

CONTRACTS AWARDED

Piles, Crane, etc. — St. Paul, Minn. — H. W. Austin, city purch. agt., traveling crane, 7.5 ton capacity, to Conkey & Co., Conkey and Calumet Aves., Chicago, $4,050; one thousand five hundred and twenty 24-oz. cold rolled copper expansion plates, 270 cast aluminum forms, to Farwell, Ozmun Kirk & Co., 2nd and Jackson Sts., $6,797; furnishing and driving 637 piles between Mississippi River and Charles Lake, to Chernus Constr. Co., 724 Plymouth Bldg., Minneapolis, $10,000. Noted Jan. 31.

Steam Rollers — New York, N. Y. — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., two 10 ton steam rollers, to Buffalo Steam Roller Co., Brisbane Bldg., Buffalo, $8,960. Noted Feb. 7.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E. N.-R.

OFFICIAL PROPOSALS

Bids: Mar. 3.

Robert Street Bridge at St. Paul, Minnesota, for Ramsey County

St. Paul, Minn.

Sealed proposals will be received by the Board of County Commissioners of Ramsey County, Minnesota, at their offices in the Court House, in the City of St. Paul, until ten o'clock a.m., March 3, 1924, at which place and time the proposals will be publicly opened and read aloud.

The work to be done includes the bridge complete, together with street paving, curbs and sidewalks from 3rd Street to Fillmore Street, and miscellaneous building and sewer changes. The bridge will consist of 8 arch spans ranging in length from about 72 feet to 244 feet and having an aggregate length of about 1,086 feet; and approaches having a combined length of some 449 feet. The street improvements at both ends add a total length of about 403 feet. A number of retaining and supporting walls are included, especially in the portion between the end of the south approach proper and Fillmore Street. The bridge and approaches provide for a 56 foot roadway and two sidewalks.

Proposals shall be made in the form of the Proposal Blank prepared for this work. Each proposal shall be accompanied by a certified check or Bidder's Bond made payable to the Treasurer of Ramsey County, for an amount equal to ten per cent (10%) of the bid to be forfeited to the County as liquidated damages (not penalty) by any bidder who is awarded a contract and who fails to execute the contract and bond promptly. Certified checks will be returned to bidders upon execution of contract and bond or sooner upon action of the Board of County Commissioners. Proposals shall be placed in a sealed envelope with a statement thereon showing the work covered by the proposal and addressed and delivered to the County Auditor on or before the said date.

Plans, specifications and proposal blanks are on file at the office of the County Auditor and in the offices of Toltz, King and Day, Inc., Engineers and Architects, St. Paul, Minnesota. Copies of the plans, specifications and proposal blanks will be furnished upon payment to Toltz, King and Day, Inc., of $50.00 for each complete set, &25.00 of which will be refunded upon the return of plans and specifications in good condition within two (2) weeks after bids are received.

A bond satisfactory to the Board of County Commissioners for the full amount of the Contract price will be required.

This work will be paid for in cash. Monthly estimates equal to 85 per cent of the work done, and approved materials for construction delivered on the job during the month, will be paid to the contractor within fifteen (15) days after the allowing of same and a final estimate on the completed work will be paid within thirty (30) days after the same is accepted and approved by the Engineers and the Board.

Work is to begin within thirty (30) days after the signing of the contract, and must be completed by April 1st, 1926.

The Board reserves the right to reject any and all bids and to waive any informalities.

By Order of the County Board:
Dated at St. Paul, Minnesota.
January 14, 1924.

GEORGE J. RIES,
County Auditor of Ramsey County.

OFFICIAL PROPOSALS

Bids: March 14.

Steel Bridge

BERKSHIRE AVENUE BRIDGE

Springfield, Mass.

Sealed proposals for the furnishing, fabricating and delivery at the bridge site, but not including erecting, of structural steel of a 66′ 0″ span bridge at Berkshire Avenue over the Boston and Albany Railroad, Springfield, Massachusetts, will be received at the office of the City Clerk, Room 105, Administration Building, Springfield, Massachusetts, until twelve o'clock noon, March 14, 1924. All proposals must be made upon the blank form attached hereto, and the envelope containing the same, sealed and addressed to the Board of Supervisors, care of the City Clerk, Administration Building, Springfield, Massachusetts, and conspicuously endorsed "Proposal for Steelwork, Berkshire Avenue Bridge, over the Boston and Albany Railroad."

Each proposal must be accompanied either by a certified check made payable to the order of the Treasurer of the City of Springfield, Massachusetts, in the amount of One Thousand ($1,000) Dollars, or by a voucher showing that an equal sum of money has been deposited with the Treasurer of the City of Springfield, Massachusetts, as a guarantee that the bidder will enter into the proposed contract within the time specified. Should any bidder whose proposal has been accepted by the City refuse or neglect to enter into contract for the performance of the work and furnish a satisfactory bond therefor, the City shall deduct from said check or sum of money an amount equal to the difference between such accepted bid and the amount of the contract as let. This deduction will be in the form of liquidated damages to the City of Springfield, and not in the form of a penalty. The checks accompanying rejected bids will be promptly returned to the bidders upon the signing of the contract.

Plans, specifications, proposal blanks, and form of contract may be obtained at the office of the Superintendent of The Department of Streets and Engineering, Room No. 326, Administration Building, Springfield, Massachusetts. All contract forms and specifications must be returned with the proposals.

The steelwork consists of twelve plate girders with struts and bracing, bearing plates, etc., and is estimated as weighing approximately 273,220 lbs. All bids will be on a lump sum basis for work shown on the above described plans with a price per pound for any incidental material furnished in addition to that shown on plans.

The accepted bidder will be required to furnish a satisfactory surety company bond in the amount of Ten Thousand ($10,000) Dollars to be executed by a Surety Company authorized to do business within the Commonwealth of Massachusetts, and all bidders must furnish the name and address of such a Surety Company which will furnish said bond.

Bidders shall, upon request, furnish the Board of Supervisors with adequate evidence of their ability to correctly and expeditiously perform the work if awarded the contract.

The Board of Supervisors expressly reserves the right to reject any or all proposals and the right to acept any proposal or to award the work as deemed for the best interests of the City. Written notification of the acceptance of any proposal sent by Registered Mail to the address given on the proposal form shall be considered an adequate notice of the award of the contract.

Department of Streets and Engineering.
By ROBERT P. MARSH,
Superintendent.

OFFICIAL PROPOSALS

Bids: March 4.

Bituminous Road Materials and Calcium Chloride for Maintenance

Lansing, Mich.

Notice to Manufacturers and Distributors of Bituminous Materials and Calcium Chloride.

Sealed proposals will be received at the office of Frank F. Rogers, State Highway Commissioner, Lansing, Michigan, until 10 o'clock a.m., Central Standard Time, Tuesday, March 4, 1924, for furnishing to counties approximately:

2,000,100	gallons of Surface Treatment Material
109,550	gallons of Cold Patch Material
155,600	gallons of Joint Filler Material
217,500	gallons of Bituminous Macadam (Penetration) Material
150,000	gallons of Light Oil for Dust Palliative
7,600	tons of Calcium Chloride

in approximate quantities stated, in accordance with provisions of specifications and instructions to bidders.

Specifications, instructions to bidders and proposal blanks may be obtained at the office of the State Highway Department, Lansing, Michigan.

A certified check in the sum of five (5) per cent of amount of bid, made payable to Frank F. Rogers, State Highway Commissioner, must accompany each proposal.

The right is reserved to reject any or all proposals.

FRANK F. ROGERS,
State Highway Commissioner.
Lansing, Michigan,
February 19, 1924.

Bids: March 12.

State Hospital Work

Binghamton, N. Y.

Sealed propsals for Sanitary Work—Renewal of Water Line and Sanitary Work—Plumbing and Sewage Disposal, Plymouth Rock Farm Cottage, Binghamton State Hospital, Binghamton, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 3 o'clock, P. M., Wednesday, March 12th, 1924, when they will be publicly opened and read.

Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contracts within thirty (30) days after official notice of award of contracts and in accordance with the terms of Specifications Nos. 4167 and 4168. The right is reserved to reject any or all bids.

Drawings and specifications may be examined at the Binghamton State Hospital, Binghamton, N. Y., at the New York Office of the Department of Architecture, 18th floor, Fuller Building, Broadway and 23rd Streets, and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: February 13, 1924.

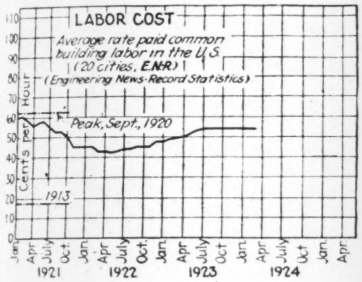
CONSTRUCTION NEWS

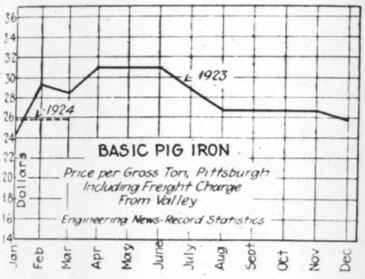
Engineering News-Record, March 6, 1924

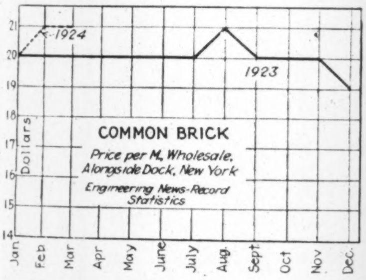
The Construction Barometer

General Cost Slightly Above Month Ago—Usual Spring Advances Checked by Light Buying

FOR the last month buyers quite generally have limited purchases to immediate requirements and not to replenish stocks. This has prevented the price rises which are to be expected in early March. Compared with a year ago, brick, steel and common labor are higher while pig iron and pine lumber are lower. Cement and fir timbers are at about the same price level as last year.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Feb. 14	$7,624,000	$11,004,000	$18,628,000
Feb. 21	15,802,000	38,386,000	54,188,000
Feb. 28	18,333,000	30,839,000	49,172,000
3 weeks	$41,759,000	$80,229,000	$121,988,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

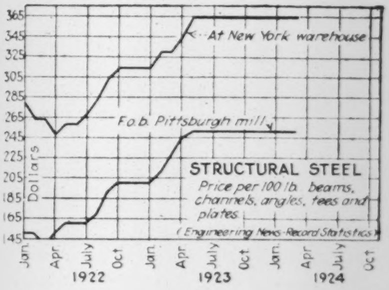
Week Ended	No.	Public Work	No.	Private Work
Feb. 14	5	$1,140,000	24	$8,118,000
Feb. 21	7	4,154,000	38	31,438,000
Feb. 28	22	6,556,000	47	14,061,000
3 Weeks	34	$11,850,000	109	$53,617,000

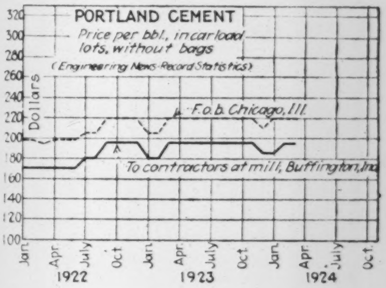
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

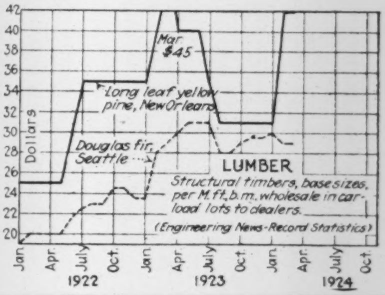
		Public			
Week Ended	Private	All	Streets and Roads	Waterworks and Sewers	All Buildings
Feb. 14	28	174	40	36	52
Feb. 21	39	192	54	31	56
Feb. 28	41	188	61	33	60

PINE LUMBER AND COMMON LABOR HIGHER — OTHER BASIC MATERIALS FIRM

	Quoted on Mar. 6 at	Price Was	On
Structurals, Pittsburgh, 100 lb	$2.40 @2.50	$2.35 @2.50	Feb. 7
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M. ft.	65.00	62.00	Feb. 28
Fir, San Fran., M. ft.	36.00	38.00	Jan. 24
Common labor, hr	.55	.54	Feb. 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Mar. 10	Toledo, O.	Feb. 21
Mar. 10	Sanford, Fla.	Feb. 28
Mar. 11	Kansas City, Mo.	Feb. 21
Mar. 12	Reading, Pa.	Feb. 28
Mar. 12	Hammond, Ind. Adv. Mar. 6.	Mar. 6
Mar. 12	Cleveland, O.	Mar. 6
Mar. 12	Baltimore, Md.	Mar. 6
Mar. 12	Arkansas City, Kan.	Mar. 6
Mar. 13	Kansas City, Mo.	Feb. 21
Mar. 14	Phillips, Wis.	Mar. 6
Mar. 14	Woodward, Okla.	Mar. 6
Mar. 17	Black River Falls, Wis.	Feb. 21
Mar. 17	Wortham, Tex.	Feb. 28
Mar. 17	Kohler, Wis.	Feb. 28
Mar. 18	Mount Prospect, Ill.	Feb. 14
Mar. 19	Silver Creek, N. Y Adv. Mar. 6.	Mar. 6
Mar. 20	Austin, Tex. Adv. Mar. 6.	Mar. 6
Mar. 24	Park Ridge, N. J. Adv. Mar. 6.	Mar. 6
Mar. 26	Litchfield, Ill.	Feb. 21
Mar. 27	Dunn, N. C. Adv. Mar. 6.	Mar. 6
Mar. 27	Newberry, S. C. Adv. Mar. 6.	Mar. 6

SEWERS

Bids Close		See Eng. News-Record
Mar. 7	Millville, N. J.	Feb. 28
Mar. 10	Ellwood City, Pa.	Feb. 28
Mar. 10	Toledo, O.	Feb. 21
Mar. 10	Long Branch, Ont.	Mar. 6
Mar. 12	Jackson, Mich.	Feb. 21
Mar. 12	Cleveland, O.	Mar. 6
Mar. 12	Baltimore, Md.	Mar. 6
Mar. 12	Festus, Mo.	Mar. 6
Mar. 12	East Cleveland (Cleveland P. O.), O.	Mar. 6
Mar. 13	New York, N. Y	Mar. 6
Mar. 18	Hartford, Conn. Adv. Mar. 6.	Mar. 6
Apr. 1	Toledo, O. Adv. Mar. 6.	Mar. 6

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Mar. 18	Toronto, Ont.	Feb. 21

BRIDGES

Bids Close		See Eng. News-Record
Mar. 7	Georgia	Mar. 6
Mar. 10	Jacksonville, Fla.	Mar. 6
Mar. 10	St. Anne de Bellevue, Que.	Jan. 31
Mar. 11	Nashville, Tenn.	Feb. 21
Mar. 11	Concordia, Kan.	Feb. 21
Mar. 11	Toledo, Ia.	Mar. 6
Mar. 12	Oskaloosa, Kan.	Feb. 28
Mar. 12	Madison, Wis.	Mar. 6
Mar. 14	Springfield, Mass. Adv. Feb. 21 to Mar. 6.	Feb. 21
Mar. 18	Nevada, Ia.	Mar. 6
Mar. 19	Sullivan, Me.	Feb. 21
Mar. 19	Greenwood, Miss.	Feb. 28
Mar. 19	Phila., Pa. Adv. Feb. 21 to Mar. 6.	Feb. 21

Bids Close		See Eng. News-Record
Mar. 19	Alabama	Feb. 28
Mar. 20	Charleston, S. D.	Feb. 21
Mar. 20	Blakely, Minn.	Mar. 6
Mar. 25	Springfield, Mass.	Mar. 6
	Adv. Mar. 6.	
Mar. 27	Buffalo, N. Y.	Mar. 6
Mar. 31	Houston, Tex.	Mar. 6
Mar. 31	Alabama	Mar. 6
Apr. 1	Portland, Ore.	Mar. 6
	Adv. Mar. 6.	
May 1	**Tientsen, North China**	**Oct. 11**

DAMS

Mar. 27	Tacoma, Wash.	Mar. 6
	Adv. Feb. 28 and Mar. 6.	

RAILWAYS

Mar. 18	**New Zealand**	**Sept. 20**
Apr. 1	Indiana	Jan. 24

EXCAVATION, DRAINAGE IRRIGATION

Mar. 11	Glens Falls, N. Y.	Feb. 21
	Adv. Feb. 14 to Mar. 6.	
Mar. 12	Gallatin, Mo.	Mar. 6
Mar. 13	Jersey City, N. J.	Feb. 28
Mar. 18	Oconto, Wis.	Feb. 28
Mar. 18	Green Bay, Wis.	Mar. 6

STREETS AND ROADS

Mar. 7	New Hampshire	Mar. 6
Mar. 7	Pennsylvania	Feb. 21
Mar. 7	Georgia	Mar. 6
Mar. 10	Huntington, W. Va.	Mar. 6
Mar. 10	Wichita, Kan.	Mar. 6
Mar. 10	Clarksburg, W. Va.	Mar. 6
Mar. 10	Wichita Falls, Wis.	Feb. 21
Mar. 10	Southmont, Pa.	Feb. 28
Mar. 10	White Plains, N. Y.	Feb. 28
Mar. 10	Michigan	Feb. 28
Mar. 10	Buckhannon, W. Va.	Feb. 28
Mar. 10	St. Petersburg, Fla.	Feb. 28
Mar. 10	Evansville, Ind.	Mar. 6
Mar. 10	Two Harbors, Ind.	Mar. 6
Mar. 10	Peoria, Ill.	Mar. 6
Mar. 10	Jersey City, N. J.	Mar. 6
Mar. 11	Antigo, Wis.	Feb. 7
Mar. 11	Fairport, N. Y.	Feb. 14
	Adv. Feb. 14 to Mar. 6.	
Mar. 11	Corsicana, Tex.	Feb. 14
Mar. 11	Maryland	Feb. 28
	Adv. Feb. 28 and Mar. 6.	
Mar. 11	Columbus, O.	Mar. 6
Mar. 11	Buffalo, N. Y.	Mar. 6
Mar. 11	Asbury Park, N. J.	Mar. 6
Mar. 11	Washington, Pa.	Mar. 6
Mar. 11	Colorado	Mar. 6
Mar. 11	Angleton, Tex.	Mar. 6
Mar. 12	Baltimore, Md.	Mar. 6
Mar. 12	Delaware	Feb. 21
Mar. 12	Salina, Kan.	Feb. 21
Mar. 12	Starksville, Miss.	Feb. 28
Mar. 12	Virginia	Feb. 28
Mar. 12	Monticello, Ill.	Feb. 28
Mar. 12	Syracuse, N. Y.	Feb. 28
Mar. 12	Sioux Falls, S. D.	Feb. 28
Mar. 12	Madison, Wis.	Mar. 6
Mar. 12	Brooklyn, N. Y.	Mar. 6
Mar. 13	Iuka, Miss.	Feb. 28
Mar. 13	Port Washington, Wis.	Mar. 6
Mar. 13	New York, N. Y.	Mar. 6
Mar. 14	New York, N. Y.	Mar. 6
Mar. 14	Kilbourn, Wis.	Mar. 6
Mar. 14	Fond du Lac, Wis.	Mar. 6
Mar. 14	New York	Feb. 28
	Adv. Feb. 28 and Mar. 6.	
Mar. 14	Canton, Tex.	Mar. 6
Mar. 14	West Allis, Wis.	Mar. 6
	Adv. Mar. 6.	
Mar. 14	Ohio	Mar. 6
Mar. 15	Decatur, Ala.	Feb. 28
Mar. 15	Geneva, Ill.	Feb. 28
Mar. 17	St. Paul, Minn.	Feb. 28
Mar. 17	Pennsylvania	Feb. 28
	Adv. Feb. 28 and Mar. 6.	
Mar. 17	Buffalo, N. Y.	Mar. 6
Mar. 17	California	Mar. 6
Mar. 17	Los Angeles, Calif.	Mar. 6
Mar. 17	Cape Girardeau, Mo.	Mar. 6
Mar. 17	Chehalis, Wash.	Mar. 6
Mar. 17	Akron, O.	Mar. 6
Mar. 17	Burgin, Ky.	Mar. 6
Mar. 18	Juneau, Wis.	Mar. 6
Mar. 18	Washington	Feb. 7
Mar. 18	Ontario	Feb. 28
Mar. 18	Starke, Fla.	Mar. 6
Mar. 18	Michigan	Mar. 6
Mar. 18	Indiana	Mar. 6
Mar. 18	Trenton, N. J.	Mar. 6
	Adv. Mar. 6.	
Mar. 20	Louisiana	Mar. 6
Mar. 21	Cresson, Pa.	Mar. 6
	Adv. Mar. 6.	
Mar. 21	Alabama	Mar. 6
Mar. 22	Kansas City, Kan.	Feb. 28
Mar. 24	Moorhead, Minn.	Mar. 6
Mar. 25	Washington	Feb. 28
Mar. 26	New London, Conn.	Mar. 6
	Adv. Mar. 6.	
Mar. 26	Delaware	Mar. 6
	Adv. Mar. 6.	
Mar. 26	Providence, R. I.	Mar. 6
	Adv. Mar. 6.	
Apr. 1	St. Louis, Mo.	Mar. 6

INDUSTRIAL WORKS

Mar. 10	Enid, Okla.	Mar. 6
Mar. 13	Corning, N. Y.	Feb. 28
Mar. 15	Milwaukee, Wis.	Mar. 6
Mar. 26	Morris Plains, N. J.	Mar. 6
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Mar. 7	Toledo, O.	Feb. 28
Mar. 7	Brooklyn, N. Y.	Feb. 14
Mar. 7	New York, N. Y.	Feb. 14
Mar. 7	Phila., Pa.	Mar. 6
Mar. 7	Camp Hill, Pa.	Mar. 6
Mar. 8	Madison, Wis.	Feb. 28
Mar. 8	Olney Sta. (Phila. P. O.), Pa.	Mar. 6
Mar. 9	Port Huron, Mich.	Feb. 28
Mar. 10	Detroit, Mich.	Feb. 21
Mar. 10	Louisville, Ky.	Feb. 28
Mar. 10	Biloxi, Miss.	Feb. 28
Mar. 10	Northville, Mich.	Feb. 28
Mar. 10	Minneapolis, Minn.	Feb. 28
Mar. 10	Phila., Pa.	Mar. 6
Mar. 10	Kenosha, Wis.	Mar. 6
Mar. 10	Milwaukee, Wis.	Mar. 6
Mar. 11	Sumter, S. C.	Feb. 21
Mar. 11	Brooklyn, N. Y.	Feb. 21
Mar. 11	Brooklyn, N. Y.	Mar. 6
Mar. 12	Falls City, Neb.	Feb. 21
Mar. 12	Leavenworth, Kan.	Feb. 28
Mar. 12	Mineral Point, Wis.	Mar. 6
Mar. 12	Grosse Pointe Park (mail Grosse Pointe, branch Detroit P. O.), Mich.	Mar. 6
Mar. 12	Hammond, Ind.	Mar. 6
Mar. 12	Massillon, O.	Mar. 6
Mar. 14	New Orleans, La.	Mar. 6
Mar. 14	Findlay, O.	Mar. 6
Mar. 15	Bradford, Pa.	Feb. 21
Mar. 15	Barberton, O.	Feb. 28
Mar. 15	Atlantic City, N. J.	Mar. 6
Mar. 15	Madison, Wis.	Feb. 28
Mar. 15	Louisville, Ky.	Mar. 6
Mar. 16	Michigan City, Ind.	Mar. 6
Mar. 17	Minneapolis, Minn.	Feb. 28
Mar. 17	Green Bay, Wis.	Feb. 28
Mar. 17	Mendota, Wis.	Feb. 28
Mar. 17	Troy, N. Y.	Feb. 21
Mar. 17	North Plainfield (Watchung P. O.), N. J.	Feb. 21
Mar. 17	Louisville, Ky.	Mar. 6
Mar. 18	Colma, Calif.	Mar. 6
Mar. 18	Newark, O.	Mar. 6
Mar. 18	Montclair, N. J.	Mar. 6
Mar. 18	Orange, Mass.	Mar. 6
Mar. 19	Burlington, Wis.	Mar. 6
Mar. 19	Baltimore, Md.	Mar. 6
Mar. 20	Gilbert, Minn.	Mar. 6
Mar. 21	Lockport, N. Y.	Feb. 21
Mar. 21	Troy, N. Y.	Mar. 6
Mar. 24	Easton, Pa.	Feb. 28
Mar. 24	St. Louis, Mo.	Mar. 6
Mar. 24	Phila., Pa.	Mar. 6
Mar. 25	Stony Creek Mills, Pa.	Mar. 6
Mar. 26	Somerville, N. J.	Feb. 21
Mar. 26	Buffalo, N. Y.	Mar. 6
Mar. 28	Pueblo, Colo.	Mar. 6
Apr. 1	Duluth, Minn.	Feb. 7
Apr. 1	Atlantic City, N. J.	Feb. 7
Apr. 1	Brainerd, Minn.	Feb. 28
Apr. 1	San Bernardino, Calif.	Mar. 6
May 1	Youngstown, O.	Feb. 7

FEDERAL GOVERNMENT WORK

Mar. 10	Road Graders, etc.—Ft. Bragg, N. C	Mar. 6
Mar. 11	Hospital—Pikesville, Ky.	Feb. 21
Mar. 12	Riprap — Mare Island, Calif.	Feb. 28
Mar. 13	Extension to Slip—New York, N. Y.	Mar. 6
Mar. 14	Sand Pump and Boiler Feed Pump—Memphis, Tenn.	Feb. 21
	Adv. Feb. 21 to Mar. 6.	
Mar. 17	Canal—Klamath Falls, Ore.	Feb. 21
Mar. 18	Post Office—Dubois, Pa.	Feb. 28
	Adv. Feb. 28 and Mar. 6.	
Mar. 19	Breakwater Pier—Hampton Roads, Va.	Mar. 6
Mar. 19	Foundations—Phila., Pa.	Mar. 6
Mar. 20	Boats—Wash., D. C.	Feb. 28
Mar. 20	Dike and Sluice—Killochook Meadows, N. J.	Feb. 28
Mar. 21	Reservoirs—Wash., D. C.	Feb. 21
	Adv. Feb. 21 to Mar. 6.	
Mar. 22	Generators—Florence, Ala.	Feb. 14
Mar. 22	Generators—Sheffield, Ala.	Feb. 28
Mar. 25	Road Work, etc.—Fort Wright, (Fishers Island P. O.), N. Y.	Mar. 6
Mar. 28	Ice and Refrigerating Plant—Livermore, Calif.	Feb. 14
Mar. 28	Dredging — Providence, R. I.	Feb. 28
	Adv. Feb. 28 and Mar. 6.	
Apr. 2	Roads—Phoenix, Ariz.	Mar. 6

UNCLASSIFIED

Mar. 11	Tunnels, etc. — Sonyea, N. Y.	Feb. 28
	Adv. Feb. 28 and Mar. 6.	
Mar. 11	Rip Rap—Scotia, N. Y.	Feb. 14
	Adv. Feb. 14 to Mar. 6.	
Mar. 11	Rein.-con. Floor—Buffalo, N. Y.	Mar. 6
Mar. 11	Power and Lighting System—Baltimore, Md.	Mar. 6
	Adv. Mar. 6.	
Mar. 12	Sanitary Work—Binghamton, N. Y.	Feb. 21
	Adv. Feb. 21 to Mar. 6.	
Mar. 15	Steel Hull, etc.—Portland, Ore.	Feb. 14
Mar. 22	Steel Shed—Charleston, S. C.	Mar. 6
	Adv. Mar. 6.	
Mar. 26	Chimney—Chimney Rock, N. C.	Mar. 6
Mar. 31	**Hopper Dredge — Brisbane, Queensland, Australia**	Nov. 1
Apr. 30	**Headworks—Wellington, New Zealand**	Dec. 13

MATERIAL AND EQUIPMENT

Mar. 7	Paving Stone, etc.—Buffalo, N. Y.	Feb. 28
Mar. 10	Rock—Jacksonville, Fla.	Mar. 6
Mar. 10	Lumber—Waterloo, Ia.	Mar. 6
Mar. 10	Rip Rap—New York, N. Y.	Mar. 6
Mar. 10	Lime—Long Island City, N. Y.	Mar. 6
Mar. 11	Lumber—Toledo, Ia.	Mar. 6
Mar. 11	Freight Handling Equipment—Tampa, Fla.	Feb. 14
Mar. 11	Paving Materials—St. Paul Minn.	Mar. 6
Mar. 11	Oil and Tar—Trenton, N. J.	Mar. 6
Mar. 11	Clamshell Bucket and Sidewalk Tile—St. Paul, Minn.	Mar. 6
Mar. 13	Cement, etc.—Cape May, N. J.	Mar. 6
	Adv. Mar. 6.	
Mar. 17	Scarifying Grader—Winona, Minn.	Mar. 6
Mar. 19	Tractor—Benson, Minn.	Feb. 7
Mar. 28	Cement—Alabama	Mar. 6
May 6	Asphalt, etc.—Holyoke, Mass.	Mar. 6

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

New York—Consolidated Water Co., 712 Washington St., Utica, purchased Hinckley Corp. of Hinckley, N. Y., plans filtration plant at Hinckley with 54 in. supply line to city of Utica. $2,250,000.

N. J., Hammonton—Water Comn. plans 2 electrically driven pumping units, compressors and other apparatus at pumping station. $14.000. W. R. Seely, town clk.

Miss., Meridian—Voted $80,000 bonds for improvements, incl. reservoir, pumps, pipes, etc. Noted Jan. 10.

Tenn., Greenville—Voted $45.000 bonds for completion water plant, incl. new mains, extensions, etc.

Tenn., Jackson—Election soon $150,000 bonds, enlarging waterworks, extending mains, etc. L. Taylor, mayor.

Tenn., Lowrenceburg—Election Apr. 14, $25,000 bonds, waterworks.

Tenn., Morristown—Plans extensions and improvements to waterworks, incl. electrically operated pumps. $105,000. J. F. Mather, supt. Water Dept.

Tenn., Nashville—Bd. Pub. Wks. plans to relay 6-in. c.i. mains in 8 streets. $18,000. H. Reyer, supt. of waterworks.

O, Columbus—See "Streets and Roads."

Mich., Berkley—Having plans prepared new water system, pumping station, etc. $260,000. R. A. Murdoch, 603 Free Press Bldg., Detroit, engr.

Ill., Springfield—Apr. 1 to vote on $300,000 bonds, filtration plant and additional settling basins, etc. W. J. Spaulding, City Hall, comr.

Wis., Eau Claire—Making preliminary plans 3 m.g. rein.-con. reservoir. $35,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, Minn., engr. Noted Jan. 17.

Wis., Madison—Common Council appropriated $15,000 to enlarge old wells on east side and purchase additional pumping equipment for well No. 13. L. A. Smith, supt. Engineer not selected.

Wis., Phillips—Rejected bids waterworks improvements, steel tank on steel tower, 2 electric pumps, automatic control valve, etc. Druar & Mininowski, 500 Globe Bldg., St. Paul, engrs. Noted Jan. 31.

Waterworks (Continued)

Ia., Marshalltown—Election soon $300,000 bonds new waterworks. O. G. Hern, Marshalltown, engr.

Tex., Brady—Plans election $100,000 bonds, waterworks. Address E. J. Adkins, city secy. Engineer not announced.

Tex., Ft. Worth—See "Dam."

Tex., Ft. Worth—See "Streets and Roads."

Okla., Apperson—Defeated $85,000 bonds for new waterworks. R. Flood, Drumright, engr. Noted Feb. 7.

Okla., Newkirk—Election Mar. 14, $100,000 bonds, new pipe line, wells, motor driven centrifugal pumps, transmission line, mains, valves, and hydrants. H. E Musson, Grain Exch. Bldg., Oklahoma City, engr. Noted Jan. 24.

Okla., Oklahoma City—Pumps—Huckins Hotel Co., 20-22 North Bway., plans to purchase and install 2 motor driven deep well pumping units. $10,000.

Okla., Shidler—Voted $125,000 bonds new waterworks system incl. pumping station, mains, tank, etc. Gantt-Baker Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Okla., Tipton — Plans new waterworks and fire trench equipment, 15,000 ft. 4- to 8-in. c.i. pipe. $30,000. J. D. Bomford, Enid, engr.

Okla., Wewoka — Having surveys made new dam, pipe line, etc., to exceed $25,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Utah, Salt Lake City—Plans building and equipment for Upper Canal Pumping plant. $60,000. S. Q. Cannon, city engr.

Wash., Anacortes—Having surveys made waterworks improvements, incl. additional water supply, filters, etc. $100,000. Burns & McDonnell Eng. Co., 415 Marsh-Strong Bldg., Los Angeles, Calif., engrs. Noted Dec. 27.

Wash., Yakima—Will vote on bonds for water system. Former issue of $35,000 bonds found insufficient. C. F. Wilson, city engr.

Calif., Beverly Hills—Plans to vote on $150,000 bonds for purchasing and improving privately owned waterworks. Improvements to exceed $25,000. J. Albers, city engr.

Ont., Hamilton — Plans new reservoir. $100,000. W. L. McFaul, city engr.

Ont., Toronto—York Twp., 40 Jarvis St., plans 10,000 ft. 6 in. c.i. mains in Porter and Schell Aves. $25,000. Owners buy pipe and materials and let labor. F. B. Goldike, twp. engr.

BIDS DESIRED

N. Y., Silver Creek—Mar. 19, by Bd. Water Comrs., earthen dam, Div. 1; 21,000 ft. 14 in. c.i. pipe, and 45 tons 36 in. pipe, Div. 2. J. P. Wells, Cutler Bldg., Rochester, hydraulic engr.; adv. E. N.-R. Mar. 6.

N. J., Park Ridge—Mar. 24, by Mayor and Boro Council, furnishing and laying c.i. pipe, 300,000 gal. steel standpipe, and drilling two 12 in. artesian wells. H. J. Harder, 129 Market St., Paterson, engr.; adv. E. N.-R. Mar. 6. Noted Jan. 3.

Md., Baltimore—Mar. 12, by Bd. Awards, furnishing and delivering wrought iron pipe, couplings and malleable iron fittings to Water Dept. V. B. Siems, City Hall, water engr.

N. C., Dunn—Mar. 27, by J. L. Wade, mayor and Bd. Town Comrs., waterworks and sewerage improvements. Gilbert C. White Co., Durham, engrs.; adv. E. N.-R. Mar. 6.

S. C., Newberry—Mar. 27, by Comrs. Pub. Wks., City Hall, water supply system. P. H. Norcross, 1404 Candler Bldg., Atlanta, Ga., consult. eng.; adv. E. N.-R. Mar. 6.

O., Cleveland—Mar. 12, by Cuyahoga Co., 17,000 ft. 6 and 8 in. c.i. mains, Impvt. 42 of Co. Sewer Dist. 1. R. F. MacDowell, Court House, engr.

O., Cleveland—Taking bids motor driven centrifugal pumping unit.

O., Columbus—See "Streets and Roads."

Ind., Hammond—Mar. 12, at office of Bd. Pub. Wks., c.i., w.i. or steel pipe. E. W. Miles, clk. Water Dept.; adv. E. N.-R. Mar. 6.

Wis., Phillips—Mar. 14, by C. F. Scheel, city clk., waterworks improvements incl. steel tank on steel tower, 2 electric pumps and other mechanical equipment, also automatic control valves, etc. $15,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs. Noted Mar. 6.

Kan., Arkansas City—Mar. 12, by City Clerk, 20,055 ft. 4 in. class B c.i. pipe, 7,337 lb. B & S specials, thirty-four 4 in. gate valves and boxes, 21 fire hydrants, 23 connections, 200 meters, 2 deep wells, remote control house pump, etc. $50,000. D. Lawhe, City Hall, engr. Noted Nov. 1.

Mo., Festus—See "Sewers."

Tex., Austin—Mar. 20, by W. D. Yett, mayor and Councilmen, at office J. Hornsby, city clk., City Hall, filtration plant. C. E. Leonard, city engr.; adv. E. N.-R. Mar. 6.

Okla., Woodward—Mar. 14, by S. J. Dohren, city clk., 4 pumps, 1,275 g.p.m. against 200 ft. head, 1,250 g.p.m. against 175 ft. head, 1,275 g.p.m. against 175 ft. head, and 1,325 g.p.m. against 190 ft., head. Black & Veatch, 700 Mutual Bldg., Kansas City, Mo., engrs.

BIDS RECEIVED

Conn., Wallingford—Bd. Water Comrs., Feb. 28, laying and carting 8,700 lin.ft. 18-in. Class C pipe (all materials furnished by Water Dept), 6-ft. trench with 400 lin. ft. in red rock and 900 lin.ft. wet trench from Zilly & Angelone, Hartford, $12,975. Noted Feb. 21.

N. Y., Brooklyn—Bd. Water Supply, Gas & Electricity, Municipal Bldg., New York, Feb. 26, mains in Ave. L. 2nd Ave., 37th, 42nd, Bridge, Sands and Clinton Sts., from Wattaga Contg. Co., $129,756. Noted Feb. 21.

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., Feb. 28, centrifugal pumps and switchboard, etc., from A. J Abels Co., Inc., Iroquois Bldg., $67,407. Noted Feb. 7.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Riverside Terrace, Bennett and 12th Aves., West 12th, West 40th, 46th and 186th Sts., also fire hydrants on existing mains in Ave. A, Bway., East Bway., Riverside Dr., Bayard, James, Madison, Oak, Water and West 153rd Sts., from W. J. Drummond, $41,781. Noted Feb. 21.

Calif., San Francisco — City and San Francisco Co., c.i. pipe, submarine portion Hetch Hetchy Aqueduct Bay Crossing Pipe Line, incl. 1,625 tons flexible joint pipe, 30 tons 42 in. bell and spigot pipe, one special pipe for west end, from Union Machine Co., 934 Brannan St., (1-c) $124 (2-c) $992; Bethlehem Shipbuilding Co., 18th and Illinois Sts. (1-a) $164.49 (2-c) $1,406; United States Cast Iron Pipe & Fdry. Co., Monadnock Bldg. (1-b) $119 (2-c) $1,800; gate valves for Hetch Hetchy project (Item 1) two 42 in. valves (1-a) two 42 in. (2) one 36 in. (2-a) one 36 in. (3) four 20 in. (1-b) two 42 in. (1b) two 42 in. (2-b) one 36 in. (2-b) one 36 in. (3) four 20 in., from Union Machine Co., 934 Brannan St. (1-a) $5,500 (2-a) $5,075 (3) $640 (1-b) $5,450 (2-b) $4,875 (3) $640; Pelton Water Wheel Co., Harrison and 19th Sts. (1) $5,138 (1-a) $5,826 (2) $4,810 (2-a) $5,808 (3) $1,037 (1-b) $5,135 (1-b) $5,740 (2-b) $4,802 (2-b) $5,650 (3) $1,035. Items from 1-b to 3 are conditioned upon bidder being awarded contract for all valves. Alternative bids were received on hand operated and water motor operated valves, suitable to working pressure 165 lb. per sq.in., to be double seated with flanged ends, 42 in. and 20 in. to have rising stems, 36 in. non rising stems. Noted Jan. 24 and Feb. 14.

CONTRACTS AWARDED

Vt., Enosburg Falls—Enosburg Falls Water Corp. will erect 140-ft. concrete dam by day labor; 30 x 60 ft. standpipe, to Chicago Bridge & Iron Wks., 210 Transportation Bldg., Chicago; laying 10,560 ft. 10-in. c.i. main, to Standard Cast Iron Pipe & Fdry. Co., Bristol, Pa. Engrs. est. $75,000.

Pa., Phila.—Dept. Pub. Wks., Room 216, City Hall, 48 in. steel water main to connect the West Phila. water supply system with main city system in Girard Ave. from 31st to 40th Sts., and across Schuylkill River on new steel trusses, under existing Girard Ave. Bridge, about 1 mi. long, to M. and J. B. McHugh, 892 North Warnock St., $247,007. Noted Feb. 7.

N. C., Greensboro—See "Waterworks."

Minn., Faribault—Furnishing 108 tons 6-in. and 13 tons 8-in. Class B c.i. pipe, 12-ft. lengths, and 8 tons fittings, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala. Noted Feb. 7.

Minn., Little Falls—City, installing 1,000 lin.ft. 6-in., 1,000 lin.ft. 8-in. and 2,000 lin.ft. 12-in. c.i. pipe, 7 gate valves and constructing pump house, to J. G. Anderson, Little Falls.

Minn., Minneapolis—Furnishing 126 tons reinforcing steel for Water Dept., to C. A. P. Turner Co., 627 1st Ave. N., $8,063. Noted Feb. 14.

Minn., St. Paul—H. W. Austin, city purch. agt., 120 tons c.i. pipe specials, to South Park Fdry. & Machine Co., 23 East Water St., $98 per ton; brass water gate valves to Crane Co. of Minnesota, 5th St. and Bway.; corporation cocks and curb cocks, to Mueller Mfg. Co., 512 West Cerro Gordo St., Decatur, Ill.; 9 x 60 ft. steel standpipe, to James McNeil & Bro. Co., 29th St., Pittsburgh, Pa.; 12 x 98 ft. standpipe; to Duluth Iron Wks., Duluth; 800 sq.yd. sandstone blocks, to Standstone Quarries Co., 510 Plymouth Bldg., Minneapolis, $2.74 per sq.yd. Noted Feb. 28.

Wyo., Casper—To Casper Supply Co., Center St. and Railroad Ave., 26,000 lin.ft. 4 in. c.i. pipe $73.98 per ton, 4,008 lin.ft. 6 in. and 6,360 lin.ft. 8 in. $69.98, etc., total $47,085. Noted Feb. 7.

Okla., Holdenville — New purification plant, 14,000 ft. 6 in. c.i. pipe, motor driven centrifugal pumps, to Votaw & Long, Holdenville, $63,396. Noted Feb. 21.

Okla., Shidler—Phillips Petroleum Co. earth dam and spillway 48,000 cu.yd. earth and 23,000 cu.yd. rock excav., to Cook & O'Brien, Railway Exchange Bldg., Kansas City, Mo., $59,207. Engrs. est. $100,000.

Calif., Pasadena—Quantity of c.i. pipe and fittings, to Pacific Pipe Supply Co., 1002 Santa Fe St., Los Angeles, $102,500.

Calif., Santa Cruz—Pipe and fittings, to Western Pipe & Steel Co., 444 Market St., San Francisco, $95,864.

Sewers

PROPOSED WORK

N. J., Bloomfield—Plans 8,600 ft. 6 and 8 in. tile sewers in Broad St., Watchung and Sunset Aves. $31,252. E. Baechlin, town engr.

Fla., Labelle—Plans to vote on $25,000 bonds for sewerage system. S. E. Stewart, Labelle, engr.

O., Columbus—See "Streets and Roads."

O., North Olmsted—Cuyahoga Co. (Cleveland) plans widening and extending Coe Ditch with tile and concrete, here $50,000. F. Lander, Court House, Cleveland, engr.

Ill., Bellwood — Soon takes bids West Side Sewer, 4,376 lin.ft. 39- to 48-in. concrete sewer, 44,394 ft. 8- to 36-in. D. S. vitr. tile sewer, 200 ft. 36-in. c.i. pipe, excavation, etc. $260,628. E. A. Rossiler, 127 North Dearborn St., Chicago, engr.

Ill., Glenview—Having preliminary surveys made sanitary sewerage system, probably 8- to 48-in. pipe, etc. $100,000. Marr-Green Co., 400 North Michigan Ave., Chicago, engrs.

Kan., Wichita—Soon takes bids 11,045 ft. 8 in. sewers and 54 manholes. $25,000. P. L. Brockway, City Bldg., engr.

Neb., Kearney—Voted $75,000 bonds for storm sewers. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.

S. D., Salem—Plans sanitary sewerage system. $25,000. B. L. Hintz, city clk.

Mo., Cameron—Soon takes bids sewers and disposal plant. $70,000. Black & Veatch, 700 Mutual Bldg., Kansas City, engrs. Noted Jan. 3.

Mo., Carthage—Rejected bids Feb. 11, for 693 lin.ft. 18 in. c.i. and 6,227 ft. 18- to 24-in. clay or concrete pipe, Imhoff tank, trickling filter sludge bed, etc. $108,000. Will readvertise soon. Noted Jan. 31.

Okla., Apperson—Defeated $45,000 bonds 6 mi. sewerage system and disposal plant. R. Flood, Drumright, engr. Noted Feb. 7.

Calif., Long Beach—Having plans prepared sewage disposal plant, Dorr type of screen, each screen 10 m.g. daily capacity. R. D. Van Alstine, city engr.

Calif., San Fernando—Plans to vote on bonds (to exceed $25,000) for sewage disposal plant.

Ont., Guelph—Plans 9,000 ft. 12 in. trunk sewer. $55,000. H. S. Nicklin, city engr.

BIDS DESIRED

Conn., Hartford—Mar. 18, by Bd. Contact & Supply at Mayors office, Municipal Bldg., sewers in Granby St. et al. R. N. Clark, city engr.; adv. E. N.-R. Mar. 6.

N. Y., New York—Mar. 13, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in East 172nd and East 177th Sts., Rosedale, Commonwealth, St. Lawrence, Dewey, Schley, Randall, East Tremont, Edison, Logan, Hollywood, Wilson, Needham, Whitlock and Leland Aves.

Md., Baltimore—Mar. 12, by Bd. Awards, 47,500 lin.ft. sanitary sewers and house connections, 5- to 24-in. diameter in Dists.

Sewers (Continued)

24-B and P-8. B. L. Crozier, City Hall, highways engr.

W. Va., Clarksburg—See "Streets and Roads."

O., Columbus—See "Streets and Roads."

O., Cleveland—Mar. 12, by Cuyahoga Co., 29,750 ft. 8- to 36-in. vitr. tile sewers, Impvt. 38 of Co. Sewer Dist. 1. R. F. MacDowell, Court House, engr.

O., East Cleveland (Cleveland P. O.)—Mar. 12, 625 ft. 5 ft. 6 in., 1,090 ft. 5 ft. 3 in., 1,510 ft. 5 ft., and 865 ft. 4 ft. 6 in. concrete sewers in Hayden Ave. M. Garnett, City Hall, engr.

O., Toledo—April 1, by W. T. Jackson, dir. Pub. Serv., West Side Branch Intercepting Sewer and Storm Water Regulator connections known as Contr. 7A of Toledo intercepting sewerage system. G. E. Laska, secy.; adv. E. N.-R. Mar. 6.

Mo., Festus—Mar. 12, 10 mi. sewers, disposal plant, sewage pumping plant, etc., also 9.5 mi. c.i. mains, hydrants, valves, etc., and either 2 m.g. concrete or steel standpipe. J. P. Davis, Central Trust Bldg., Jefferson City, engr. Noted Dec. 6 under "Waterworks."

Ont., Long Branch—Mar. 10, by S. Barratt, clk. Etobicoke Twp., Islington, 12 mi. 9-48 in. vitr. and concrete sewers, in this vicinity. $250,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs. Noted Feb. 28.

O., Ashtabula—W. M. Cotton, city mgr., Feb. 21, 3,500 ft. 24 x 42 in. concrete submerged outfall pipe and river crossing, from Amer. Constr. Co., Marion Bldg., Cleveland, $207,162. Noted Feb. 14.

O., Cleveland — Cuyahoga Co. Feb. 27, 16,000 ft. 8- to 27-in. vitr. and 3,200 ft. 30- to 42-in. segmental block sewer, Impvt. 55 of Co. Sewer Dist., from Langahan Constr. Co., Marshall Bldg., $120,000. Noted Feb. 21.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to A. Mannino, 263 86th St., sewers in East 9th St., 79½% engrs. est. $28,143, East 7th St., 81% $8,538, Empire Blvd., 110% $2,376, West 4th St., 77% $65,885 New Utrecht Ave., 86% $10,473, 69th St., 85% $5,403; to Fenlen Constr. Co., sewer in East 18th St., 87% $16,353; to C. F. Vacharas, 645 40th St., Vanderbilt Ave., 113% $16,664, Hegeman Ave., 84.3% $1,400, Douglass St., 85.3% $400; to Manmill Constr. Co., 2035 Douglass St., Junius St., 89.2% $400. Noted Feb. 28.

N. Y., Kenmore—For 10- to 60-in. concrete and vitr. tile storm sewers in various streets, to J. M. Fahning, 460 Leroy Ave., Buffalo, $81,838.

N. Y., Pleasantville—Bd. Sewer Comrs., Village Hall, disposal plant, Constr. 1, to Hennessey & Sowell, Hightstown, N. J., $82,576; collecting system, Contr. 2, to J. Miele, 21 Hillcrest Terrace, East Orange, N. J., $107,051. Noted Jan. 17.

N. C., Greensboro—For 50 mi. water and sewer lines contract awarded tentatively, to Elliott Bldg. Co., Hickory, $246,517. Noted Jan. 31.

O., Cleveland—Cuyahoga Co. 9,000 ft. 8- to 42-in. vitr. tile sewer, Impvt. 36 of Co. Sewer Dist. 1, to Gallagher-Burke Constr. Co., Rockefeller Bldg., $60,510. Noted Feb. 28.

O., Euclid — Vitr. tile and segmental block sewer in East 185th St., to Lafornaro Constr. Co., 2218 Murray Hill Rd., Cleveland, $58,928.

Wis., Milwaukee—Metropolitan Sewerage Comn., 508 Market St., concrete sewer in Jackson Dr., 26th, Oklahoma and Western Aves., to Knowles & Fehr, Inc., 3110 Belmont St., Chicago, $329,124; terra cotta pipe sewer in Lake St. from 27th to 35th Sts., to G. E. Zimmermann, 3402 Grand Ave., $24,357. Noted Feb. 14.

Mo., Kansas City—Sanitary sewers in Dist. 518, to Torson Constr. Co., 4429 Highland Ave., $25,226.

Wash., Tacoma—Sewers in Gallagher Gulch from Tacoma Ave. to Dock St., 450 ft. 66-in., 955 ft. 63-in. and 850 ft. 60-in. rein.-con. pipe, 4,000 cu.yd. earth trenching, etc., to Hart Constr. Co., 806 Tacoma Bldg., $62,224.

Que., Montreal — Will build sewers in Notre Dame DeGrace Ave., Desautels, Henri Julien, Dandurand, Drolet and Talhurst Sts., by day labor, $75,790; sewer in St. Donat St., to A. Thezaud, 885 St. Catherine St. E., $11,631; in St. Zotique St., to V. Mastracchio, 554 St. Denis St., $3,772. Noted Jan. 10.

Ont., Toronto—To Murphy Contg. Co., 8 Wychwood Ave., sanitary and storm sewers in Foxbar Rd. $3,545; to City Works Dept., City Hall, Gresham Rd. $1,664, Balmuto St. $403, maintenance and repair work on several streets $55,553. Engrs. est. $60,000.

Bridges

PROPOSED WORK

N. Y., North Hoosick—Town of Hoosick, Hoosick Falls, plans 1 span concrete highway bridge 24 ft., over White Creek, near here. $65,000. G. S. Thompson, 257 Bway., Troy, engr.

Wisconsin—State Hy. Comn., Madison, prepared plans following bridges, Pine River Bridge, Town Pine River, Lincoln Co., 75 ft. plate girder span, $11,500; Devil Creek Bridge between Towns Corning and Scott, 25 ft. concrete deck girder, $2,850, H. H. Kuehling, Merrill, comr.; Engel Bridge, Town Plymouth, Juneau Co., 25 ft. concrete deck girder, $3,800, A. V. Robinson, New Lisbon, comr.; Northport Bridge, Village Northport, new 30 ft. I beam span, $3,800; Jump River Bridge, Town Kennan, Price Co., 140 ft. truss span, $15,500, B. M. Griffin, Phillips, comr.; Naffin Bridge, Town Black Wolf, Winnebago Co., 35 ft. concrete deck girder, $3,250, F. Steiner, Oshkosh, comr.; Koskoskee Bridge, Town Summer, Jefferson Co., 30 ft. concrete deck girder, $2,500, R. D. Royce, Fort Akinson, comr. Bids soon.

Wis., Wausau—Soon takes bids 120 ft. concrete arch over West Washington St. slough, 3 spans. $45,000. B. C. Gowen, City Hall, engr.

Kan., Oskaloosa — Jefferson Co. Hy. Comn. plans 220 ft. steel bridge, 20 ft. roadway, on Federal Aid Project 175, Sect. A, to exceed $25,000. R. C. Ham, Oskaloosa, engr.

Missouri — State Hy. Dept., Jefferson City, plans three 30 ft. rein.-con. deck girder spans over Little Parson Creek, five 20 ft. rein.-con. slab spans over overflow Big Turkey Creek, eleven 20 ft. rein.-con. slab spans over overflow East Yellow Creek, fifteen 20 ft. rein.-con. slab spans over overflow Big Parsons Creek, twenty-eight 20 ft. rein.-con. slab spans over overflow Locust Creek, Linn Co.; one 12 ft. rein.-con. slab span on Sta. 384 plus 30, and three 35 ft. rein.-con. deck girder spans over Beaver Springs Creek, McDonald Co.; three 35 ft. rein.-con. deck girder spans over Isle Du Bois Creek, and three 35 ft. concrete deck girder spans, 2 rein.-con. piers, over Joe Branch, St. Genevieve Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Ililnois Power & Light Corp., 232 South Clark St., Chicago, plans broadening bridge over Mississippi River, here, to provide 40 ft. roadway on south side instead of 16 ft. as at present. Later will give same treatment to north vehicle roadway, also strengthen steel support, install new concrete work, etc., to take care of heavier vehicular and street railway traffic. Above bridge is used by Illinois Traction System, subsidiary of owner. $2,000,000. Private plans. Will mature in spring.

Wash., Hoquiam—City Council takes bids about Mar. 26, 50-ft. bascule single leaf span, 22 ft., over Little Hoquiam River. $30,000. W. L. Lovejoy, Hoquiam, engr.

Calif., Los Angeles — Los Angeles Co. plans bridge over flood control channel, West Anaheim St. From $25,000 to $30,000.

Ont., Cobourg — Northumberland and Durham Counties plan highway bridge 100 to 125 ft. long, 20 ft. roadway, steel or concrete superstructure, concrete abutments, over Trent River. $25,000. N. F. MacNachtan, co. clk.

BIDS DESIRED

Mass., Springfield—Mar. 25, at office of City Clerk, Room 105, Administration Bldg., reconstructing substructure and superstructure of North End Bridge over Connecticut River between here and West Springfield. E. F. Leonard, chn. bridge com.; adv. E. N.-R. Mar. 6. Noted Nov. 22.

N. Y., Buffalo — Mar. 27, at office of Dept. Pub. Wks., Municipal Bldg., reconstructing, renewal and protection of viaducts in Elk St. over tracks of New York, Chicago & St. Louis R.R.; in Van Rensselaer St. over tracks of Erie R.R., in Fulton St. (foot bridge) over tracks of Lake Shore & Michigan Southern R.R., also in Elk St. over tracks of Erie R.R. Noted Jan. 17.

Fla., Jacksonville—Mar. 10, by Florida East Coast Ry., 120 Bway., New York, 4,000 tons steel for superstructure of St. Johns River Bridge. C. D. Boice, Purch. Agt. Noted Feb. 7.

Alabama—Mar. 31, by State Hy. Dept., Montgomery, bridge on Birmingham-Montgomery Rd., Federal Aid Project 109, Chilton Co., 542.6 cu.yd. Class A and 56.5 cu.yd. Class B concrete, 89,370 lb. reinforcing steel; bridge on Stockton-Little River Rd., Federal Aid Project 140, Baldwin Co., 411,812 ft. treated timber structures, 18,005 lin.ft. treated timber piles, 3,718 sq.yd. 1.5 in. cold mix bituminous surfacing, one 80 ft. and one 50 ft. steel truss, six 20 ft. steel I-beam spans to be cleaned and painted (3 coats), 138.9 cu.yd. Class A concrete in piers, 7,446 lb. reinforcing steel in piers, one 80 ft. steel span complete in place with floor, etc. W. S. Keller, state highway engr.

Ohio—See "Streets and Roads."

Wis., Fond du Lac — See "Streets and Roads."

Wis., Juneau—See "Streets and Roads."

Wis., Madison—Mar. 12, by Dane Co. Hy. Comn., McGuire Bridge, Town Westport, Holstein, Hein, Sanders and Schernacker Bridges, all Town York, incl. 269.5 cu.yd. concrete, 10,600 lb. steel. J. R. Caldwell, comr.

Ia., Nevada—Mar. 18, by Story Co. furnishing material and constructing 8 culverts and extension, 4 I-beams and one 120 ft., high truss bridge. S. Steizerwalt, Nevada, engr.

Ia., Rockwell City—Mar. 11, by Calhoun Co. furnishing material and constructing 6 I-beam bridges, 4 box culverts, two 18 x 50 ft., and one 20 x 70 ft. pony trusses. W. E. McClure, Rockwell City, engr.

Minnesota—See "Streets and Roads."

Minn., Blakeley—Mar. 20, by F. Hoppenstedt, aud. Sibley Co. (Gaylord), three 140-ft. steel truss spans, concrete abutments, over Minnesota River, here, for Scott and Sibley Counties. $40,000. Former bids returned unopened. State Hy. Dept., 1246 University Ave., St. Paul, engrs. Noted Feb. 7.

Tex., Houston—Mar. 31, at office City Secretary, rein.-con. and steel bridge across Buffalo Bayou at intersection of Congress Ave., Smith and Acuff Sts. O. F. Holcombe, mayor.

Colorado—See "Streets and Roads."

Ore., Portland—Apr. 1, by Comrs. Multnomah Co., Court House, 1,200 ft. bridge, 66 ft., over Willamette River on Burnside St., 5 spans, steel draw, steel or concrete superstructure, concrete substructure, $3,500,000; Sellwood Bridge, 1,200 ft., 5 spans, concrete substructure, steel superstructure, over Willamette River, $1,000,000; Ross Island Bridge, 5 spans, over Willamette River, $1,600,000. City of Portland and Multnomah Co. owners. Hedrick & Kremers, 250½ 3rd St., engrs.; adv. E.N.-R. Mar. 6.

BIDS RECEIVED

Pa., Phila. — Dir. Pub. Wks., 216 City Hall, completing bridge at 40th St. over Pennsylvania R.R. tracks, from Mundy Paving & Contg. Co., 226 South Warnock St., $97,745. Noted Feb. 14.

Mich., Springwells—See "Unclassified."

Missouri — State Hy. Dept., Jefferson City, from Short & Bramer, Monett, two 10 ft. rein.-con. slab spans over stream, Boone Co. $2,868, three 60 ft. steel truss and two 18 ft. rein.-con. slab spans over Perchee Creek, Boone Co. $22,444, three 20 ft. rein.-con. slab spans over Holder Branch, Camden Co., $4,421, one 40 ft. and two 30 ft. rein.-con. deck girder spans over Macks Creek, Camden Co. $10,864; from C. P. O'Reilley & Co., Wainwright Bldg., St. Louis, 30 ft. I-beam span over stream, Howard Co. $1,140, one 42 ft. rein.-con. deck girder and six 20 ft. rein.-con. slab spans over Moniteau Creek, Howard Co. $13,254; from Kelly & Underwood, Granby, 20 ft. rein.-con. slab span over stream, Wright Co. $1,915; from Reynolds, Bloker & Crews, Carruthersville, one 80 ft. steel truss and six rein.-con. slab spans over Bonne Femme Creek, Howard Co. $20,186; from Woodsmall & Woodsmall, Marshall, three 25 ft. rein.-con. deck girder spans over Elk Fork, Randolph Co., $13,058; from Wilson Constr. Co., Warrensburg, one 40 ft. and two 25 ft. rein.-con. deck girder spans over stream, Schuyler Co., $8,877; from F. A. Stonner, Chamois, three 20 ft. rein.-con. slab spans over Little Loose Creek, Osage Co. $6,231; from M. E. Gillioz, Monett, 50 ft. steel truss span over stream, Boone Co. $1,788; from Pub. Wks. Constr. Co., Century Bldg., St. Louis, two 12 ft. rein.-con. slab spans over stream, Boone Co. $4,524. Noted Feb. 21.

Tex., Ft. Bend—Richmond Co. 1,504 ft. bridge across Brazos River on North State Highway 3,960,000 lb. steel in truss, 160,000 lb. in I beam, 252 cu.yd. concrete, 149,610 lb. reinforcing, etc., from Austin Bridge Co., 1813 Clarence St., Dallas, $251,782;

Bridges (Continued)

piers only from **Missouri Valley Bridge & Iron Co., Leavenworth, Kan., $110,291.** Noted Jan. 24.

Colorado—State Hy. Dept., Denver, steel truss bridge with timber floor, over Rio Grande Del Norte River near La Sanses, State Project 811, Costilla and Conejor Counties, from C. A. Switzer, 4571 Wolff St., Denver, $28,117. Engrs. est. $25,000.

Colorado—State Hy. Dept., Denver, three 100 ft. steel truss span bridge over South Platte River, between Englewood and Ft. Logan, State Project 791-904, Arapahoe Co., from C. O'Niell, Box 52, Platteville, $44,050.

Colorado—See "Streets and Roads."

Calif., Santa Ana—Orange Co., bridge over Santa Ana River on Coast Highway, three 60 ft. steel, eight 30 ft., two 31 ft. and two 20 ft. spans, concrete piles, 1,260 cu.yd. concrete, 198,000 lb. reinforcing and 90 tons structural steel, from McKay Eng. Co., Railway Bldg., Los Angeles, $63,131. Noted Jan. 24.

CONTRACTS AWARDED

Pa., Phila.—Delaware River Bridge Joint Comn., Room 806 Widener Bldg., constructing Phila. and Camden approaches of bridge over Delaware River, between here and Camden, N. J., Phila. approach piers, Contr. 11, to Frederick Snare Corp., 114 Liberty St., New York City, $231,000; Camden approach piers, Contr. 12, to H. G. Ley Co., 716 Raymond St., $271,862. Noted Feb. 21.

Ga., Columbus—Comrs. Muskogee Co. steel truss bridge over Upatoie Creek on Buena Vista Rd., to Columbus Constr. Co., Murrah Bldg., Columbus, $27,300. Noted Feb. 7.

Alabama—State Hy. Dept., Montgomery, substructure of bridge over Shoal Creek, about 5 mi. from Florence on Florence and Athens Highway, Lauderdale Co., Project 144, 4 piers, three 75 ft. high and one 60 ft. high, 1,557 cu.yd. concrete, 35,250 lb. reinforcing, etc., to Gould Constr. Co., Independent Life Bldg., Nashville, Tenn., $55,844. Engrs. est. $60,000. Noted Feb. 7.

Ia., Sac City—Sac Co. furnishing material and constructing 9 I-beam bridge, 1 pony truss and 8 box culvert, to Lundgren-Reis Co., 65 College St., Des Moines, $38,000. Noted Feb. 14.

Ia., Sioux City—Bridge over Floyd River at 3rd and Plymouth Sts., two 60 ft. and two 20 ft. rein.-con. spans, 40 ft. roadway, 5 ft. sidewalks, to Ward & Weighton, 510 Davidson Bldg., $33,244.

Minnesota—Hennepin Co. (Minneapolis) and Dakota Co. (Hastings), 4,119-ft. bridge over Minnesota River between Ford Snelling and Mendota, to Koss Constr. Co., 2818 5th St., Des Moines, Ia., $1,685,000 for concrete arch type, except reinforcing steel and pavement surfacing. Will advertise immediately for reinforcing steel required during the next year and will also advertise for pavement surfacing later. Noted Jan. 24 under Mendota.

California—State Hy. Comn., Sacramento, to J. Simpson & Co., 701 Antonio St., Los Angeles, Federal Aid Project 129, bridge over Cedar Creek, 18 mi. east of Gilroy, Santa Clara Co., 560 cu.yd. concrete $19.56, 370 cwt. reinforcing $7, bridge over North Fork Pacheco Creek, 21 mi. east of Gilroy, 675 cu.yd. concrete $26.66, 980 cwt. reinforcing $7, total $42,234. Noted Feb. 21.

Dams

PROPOSED WORK

N. Y., Paul Smiths—Paul Smiths Electric Light, Power & Railway Co., purchased site at Raquette Falls, and plans dam and hydro generator. $85,000.

Tex., Ft. Worth—Election Apr. 15, $400,000 bonds, strengthening dam at Lake Worth, raising spillway 5 ft. with new main to Holly Pumping Plant. D. L. Lewis, city engr.

BIDS DESIRED

Wash., Tacoma—Mar. 27, at office of I. S. Davisson, comr. light and water, constructing Cushman Dam and appurtenant works on north fork of Skokomish River, Mason Co. J. L. Stannard, ch. engr. Cushman Project; adv. E. N.-R. Feb. 28 and Mar. 6.

CONTRACTS AWARDED

Vt., Enosburg Falls—See "Waterworks."

Railways

PROPOSED WORK

New Jersey—New York Central R.R., Grand Central Terminal, New York City, plans improvements on Marginal Belt Line 13 between Edgewater and Bayonne, incl. interchange tracks with Pennsylvania R.R. at Harsimus Junction, Jersey City, $125,000; cross-over switch at Willow Ave., West Hoboken, from Erie Yard to southbound main track $2,000; enlarging yard at Kings Bluff, south of Weehawken, $100,000; interlocking plant at National Junction for joint use of New York Central and Lehigh Valley R.R., $100,000; automatic block signals between Weehawken and National Junction $100,000. G. W. Kittredge, ch. engr.

Alabama—Central of Georgia Ry. Co., 233 West Broad St., Savannah, Ga., had survey made and will award contract about Apr. 1, elimination of 40 highway grade crossings, 2 railroad crossings and 83 curves, maximum grade of entire road from Birmingham to Columbus, Ga., to be reduced ½ to 1 per cent, old railroad track from Birmingham, Ala., to Columbus, Ga., to be practically rebuilt. $5,000,000 to $6,000,000. C. K. Lawrence, ch. engr.

Texas—Texas Interurban Ry. Co., Interurban Bldg., Dallas, had plans prepared 68 mi. extension from Terrell to Tyler via Wills Point and Canton. $4,250,000. R. B. Brown, ch. engr.

California—Atchison, Topeka & Santa Fe Ry., Kerchkoff Bldg., Los Angeles, plans improvements at Richmond yards, incl. new trackage, new approaches to city, improvements to wharfing facilities, shops, etc. To exceed $150,000. R. B. Ball, ch. engr. Coast Lines.

CONTRACTS AWARDED

California—Atchison, Topeka & Santa Fe Ry., 6th and Main St., Los Angeles, and Union Pacific R.R. Co., 58 East Washington St., Chicago, double tracking 44 mi. line between Summit and Hicks, San Bernardino Co., incl. 800,000 cu.yd. earth and heavy rock excav., to Sharp & Fellows Constr. Co., Central Bldg., Los Angeles, $2,500,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Okla., Wewoka—Wewoka Dist. 1, Seminole Co., having surveys made straightening and draining Wewoka Creek. Proposition still in process of financing. $100,000. H. Wilkins, 225 West Grand St., Oklahoma City, engr.

Utah, Salt Lake City—Salt Lake Co. D.D. 2 plans open ditch drainage of 7,000 acres in Salt Lake Co. west of Salt Lake City. $90,000. Margetts & Kleinschmidt, Felt Bldg., engrs.

Calif., Crescent City—Del Norte Co. plans to vote on $45,000 bonds, portion of county's cost in financing improvements to harbor in conjunction with United States Government.

Calif., Porterville—Vandalia Irrigation Dist. voted $210,000 bonds for irrigation works, pumping plants, pipe lines, ditches, etc. Noted Sept. 27.

BIDS DESIRED

Wis., Green Bay—Mar. 18, at office Clerk Circuit Court for Brown Co., 1,068,000 cu.yd. open ditch, average depth 7 ft.; 20 mi. tile drains, average depth 5½ ft., incl. 105,969 ft. 8- to 30-in. tile and 800 ft. 12 in. sewer pipe, in Pensaukee D. D. T. A Rocque, Lena, Secy. Pensaukee D. D.

Mo., Gallatin—Mar. 12, by Supervs. South Daviess Co. D. D., at office of Cruzen & Mann, attys., 10.1 mi. main ditch 2,200,000 cu.yd. excav., 4 laterals and 1 cut-off ditch, 6.4 mi. long, 428,000 cu.yd. excav., 700 ft. levee 1,400 cu.yd. embankment. C. J. Wiegner, Memphis, engr.

BIDS RECEIVED

New York—J. A. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York City, Feb. 29, dredging channels, constructing dikes, and placing fill on west island in connection with improvement of Jamaica Bay, Queens Boro, Contr. 1818 B and C, from W. H. Geoghegan Realty Co., B-1 $0.245, B-2 $1, C-1 $0.245, C-2 $1; United Dredging Co., 233 Bway., New York City, B $0.169, C $0.50. Noted Feb. 21.

CONTRACTS AWARDED

N. C., Morehead City—North Carolina Fisheries Comn., dredging approach channel 1½ mi. in Pamlico Sound and ½ mi. canal from sound to ocean, 250 ft. wide, at New Inlet, to Calkins Dredging Co., Norfolk, Va. Est. cost $70,000. Noted Jan. 24.

Miss., Charleston—Matthews Bayou D.D., 175,000 cu.yd. excav., to N. C. McGinnis Co., Exch. Bldg., Memphis, Tenn. Noted Feb. 28.

Ill., Joliet—M. L. Rubens, c/o Princess Theatre, excavating for 4 story and basement, rein.-con., brick and stone, Clinton and Scott Sts., to Kaiser & Dusett, Joliet Natl. Bank Bldg. Noted Jan. 17.

Streets and Roads

PROPOSED WORK

Maine—State Hy. Comn., Augusta, takes bids in spring paving 4.19 mi. State Highway B, in Bridgton, 44,246 sq.yd. bituminous macadam, 14,000 cu.yd. earth excav., $117,299; 3.07 mi. State Highway B in Raymond, 32,419 sq.yd. bituminous macadam, 11,400 cu.yd. earth excav., $88,862; 2.78 mi. State Highway N, in Edmunds, 6,792 cu.yd. gravel surfacing, 8,648 cu.yd. earth and 2,862 cu.yd. rock excav., $61,890; 2.16 mi. State Highway K, in Smyrna, 5,178 cu.yd. gravel surfacing, 6,661 cu.yd. earth excav., $34,771; 3.27 mi. State Highway K in Lincoln, 6,200 cu.yd. gravel surfacing, 7,600 cu.yd. earth and 100 cu.yd. rock excav., $52,700; 3.22 mi. State Highway S, in Paris and Woodstock, alternate bids will probably be asked on 7,568 cu.yd. gravel surface and 34,003 sq.yd. bituminous macadam, $56,354 and $93,289 respectively. P. D. Sargent, ch. engr.

Mass., Pittsfield—Making plans concrete paving 5,000 ft. road, 18 ft. wide, $81,000; 4,000 ft., 20 ft., $74,000. A. B. Farnham, City Hall, engr.

New Jersey—State Hy. Dept., Trenton, plans improving 4 mi. road from Adelphia to Elton, macadam or gravel. $26,567. W. G. Sloan, state highway engr.

N. J., Mays Landing—Atlantic Co. plans to readvertise bids repairing or reconstructing Absecon Blvd., also additions to 9 bridges. $935,712. Former contract rescinded. A. H. Nelson Guaranty Trust Bldg., Atlantic City, engr. Noted Aug. 16.

W. Va., Charleston—Comrs Kanawa Co. plan road from Dunbar to Nitro. $100,000. Noted Dec. 6.

W. Va., Moundsville—City Council plans improving Elm Ave. and 8 other streets, vitr. brick. $60,000. A. Purdy, Moundsville, engr.

W. Va., Summersville—Nicholas Co., Wilderness Dist., election Apr. 8, to vote on $90,000 bonds for highway improvements. C. E. Stephenson, Clk.

W. Va., Wayne—Stonewall and Grant Dists., Wayne Co., voted $111,000 and $58,000 bonds respectively, for roads. H O. Wiles, Ceredo, engrs. Noted Feb. 7.

W. Va., Wheeling—Plans paving 8th St. et al. $125,000. H. Conrad, 422 South Bway., engr.

W. Va., Winfield—Putnam Co. Buffalo Dist. voted $60,000 bonds for roads. J. M. Henson, clk.

N. C., Lenoir—Caldwell Co. plans to issue $200,000 bonds hard, surfacing road between here and Philadelphia Church. F. H. Coffey, chn. Bd. Co. Comrs.

Fla., Miami Beach—Plans improving various streets. $250,787. Van Alen Harris, city mgr.

Ala., Anniston—Will sell $150,000 bonds paving streets in residential section. A. Wikle, mayor.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, plans to construct 20 mi. highway, Henderson to McNairy Co. line, Chester Co., 8 ft., probably gravel; having surveys made 15 mi. highway from Somerville, Fayette Co., to Shelby Co. line, 16 ft. J. G. Creveling, comr. Noted Jan. 17.

Tenn., Jackson—Election soon $500,000 bonds, general street improvements. E. R. Dike, city engr.

Tenn., Murfreesboro—Rutherford Co. voted $750,000 bonds, $300,000 for Federal aid roads and $450,000 for resurfacing county roads. J. G. Creveling, highway comr.

Tenn., Pulaski—Plans paving, probably limestone base and rock asphalt surface, 1st, 2nd and 3rd Sts. $130,000.

Kentucky—State Hy. Dept., Frankfort, plans grading 2 mi. Hyden-Hazard Rd., 20 ft., State Project 28, Sect. B, Leslie Co., 18,889 cu.yd. earth and 14,952 cu.yd. rock excav. J. S. Boggs, state highway engr.

O., Circleville—Had plans prepared curbing, grading and asphalt paving Franklin St. $62,000.

O., Cleveland—Plans widening and paving Euclid Ave., $100,000; opening and paving East 35th St., $257,000; paving East 13th St., $150,000. R. Hoffman, City Hall, engr.

O., Columbus—Making plans grading, laying necessary water services and sewer connections and paving 2,124 ft. Acheson St. and Michigan Ave., 30 ft., brick $39,495, asphalt $32,639; 746 ft. Malvern Ave., 24 ft., brick $13,887, asphalt $11,698; 4,023 ft. Bruck St., 26 ft., brick $65,485, asphalt $50,329; 4,546 ft. Livingston Ave., 24 ft., brick $65,211, asphalt $53,507; 143 ft. alley north of 9th Ave., 15 ft., brick $840, concrete $747. R. H. Simpson, city engr.

O., Columbus—Franklin Co. plans 35 mi. new highways also improvement and re-

Streets and Roads (Continued)

surfacing of many additional miles of road during 1924. C. C. Lattimer, co. surv.

O., Dover — Bd. Control takes bids in spring improving 6th St., 40,000; ½ mi. 4th St., 36 ft., $50,000.

O., East Cleveland (Cleveland P. O.)—Takes bids in spring resurfacing and repaving various streets, $10,600 and $491,200 respectively; paving Lee Rd., Belvedire and Amelia Courts, Stanwood and Euclid Aves., $90,750. M. Garnett, City Hall, engr.

O., Lima — Allen Co. takes bids in spring brick paving 3.5 mi. Lima-Bellefontaine Rd., 18 ft. $125,000.

O., Lisbon—Columbiana Co. plans to improve 5 mi. road along Mahoning and Columbiana Counties to Stark Co., 18 ft., 10 in. foundation will be laid at this time. Will cover same with brick at later date. $150,000. F. C. Kirk, Lisbon, engr.

O., Newark—Takes bids in spring resurfacing Granville St., $33,612. H. R. Wells, Newark, engr.

Michigan—Plans grading and surfacing with concrete or bituminous concrete **(S. T. L. means State Trunk Line and F. A. P. means Federal Aid Project)** 0.5 mi. S. T. L. Rd. 55-13, Ogeman Co., 0.7 mi. S. T. L. Rd. 10-28, Saginaw Co., 1.777 mi. S. T. L. Rd. 10-37, Presque Isle Co., 5.5 mi. S. T. L. Rd. 43-4, Montcalm Co., 0.75 mi. S. T. L. Rd. 19-8, Huron Co., 4 mi. S. T. L. Rd. 20-14, Bay Co., 4 mi. S. T. L. Rd. 14-41, Isabella Co., 11 mi. S. T. L. Rd. 27-12, Sanilac Co., 1.25 mi. S. T. L. Rd. 14-37, Clare Co., 3 mi. S. T. L. Rd. 40-5, Cass Co., 1.3 mi. S. T. L. Rd. 11-22 B, 6 mi. S. T. L. Rd. 58-4, and 1.3 mi. S. T. L. Rd. 58-5, Berrien Co., 13 mi. S. T. L. Rd. 10-39, Oakland Co., 2.723 mi. S. T. L. Rd. 14-15, A and B Ingham Co., 3.5 mi. S. T. L. Rd. 43-3, and 1 mi. S. T. L. Rd. 21-20, Ionia Co., 2 mi. S. T. L. Rd. 11-58 and 5.973 mi. S. T. L. Rd. 11-25, A and B, Oceana Co., 4.19 mi. F. A. P. 50. Sect. B, and 14.5 mi. F. A. P. 73, Monroe Co., 15.7 mi. F. A. P. 89, and 1.5 mi. F. A. P. 75 Sect. A, Jackson Co., 3.5 mi. F. A. P. 88, Sect. B, Ingham Co., 10.5 mi. F. A. P. 97, Oakland Co., 10.5 mi. F. A. P. 82, Sect. B, Washtenaw Co., 4.5 mi. F. A. P. 82 A, Wayne Co., 14 mi. F. A. P. 113, Kent Co.; grading and gravel surfacing 8.5 mi. S. T. L. Rd. 40-8, Van Buren Co., 4 mi. S. T. L. Rd. 66-16, Missaukee Co., 3 mi. S. T. L. Rd. 66-14 A, and 1.5 mi. S. T. L. Rd. 13-23 A, Osceola Co., 3 mi. S. T. L. Rd. 42-1 A and B, Wexford Co., 13.2 mi. S. T. L. Rd. 48-6 B, and 2 mi. S. T. L. Rd. 48-9, Chippewa Co., 6 mi. S. T. L. Rd. 25-7, and 4 mi. S. T. L. Rd. 25-13, Schoolcraft Co. 10.6 mi. F. A. P. 110, Menominee Co., 8 mi. F. A. P. 112, Ontonagon Co.; surfacing with macadam or gravel, 12.892 mi. S. T. L. Rd. 25-5, Alger Co., 4.258 mi. S. T. L. Rd 25-4, Luce Co., 14.1 mi. S. T L. Rd. 25-8, Schoolcraft Co., 5 mi. S. T. L Rd. 25-12 B, 13.3 mi. S. T. L. Rd. 25-15 B and C, 7.4 mi. S. T. L. Rd. 25-17, and 6 mi. S. T. L. Rd. 25-15 A, Chippewa Co; surfacing with macadam 2.5 mi. F. A. P. 103, Ontonagon Co., 5.977 mi. S. T. L. Rd. 25-2 A and 6 mi. S. T. L. Rd. 25-6, Luce Co. G. C. Dillman, ch. engr.

Mich., Detroit—Having plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete, on Walton St. $21,090, 14th St. $5,500, Griggs Ave. $15,730, Sylvester Ave. $4,780, Lonyo Ave. $78,980, Calvert Ave. $10,600, Milner St. $17,710, Charest Ave. $39,710, Idaho Ave. $13,830, Wilson St. $16,570, Robinwood Ave. $21,340, Weitzel Court $8,170, Lonyo Rd. $17,930, Log Cabin Ave. $63,890, also grading and paving 10 alleys with one course concrete, $34,110. G. Jerome, city engr.

Mich., Kalamazoo—Plans to grade and pave 80 blocks on Butler Court, Terrace Pl., River Rd., Lay and Lane Blvds., Krom and Hays Park Aves., Chestnut, Edwards, Pitcher, Eleanor, Ransom, Westnedge, Academy, Locust, Wheaton, Cedar, Jasper, 2nd, Stockbridge, Egleston, Lake, 3rd, Mill, and Reed Sts. $319,978. Work includes 24 blocks vitr. brick, 52 blocks asphalt and 4 blocks concrete. E. S. Clark, city engr.

Ill., Joliet—Will Co. having preliminary plans made grading, ditching, and concrete surfacing 17 mi. roads, 18 ft. $400,000. W. H. Smith, supt.

Ia., Boone—Plans paving, curbing, etc., 74 blocks. $250,000. C. L. Ehrhart, city engr.

Ia., Nevada—Bids rejected paving, etc., 40,300 sq.yd. concrete, 21,600 lin.ft. curb, 33,650 sq.yd. asphaltic concrete, 21,600 lin.ft. curb and gutters, sewer extensions. Noted Jan. 31.

Ia., Oskaloosa—Plans paving 16 blocks. $65,000. T. H. Carlen, clk.

Ia., Storm Lake—Plans paving, curbing, etc., 20 blocks. $70,000. S. W. Kern, clk.

Minnesota—See "Bridges" under "Contracts Awarded."

Minn., St. Paul—Ramsey Co. plans grading and paving 2.5 mi. Project 24-53. $75,000. P. N. Coates, 900 Guardian Life Bldg., co. surv.

Kan., Hutchinson—Soon takes bids improving 12 blocks 16th, Elm, Washington and 2nd Sts., 24 ft. average width, grading, 2 in. asphaltic concrete on 5 in. concrete, concrete curbs, gutters, etc. $400,000. R. B. Lee, City Hall, city engr.

Kan., Kansas City—Wyandotte Co. soon takes bids fine grading and concrete slab, on 0.873 mi. Federal Aid Project 102, 18 ft. O. K. Williamson, co. engr.

Kan., Parsons—Soon takes bids improving 7 blocks, Morgan and Washington Sts., 26 ft., grading, concrete surfacing, concrete curb, gutters, etc. $25,000. F. M. Harr, city engr.

South Dakota—State Hy. Dept., Pierre, plans grading 22.7 mi. Federal Aid Project 177, from Rapid City to New Underwood, Pennington Co. Will let contract about April. F. D. Hudgins, ch. engr.

S. D., Vermilion—Plans to pave 50 blocks. Address City Engineer.

Missouri—State Hy. Dept., Jefferson City, received no bids Feb. 21, graveling 50,779 sq.yd. Paris-Shelbina Rd., Monroe Co. Noted Feb. 21.

Missouri — State Hy. Dept., Jefferson City, received no bids Feb. 21, grading and graveling 77,849 sq.yd. roads in Mercer and Atchison Counties. Noted Feb. 21.

Mo., Cape Girardeau — Plans grading, concrete curbing, guttering and paving approximately 26,500 sq.yd. West Bway., Themis, Boulevard, William, Henderson and Middle Sts., 6 in. concrete. $55,000. J. B. Heagler, City Hall, engr.

Mo., Maplewood (St. Louis P. O.)—Soon takes bids concrete curbing, guttering and surfacing 8,190 ft. Walker, High, Bellevue, Woodland, Lohmeyer, Alimede and Kensington Sts., rein.-con. or waterbound macadam, also Weaver and Folk Sts., waterbound macadam. $82,500. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, engr

Mo., Maryville—Takes bids soon concrete curbing, guttering, grading and paving 3,300 ft. North Main, College, Market, 5th and Dunn Sts., 24 ft., asphaltic cement or asphalt on concrete. $31,000.

Mo., Slater—Soon takes bids 10,000 yd. rein.-con. paving. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, engrs.

Ark., Little Rock—Pulaski Co. soon takes bids grading and rein.-con. surfacing 54,500 sq.yd. Little Rock and Westwood, Pulaski Co. 5; 73,920 sq.yd. Little Rock-Northern Highway Paving 7; 49,000 sq.yd. Little Rock-Northern Heights Paving 6. G. H. Sykes, Little Rock, engr. Noted Feb. 14.

Tex., Austin—Travis Co. plans grading and gravel surfacing 5 mi. Turnerville Rd., 16 ft. $35,000. O. Leonard, Box 256, Austin, engr.

Tex., Austin—Travis Co. making plans grading and gravel surfacing 6 mi. Del Valle-Colton-Creedmoor Rd., 16 ft., $57,000; reconstructing part of highway on new location, constructing 20 ft. gravel surface with 18 ft. bituminous top on 11 mi. State Highway 2, from city limits to Hays Co. line, $138,500. O. Leonard, Box 256, co. engr.

Tex., Batesville—Zavalla Co. voted $165,623 bonds, hard surfacing Precinct 4, from Uvalde Co. line through La Pryor to Maverick Co. line. N. P. Hunt, La Pryor, co. judge. Noted Feb. 7.

Tex., Corpus Christi—Nueces Co. had revised plans prepared bituminous topping on shell and gravel 11.71 mi. State Highway 12, Federal Aid Project 342, 18 ft. $320,000. C. E. Cocke, co. engr.

Tex., Dallas—Making plans and will probably take bids in April permanent paving 30-50 miscellaneous streets. $500,000-$1,000,000. E. A. Kingsley, city engr.

Tex., Dallas—Plans widening and paving Elm St., $500,000 or more, incl. condemnation wrecking, etc.; paving with brick or asphaltic, also storm sewers or ditching 1¼ mi. West Dallas Ave., $40,000. E. A. Kingsley, city engr.

Tex., Ft. Worth—W. J. Rogers, Cheltenham, plans paving, water mains, etc. in 100 acre subdivision, south of Cheltenham $50,000. Under supervision D. L. Lewis, city engr., and K. Roby, city plan mgr.

Tex., Georgetown—Williamson Co. plans grading, etc. 5.98 mi. State Highway 2-B, 24 ft. $91,345. R. A. Nichols, co. engr.

Tex., Henderson—Election at once $100,000 bonds permanent paving various streets. Total $175,000. Property owners pay part. Engineer not announced.

Tex., Hillsboro—Hill Co. election Mar. 22, $50,000 bonds, road construction in Osceola Rd. Dist. 4. J. J. Estill, co. engr.

Tex., Hillsboro—Hill Co. voted $150,000 bonds gravel surfacing, grading, etc. Hillsboro-Hubbard Rd., etc. J. J. Estill, Court House, engr.

Tex., Huntsville — Walker Co. election Mar. 29, $1,500,000 bonds, surfacing, grading, etc., 80 mi. roads radiating from here to county line. State and Federal aid. C. G. Clark, Huntsville, engr.

Tex., Italy—Voted $80,000 bonds paving streets. Elrod Eng. Co., 3124 Main St., Dallas, engrs.

Tex., Linden—Cass Co. election Mar. $52,000 bonds, hard surfacing 5 mi. Rd. Dist. 18, 18 ft. F. E. Hess, Medical Arts Bldg., Dallas, engr.

Tex., Munday—Voted $25,000 bonds, paving 6 blocks Ernest St., 7 in. concrete or 3 in. vertical fibre brick on 5 in. concrete. Montgomery & Ward, City Natl. Bank Bldg., Wichita Falls, engrs.

Tex., Uvalde—Uvalde Co. making plans 1 in. bituminous topping on 14.16 mi. Sabinal-Knippa Rd., 18 ft. $77,000 W. B. Hodges, Uvalde, engr.

Tex., Vernon — Wilbarger Co. election Mar. 22, $150,000 bonds, highway improvements in Precinct 1. J. B. Nabors, co. engr.

Okla., Ardmore—Soon takes bids grading and rein.-con. paving, etc., 10 blocks North Caddo and 8th Aves.

Okla., Comanche—Plans widening and paving 9 blocks 3rd St., 14,450 sq.yd. concrete, 6,000 lin.ft. curbing, 4,800 cu.yd. excav. $56,945. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., El Reno—Plans grading, curbing and asphalt paving 8,350 sq.yd. Mill, Jenkins, Russell and Ellison Sts., etc. $41,000. H. G. Olmsted, 2230 West 18th St., Oklahoma City, engr.

Okla., Fairfax—Defeated $90,000 bonds grading and paving 13 blocks 5th, Elm, Mulberry, Ash, Park and Locust Sts. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Dec. 13.

Okla., Fairfax—Preparing plans grading, curbing, guttering paving, etc. with rein.-con., asphaltic concrete or brick on concrete, 8,500 ft. in Dist. 3. $100,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, archts.

Okla., Holdenville—Plans grading and paving 5 blocks North Bullitt Ave., 5,600 sq.yd. concrete, 3,200 lin.ft. curbing 1,800 cu.yd. excav. $28,000. C. Edge, Holdenville, engr.

Okla., McAlester—Plans grading and paving 7 blocks, in Dist. 19, 7,600 sq.yd. concrete, 4,100 lin.ft. curbing, 2,450 cu.yd. excav. $36,000. F Fraser, McAlester, engr.

Okla., Miami—Ottawa Co. having surveys made grading and paving 2 mi. road west from Afton, 18 ft., 21,000 sq.yd. concrete, 11,000 cu.yd. excav. $50,000. W. C. Burnham, Capitol Bldg., Oklahoma City, engr.

Okla., Norman—Cleveland Co. having surveys made grading and graveling 11 mi. Norman-Lexington Rd., 120,000 sq.yd. gravel, 40,000 cu.yd. excav. Bids after July 1. F. Cobb, Norman, engr.

Colo., Denver—Plans asphalt paving in South Capitol Hill Paving Dist. 2, $46,88 Capitol Hill Paving Dist. 14, $44,075, Park Hill Paving Dist. 2, $29,808; Park Hill Paving Dist. 1, $49,980; South Capitol Hill Paving Dist. 2, $49,980, 12 blocks in each district; surfacing with crushed stone, sand, gravel and loam, concrete gutters where necessary, in North Denver Surfacing Dist. 7, $118,300. A. K. Vickery, City Hall, engr.

Idaho, Boise City—Made plans for approach to passenger depot. $100,000 bonds to be voted for same in near future. C. C. Stevenson, city engr.

Utah, Salt Lake City—Plans paving 1,880 ft. road, 52 ft., in Dist 188, bitulithic on concrete, $30,000; 2,900 ft. 3rd St. E 52 ft. bitulithic topping on concrete, $54,000. S. Q. Cannon, city engr.

Wash., Seattle—Had estimates made regrading Denny Hill and extending Dexter Ave., involving thirty thousand 40-ft. lots. $3,591,000. J. D. Blackwell, city engr.

Wash., Spokane—Spokane Co., paving 12 mi. Dishman-Mica Rd., to W. J. Doust, Lindell Bldg., $116,104.

Calif., Los Angeles—Plans widening Wilshire Blvd. between Bronson Ave. and west city limits. $30,500. J. A. Griffin, city engr.

Calif., Porterville—Had plans prepared improving F and West Putnam Sts., 87,542 sq.ft. grading and 5 in. concrete, etc.; Orange St. 128,751 sq.ft. grading and 5 in. concrete, 4,310 lin.ft. concr[illegible], etc.; D

Streets and Roads (Continued)

and Vine Sts., 117,730 sq.ft. grading and 5 in. concrete. 2,849 lin.ft. concrete curb, etc. F. Pease, city engr.

Calif., San Diego—Had plans prepared improving Cleveland St., 22,049 sq.yd. 1½ asphaltic concrete on 2½ in. base, 19,925 sq.yd. 1½ in. asphaltic concrete on 4 in. concrete, etc. F. A. Rhodes, City Hall, engr.

Calif., Santa Ana—Orange Co. plans paving 4½ mi. Fairview Ave. To exceed $100,000. J. L. McBryde, co. rd. comr.

Calif., South San Francisco—(Branch San Francisco)—Had plans prepared improving portion alleys between Grand and Miller Aves., Grand and Baden, Baden and Commercial, etc., incl. 238,000 sq.ft. 5 in. concrete, 32,500 sq.ft. 4 in. concrete with 1½ in. Topeka top, 2,600 sq.ft. concrete sidewalks, 6,300 cu.yd. grading. G. A. Kneese, Courthouse, Redwood City, engr.

Calif., Suisun City—Plans to vote on $37,500 bonds for paving and $12,500 for installing street lighting system.

Ontario—Provincial Highway Dept., 110 University Ave., Toronto, plans to take over and improve 20 mi. of roads between Ayr and Kitchener, and between Phillipsburg and Bridgeport. $200,000. G. Hogarth, ch. engr.

Ont., Blyth—Plans concrete pavements on Queen and Dinsley Sts. $50,000. Prices wanted on materials.

Ont., Eastview — Town plans asphalt pavements on Victoria St. and macadam on River Rd. $25,000. J. C. Wolff, town clk.

Ont., Guelph—Plans paving 1 mi. Division and Arthur Sts., 14,000 sq.yd. concrete or asphalt on concrete. $50,000. H. S. Nicklin, city engr.

Ont., Leamington—Plans to pave Foundry St. et al. $30,000. Prices wanted on all materials.

Ont., Toronto—See "Park Improvements" under "Unclassified."

Ont., Toronto — Plans concrete curbing and 13,000 sq.yd. asphalt pavements on Glen Rd., Cluny Drive, St. Mary St., Powell and Cluny Aves., $50,000. R. C. Harris, city engr.

BIDS DESIRED

New Hampshire—Mar. 7, by State Hy. Comn., Concord, paving 2.7 mi. main highway, modified asphalt. $100,000. F. E. Everett, state highway comr.

R. I., Providence—Mar. 26, at office of Water Supply Bd., City Hall, grading, paving, etc. 4 mi. road in Scituate. F. E. Winsor, 661 Westminster St., ch. engr.; adv. E. N.-R. Mar. 6.

Conn., New London—Mar. 26, at office of City Purchasing Agent, concrete or hillside brick pavement. W. A. Holt, city mgr.; adv. E. N.-R. Mar. 6.

N. Y., Brooklyn—Mar. 12, by E. Riegelmann, boro pres., Boro Hall, grading, curbing, flagging and paving East 18th St., preliminary bituminous macadam; asphalt paving Lenox and Quentin Rds., Lott, Warehouse and Stillwell Aves., 43rd, 77th, 79th, 81st, East 18th, West 24th, 25th, 27th, 28th, 29th, 30th, 31st, 32nd, 35th, 36th, 37th, 8th, 10th, 12th, 15th, 16th and 19th Sts.; curbing and flagging Lott Ave. and Quentin Rd.; curbing East 18th St.; grading, curbing and flagging West 12th, 66th, 67th and 73rd Sts.

N. Y., Buffalo—Mar. 11, by Dept. Parks & Buildings, City Hall, paving 7,177 sq.yd. Red Jacket Parkway, vitr. brick or asphalt. $30,000 J. H. Meahl, comr.

N. Y., Buffalo—Mar. 17, by Commissioner Pub. Wks., Municipal Bldg., paving and repaving Rapin Pl., Weiss St., Layer and Cambridge Aves., vitr. brick or asphalt. To exceed $60,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., New York—Mar. 13, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, etc., on Randall and Thieriot Aves., Worthen, East 227th and Barry Sts.; grading, etc., East 156th St., Metcalf, Fenton and Morgan Aves.; curbing and laying sidewalks, etc., Houghton Ave.; grading, curbing, laying sidewalks and paving with bituminous concrete, etc., East 171st and West 180th Sts.; grading, regrading, curbing, recurbing, laying and relaying sidewalks, paving and repaving with sheet asphalt Bway.; paving, etc., Cauldwell Ave., granite block, White Plains and Unionport Rds., Grant, Webb, Steuben, Findlay and Bronxdale Aves., all with sheet asphalt, Elliot Pl., Andrews and Mt. Eden Aves., bituminous concrete, White Plains and Unionport Rds., asphalt blocks.

N. Y., New York—Mar. 14, by J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, regrading, curbing, recurbing, flagging, reflagging and paving 5th Ave. from north side of 140th to north side of 142nd Sts., granite block on concrete.

N. J., Asbury Park — Mar. 11, paving 6,035 sq.yd. Bangs Ave. and Emory St., asphalt or concrete. N. Rogers, Asbury Park, engr. Noted Feb. 21.

N. J., Jersey City—Mar. 10, by Hudson Co., Court House, reconstructing Hudson Co. Blvd. east from 29th to 31st Sts., North Bergen Twp. F. J. Radigan, Court House, co. engr.

N. J., Trenton—Mar. 18, by Bd. Freeholders Mercer Co., surface dressing of tar to about 114 mi. roads. H. F. Harris, Court House, co. engr.; adv. E. N.-R. Mar. 6.

Pa., Cresson—Mar. 21, at office T. McN. Walker, boro. secy., 523 Ashcroft Ave., 20,000 sq.yd. pavements on 8 streets and avenues. D. W. Dillman, boro. engr.; adv. E. N.-R. Mar. 6. Noted Feb. 28.

Pa., Washington — Mar. 11, by Bd. Supervs. Jefferson Twp., Washington Co. at office State Hy. Dept., 110 South Main St., Washington, 16,158 lin.ft. one course rein.-con. pavement, 16 ft. wide.

Delaware—Mar. 26, by State Hy. Dept., Dover, paving, etc., 2.18 mi. Bear-Christiana Rd., Contr. CN-16, 1.9 mi. Basin Corner-New Castle Rd., Contr. CN-17, 0.836 mi. Clayton-Smyrna Rd., Contr. CK-21; adv. E. N.-R. Mar. 6.

Md., Baltimore—Mar. 12, by Bd. Awards, grading, curbing and paving streets listed in Contr. 250-OANA, 21,150 sq.yd. asphalt, 1,400 sq.yd. vitr. brick. R. K. Compton, 214 East Lexington St., chn. and engr. Paving Comn.

W. Va., Clarksburg—Mar. 11, by D. H. Hamrick, city clk., grading, paving, sewering, etc., various streets, 2,000 lin.ft. curbing, 3,000 cu.yd. grading 625 cu.yd. concrete base, 3,200 sq.yd. vertical fibre brick, asphalt filler, 1,360 lin.ft. 8- to 24-in. vitr. pipe, etc. T. S. Long, city engr.

W. Va., Huntington—Mar. 10, by Bd. Comrs. grading and paving 5th, 19th and Elm Sts., 5th St. Rd., 14th Ave., alley between 11th and 12th Sts., Jefferson and Madison Aves. A. B. Maupin, city engr. Noted Feb. 14.

W. Va., Summersville — Apr. 8, by Nicholas Co. Court, Wilderness Dist. improving Nallen-Hughes Bridge Rd. and Old Nicholas Rd., $70,000 and $20,000 respectively. M. Dotson, office deputy for assessor.

Fla., Starke — Mar. 18, by Bd. Bond Trustees Bradford Co., E. S. Mathews, chn., grading, sand clay surfacing, etc., 47 mi. highways. $187,000. E. R. Neff, Starke, engr.

Alabama—Mar. 31, by State Hy. Comn., Montgomery, grading 25.089 mi. Stockton-Little River Rd., 26 ft., Federal Aid Project 140, Baldwin Co.; 17.455 mi. Montgomery-Birmingham Rd., Chilton Co., Project 1, covers surfacing, alternate types: 187,250 sq.yd. Portland cement concrete, 177,500 sq.yd. warrenite bitulithic, bituminous concrete, modified Topeka pavement, sheet asphalt, vitr. brick or rock asphalt on concrete; Project 2, covers grading, etc., 66.63 acres clearing and grubbing, 197,738 cu.yd. common and 10.429 cu.yd. rock excav., 296,085 sta.yd. overhaul on excav. W. S. Keller, state highway engr. Noted Nov. 15 and Dec. 10.

Louisiana—Mar. 20, by State Hy. Comn., Reymond Bldg., 7.92 mi. State Project 393, Sect. B, Colfax-Pollock Highway, Grant Parish. J. M. Fourmy, ch. engr.

Ky., Burgin—Mar. 17, by Kentucky Utilities Co., M. E. Taylor Bldg., Louisville, 4,280 ft. macadam road approaches to proposed Kennedy Mills bridge over Dix River, 4½ mi. east of here $25,000. G. T. Bogard, c/o owner, engr.

Ky., Louisville—Bd. Pub. Wks. taking bids reconstructing 32nd St., Garland and Central Aves., etc., from K. A. Barker, Floyd and Lee Sts., $42,000. Noted Mar. 6.

Ohio — Mar. 14, by Dept. Highways & Pub. Wks., Columbus, concrete curbing 1.85 mi. road in Ashtabula Co.; concrete bridge on road in Washington Co.; grading, bridging and paving 46.023 mi. roads in Allen, Ashland, Auglaize, Clermont, Columbiana, Cuyahoga, Lake, Mahoning, Marion, Mercer, Preble, Scioto, Summit, Washington, Warren and Wayne Counties. A. V. Donaheys, dir. highways.

O., Akron—Mar. 17, by W. F. Peters, dir. Pub. Serv., grading, curbing, laying cement sidewalks and paving 14,000 sq.yd. East Market St., vitr. brick or asphalt on concrete. $98,000. E. A. Kemmler, Delaware Bldg., engr.

O., Columbus—Mar. 11, by R. H. Simpson, city engr. grading, laying necessary water services and sewer connections and paving 765 ft. Hamlet St., 17 ft., brick $8,928, asphalt $7,993; 3,926 ft. Essex St. and Ohio Ave., 30 ft., brick $105,186, asphalt $93,963; 743 ft. alley west of 11th St., 14 ft., brick $6,002, concrete $5,090; 464 ft. Isabel Ave., 24 ft., brick $8,408, asphalt $7,545.

Indiana—Mar. 18, by State Hy. Comn., Indianapolis, surface treating roads in Floyd, Porter, LaPorte, Lawrence, Harrison, Lake, Wells, Starke, Marshall, Allen, Elkhart, Jefferson, Dearborn and Monroe Counties, 686,176 sq.yd. bituminous macadam, 368,369 gal. tar, 588 tons crushed stone. C. Gray, state highway engr.

Ind., Evansville—Mar. 10, by Comrs. Vanderburg Co., resurfacing various roads with limestone. S. B. Bell, aud.

Michigan—Mar. 18, by State Hy. Dept., Lansing, grading and surfacing 3.05 mi. Assessment Dist. Rd. 325, Muskegon Co., 12,130 cu.yd. excav., 21,784 sq.yd. Class B gravel. G. C. Dillman, ch. engr.

Ill., Peoria—Mar. 10, by Comrs. Richwood Twp., Court House, grading and 6-in. concrete surfacing 11,842 ft. Prospect Ave., Sect. A, 18 ft. County engr.

Wis., Fond du Lac—Mar. 14, by Fond du Lac Co. Hy. Com., grading, surfacing and bridging Waupun-Brandon Rd., State Trunk Highway 49 and Fond du Lac-Calumetville Rd., Trunk Highway 55, incl. 26,381 cu.yd. earth excav., 80,100 sqyd. concrete surfacing, etc. G. Treleven, comr.

Wis., Juneau—Mar. 18, by Dodge Co. Hy. Com., Court House, grading, surfacing and bridging Oconomowoc-Mayville Rd. Mayville Woodland Rd., Hustisford-Horicon Rd., and Hustisford-Lebanon Rd., incl. 120,683 cu.yd. earth excav., 406,880 sq.yd. pavement, some concrete. E. T. Klug, comr.

Wis., Kilbourn — Mar. 14, by W. B. Shute, village clk., paving Washington Ave., Eddy and La Crosse Sts., 13,834 sq.yd. concrete or vibrolithic concrete, 5,650 lin.ft. concrete curb and gutter, 1,000 lin.ft. 10- to 12-in. storm sewer, 300 lin.ft. 12 in. sanitary sewer, 2,986 lin.ft. 4- to 8-in. water mains. E. B. Parson, Jefferson, engr.

Wis., Madison—Mar. 12, by Dane Co. Hy. Comn., constructing roads, incl. Parker Ave., Town Burke, 2,956 sq.yd. concrete, etc; Grady Rd., Town Madison, 2,875 sq.yd. concrete; Middleton Corner cut off, Town Middleton, 1,788 sq.yd. concrete; Job 10484, Town Perry, 3,600 sq.yd. concrete, 2,000 cu.yd. crushed stone, etc. Bids to be received on combination Parker Ave., Grady and Middleton Corner cut off Rds. J. R. Caldwell, comr.

Wis., Port Washington — Mar. 13, by Ozaukee Co. Hy. Com. and Village Bd., Thiensville, constructing Sect. A, Brown Deer-Cedarburg Rd., part in village of Thiensville, 19,100 cu.yd. earth excav., 68,300 sq.yd. surfacing concrete or vibrolithic; Sect. B, Brown Deer-Cedarburg Rd., part in city Cedarburg and Ozaukee Co., 8,899 sq.yd. earth excav., 28,300 sq.yd. concrete surfacing, etc. W. Ubbink, comr.

Wis., West Allis—Mar. 14, at office Acting Bd. Pub. Wks. improving various avenues, bids on sheet asphalt pavement with binder (heavy traffic), sheet asphalt pavement with binder (light traffic), concrete wearing surface, and vibrolithic concrete pavement. A. L. Wichner, supt. Pub. Wks.; adv. E. N.-R. Mar. 6.

Minnesota—Mar. 25, by State Hy. Dept., St. Paul, 5 mi. road between Friesland and Sandstone, 1-44, Sect. 2, Div. A, Federal Aid Project 1, 51,000 sq.yd. concrete, 33,000 cu.yd. excav., $125,000; 11 mi. between Foxhome and Fergus Falls 3-49, Federal Aid Project 351, 144,000 cu.yd. excav., $30,000; 6 mi. between Minneopa and Mankato, 5-28, Federal Aid Project 320, 138,000 cu.yd. excav., $28,000; 11 mi. between New Ulm and Lafayette, 15-30, Divs. A and B, Federal Aid Project 341, 204,000 cu.yd. excav., also Bridge 4189, 30 ft. long, concrete, $50,000; 7 mi. between Ogilvie and Mora, 122,000 cu.yd. excav., 23-24, Federal Aid Project 337, $25,000; 8.6 mi. between Mora and Quamba, 23-30, Div. A, Federal Aid Project 257, 104,000 cu.yd. excav., $25,000; 6 mi. between Erhart and Pelican Rapids, 30-26, Federal Aid Project 354, 108,000 cu.yd. excav., also Bridge 4199, 50 ft. long, concrete, $28,000. State Highway Dept., St. Paul, engrs.

Minn., Moorhead—Mar. 24, by R. C. Price, city clk., paving, curbing and guttering 5 blocks 10th St. N. between Center and 5th Aves $25,000.

Minn., Two Harbors—Mar. 10, paving, grading, curbing and sidewalks on Wilson St. between S and 7th Aves. and 2 blocks Cedar St. between 5th and 7th Aves. $30,000. E. Carlson, clk.

Kan., Wichita—Mar. 10, by R. L. Brockway, city engr. 37,000 sq.yd. concrete.

Streets and Roads (Continued)

11,000 cu.yd. excav., 16,500 ft. concrete curb and gutter. Noted Feb. 28.

Kan., Wichita—Mar. 10, by City Comn. paving with asphaltic concrete Madison, Indianapolis, Ida, Minnesota, Elizabeth and Emporia Aves., Zimmerman, 15th, Grove and Wichita Sts., 27,689 sq.yd. paving, 7,797 cu.yd. excav., 12,983 lin.ft. combined curb and gutter, 385 lin.ft. curbing, 294 lin.ft. gutter, etc.; with sheet asphalt Douglas Ave., Victor Place and Palisade St., 3,772 sq.yd. paving, 1,518 cu.yd. excav., 2,648 lin. ft. combined curb and gutter, 60 lin.ft. curb, 36 cu.yd. gutter, etc.; with concrete, 1 alley, Martinson, Dayton, Ellis, Harrison, Lewellen, Ida, Murdock and Jackson Aves., 2nd, 15th, Green and Morris Sts., 32,231 sq.yd. paving, 9,724 cu.yd. excav., 17,078 lin.ft. combined curb and gutter, 1,310 lin. ft. curb, 1,004 lin.ft. gutter, etc.; with brick Mosley Ave., 460 sq.yd. pavement, 500 cu.yd. excav., 290 lin. ft. combined curb and gutter, 30 lin.ft. gutter, 30 lin.ft. curb. $240,000. P. L. Brockway, City Bldg., engr. Noted Feb. 28.

Mo., Cape Girardeau—Mar. 17, by A. P. Behrens, city clk., City Hall, improving Harmony and Dunklin Aves., 13,328 sq.yd. 6 in. plain concrete, 8,550 lin.ft. concrete curb and gutter, 6,761 cu.yd. excav. J. B. Heagler, city engr.

Mo., Jefferson City — Taking bids improving Bway. and Hart Sts., 830 sq.yd. sledge stone base, 150 cu.yd. crushed stone, 6,000 sq.yd. scarifying, reshaping and rolling, 6,830 sq.yd. macadam penetration surface. F. E. Ross, City Hall, engr.

Mo., St. Louis—April 1, by Bd. Pub. Serv., 208 City Hall, paving 9,000 sq.yd. Lee St., warrenite bitulithic, $24,320; 14,200 sq.yd. 9th and Penrose Sts., bitulithic, $42,040; 64,073 sq.yd. Flad Ave., Botanical, Castleman, and Cleveland Sts., willite asphalt, $293,620; alleys in City Blocks 5331 and 5332, concrete, $8,920; cement sidewalks on Arsenal and Sublette Aves., 4,200; granite curbing and willite asphalt paving 4,190 sq.yd. Loughborough St., $24,000. W. W. Horner, City engr.

Tex., Angleton—Mar. 11, by J. T. Loggins, judge Brazoria Co., grading 10.88 mi. State Highway 19, Federal Aid Project 367-B, 24 ft., $37,052. Surfacing with shell and crushed rock with 1½ in. bituminous topping to be let later. H. W. Munson, Jr., Angleton, engr. Noted Feb. 28.

Tex., Canton—Mar. 14, by E. L. Hubbard, judge Van Zandt Co., grading and rein.-con. surfacing 7.14 mi. State Highway 15, Federal Aid Project 363-C, 9 and 18 ft. $148,925. J. H. Bray, Grand Saline, co. engr. Noted Feb. 28.

Tex., Colorado—City Com. taking bids paving 9 blocks, warrenite bitulithic on concrete. $50,000. F. F. Dubose, Colorado, engr.

Okla., Blackwell — Taking bids grading and paving 5 blocks 7th and B Sts., 5,700 sq.yd. concrete, 3,000 lin.ft. curbing, etc. $27,500. W. Ritzhaupt, Blackwell, engr.

Colorado—Mar. 11, by State Hy. Dept., Denver, paving 2.339 mi. Federal Aid Project 17-R, El Paso Co., 90 cu.yd. concrete, 10,800 sta. yds. overhaul, 12,000 cu.yd. common, 100 cu.yd. rock and 4,200 cu.yd. borrow fill excav., 24,710 sq.yd. one course plain cement concrete, alternate bids for bituminous on concrete, $83,893; concrete viaduct over tracks of Denver & Salt Lake R.R. on Denver-Brighton Rd., Federal Aid Project 257, Adams Co. L. D. Blauvelt, state highway engr.

Wash., Chehalis—Mar. 17, by City Comn., 160,000 lin.ft. concrete sidewalks on McFadden Ave. et al., LID 173, $40,000. B. Bantz, Chehalis, engr.

California—Mar. 17, by State Hy. Comn., Sacramento, paving with asphaltic concrete and widening with waterbound macadam shoulders, 3.7 mi. between Milpitas and Coyote Creek, Santa Clara Co. R. M. Morton, state highway engr. Noted Feb. 14.

Calif., Los Angeles—Mar. 17, by Supervs. Los Angeles Co., widening over 10 mi. Palmdale-Valyermo Rd., 1 ft. on each side, incl. 112,780 sq.ft. 6 in. asphaltic concrete.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Feb. 27, sheet asphalt paving (1) Banker St. (2) Delamere Pl. (3) East 9th St. (4) Empire Blvd. (5) Hopkinson Ave. (6) Ave. L (7) Osborn St. (8) Riverdale Ave. (9) West 8th St. (10) 11th Ave. (11) 43rd St. (12) 63rd St. (13) 68th St. (14) 76th St., paving (15) Van Dam St., grade 1 granite, curbing and flagging (16) Delamere Pl., grading, curbing and flagging (17) East 9th St. (18) Empire Blvd. (19) 71st St. (20) 76th St., curbing, flagging and sheet asphalt paving (21) 58th St., curbing and sheet asphalt paving (22) 81st St., from Borough Asphalt Co., 1301 Metropolitan Ave., (1) $20,405 (4) $7,208 (5) $8,495 (7) $5,749 (8) $18,699; Cranford Co., 52 9th St., (2) $9,625 (3) $9,306 (6) $17,165 (9) $18,680 (10) $3,967 (11) $8,435 (12) $10,827 (13) $5,871 (14) $8,977 (21) $9,199 (22) $8,238; J. Meehan & Son, 74 Cortlandt St., New York (15) $12,862; W. J. McHale Contg. Co., 1250 Jefferson St., (16) $2,887; Interstate Contg. Co., (17) $4,078 (18) $8,801 (19) $4,239; Galecor Contg. Co., 507 Greenwich St., New York, (20) $3,543. Noted Feb. 21.

N. Y., New York—Dept. Plant Structures, Municipal Bldg., Feb. 26, westerly flooring on steel approaches of Manhattan Bridge, from Keppler Constr. Co., 343 Lewis Ave., Brooklyn, $24,653. Noted Feb. 21.

W. Va., Williamson—Mingo Co., 6 mi. Rockhouse Creek Rd., from Ballard-Herring Co., Inc., Bedford, $33,000. Noted Feb. 14.

Ky., Louisville—Bd. Pub. Wks. reconstructing 24th St., Garland and Central Aves., from H. Bickel Co., 133 Garden St., $62,000.

O., Akron—W. F. Peters, dir. Pub. Serv., Feb. 27, grading, cement sidewalks, guttering and paving with (a) asphalt (b) brick (1) 5,000 sq.yd. Aqueduct St. (2) 750 ft. Allyn St., 24 ft. (3) 2,220 ft. Big Falls Ave., 22 ft. (4) 1,165 ft. South Arlington St., 44 ft. (5) 335 ft. Power St., 24 ft., grading, cement sidewalks and cindering (6) 11,500 cu.yd. McKinley Ave. (7) 3,500 cu.yd. Mildred Ave. (8) 2,550 cu.yd. Springdale St., from Columbus Asphalt Paving Co., 304 Buckeye Bldg., (a1) $28,029, engrs. est. $33,400, (a3) $37,224, $42,055 (a4) $27,494, $31,887; T. E. McShaffrey Constr. Co., 171 South Forge St., (a2) $16,503, $17,784 (a5) $11,060, $11,361; Hollinger & Davidson, 435 South Bway., (b2) $16,995, $18,033 (b3) $39,607, $42,794; Victor Olson Contg. Co., 501 Herberich Bldg., (b4) $30,285, $32,729; McAlonan Bros., 127 West Buchtel Ave., (b5) $10,994, $11,595; E. H. Rawle, 1466 Holly Ave., (6) $25,442, $38,027; T. Timmis, 392 Cornell St., (7) $11,194, $13,341; Lombardi & Bowlus, 249 Crosby St., (8) $9,478, $11,295. Noted Feb. 21.

Wis., Green Bay—Brown Co., concrete surfacing, etc., East De Pere Rd., from E. Schuster, Denmark, $75,645; Dixon Rd., from M. Martin Constr. Co., Berlin, $52,031; Greenleaf-Lark Rd. and State Rd., from H. O. Schaefer & Sons, Green Bay, $94,345 and $58,627 respectively. Noted Feb. 14.

Wis., Plymouth—New pavement, etc. on various streets with concrete, from A. Larson & Co., 418 South Barstow St., Eau Claire, $122,596; vibrolithic concrete, from Butler & O'Connor, 639 Hamm Bldg., St. Paul, Minn., $124,837; sheet asphalt, bitulithic and asphaltic concrete, from F. P. Coughlin Co., 30 South La Salle St., Chicago, $140,150, $144,515 and $135,350 respectively. Noted Jan. 31.

Missouri—State Hy. Dept., Jefferson City, Feb. 21, grading 3.798 mi. and 3.864 mi. Kansas City-St. Louis Rd., 34 ft., Howard Co., from Tibetts & Tibetts, Olathe, Kan., $64,002 and $19,882 respectively, 1.058 mi. Jefferson City-St. Louis Rd., 30 ft., Osage Co., from Doe Lla & Kolkmeyer, Jefferson City, $8,262, 3.42 mi. Kansas City-St. Louis Rd., 34 ft., Howard Co., from Reynolds, Blocker & Crews, Carruthersville, $36,957, 4.339 mi. Kansas City-St. Louis Rd., 34 ft., Boone Co., from Short & Bramer, Monett, $39,801, 4.962 mi. Kansas City-St. Louis Rd., 34 ft., Boone Co., from General Constr. Co., 408 Pine St., St. Louis, $37,700, 1.917 mi. road from Daviess Co. line east, 30 ft., Grundy Co., from C. L. Jackson, Warrensburg, $7,272, 0.845 mi. road from Hannibal north, Marion Co., from Cameron-Joyce & Co., Keokuk, Ia., $5,894, 3.501 mi. road from Mansfield west, 26 ft., Wright Co., from Summerfield Jones, Billings, $17,256; grading and gravel surfacing 52,800 sq.yd. road from New Bloomfield south, Callaway Co., also 20,158 sq. yd. Jefferson City-St. Louis Rd., Osage Co., from Felix Kersting Co., Jefferson City, $22,176 and $11,490 respectively, 35,193 sq.yd. road from Montgomery City south, Montgomery Co., from Teague Holmes Co., Troy, $29,299, 47,210 sq.yd. road from Unionville north and south, Putnam Co., from J. L. Simmons, La Plata, $20,099 and Keefner & Geile, Perryville, $20,099, 6,757 sq.yd. road from Moniteau south, Warren Co., from J. L. Moss, Box 165, R.R. 5, Webster Groves, $13,748, 31,629 sq.yd. road from Neosho south, Newton Co., from Kelly & Underwood, Granby, $24,612; graveling and concrete paving 23,123 sq.yd. road from Princeton north and south, Mercer Co., from C. H. Atkinson Paving Co., Watertown, S. D., $44,426, State to furnish cement, crushed stone and gravel. Noted Feb. 21.

Missouri — State Hy. Dept. Jefferson City, Feb. 21, grading and graveling 40,312 sq.yd. road from Princeton north and south, Mercer Co., from J. L. Simmons, La Plata, $24,382, 37,573 sq.yd. Fairfax-Tarkio Rd., Atchison Co., from Harrison Constr. Co., Des Moines, Ia., $2[illegible]71, State furnishes gravel on both; grading 0.964 mi. road, 30 ft., from Moberly east, Randolph Co., from Woodsmall & Woodsmall, Marshall, $13,058, 2.286 mi. Eldon-Linn Creek Rd., 24 ft., Camden Co., from C. F. Johnson & Son, Buffalo, $30,916, 4.295 mi. road from Lancaster south, 30 ft., Schuyler Co., from Wilson Constr. Co., Warrensburg, $25,532; concrete surfacing 8,931 sq. yd. road from Hannibal north, Marion Co., from Cameron-Joyce & Co., Keokuk, Ia., $23,668, State furnishes cement; graveling and concrete paving 21,135 sq.yd. Fairfax-Tarkio Rd., Atchison Co., from O. H. Schmidt, St. Joseph, $47,906, State furnishes cement, crushed stone and gravel. Noted Feb. 21.

Tex., Ballinger — Runnels Co., grading, etc., State Highway 30, Hatchell Rd., 43,480 cu.yd. roadway, 42,194 cu.yd. borrow, 3,374.5 cu.yd. loose and 1,173.3 cu.yd. solid rock excav., 1,376 cu.yd. concrete, 168,357 lb. reinforcing, from Tibbetts Constr. Co., 209½ West 8th St., Ft. Worth, $54,501. Noted Feb. 7.

Colorado—State Hy. Dept., Denver, concrete paving 6.335 mi. Federal Aid 220-C, Paving Div. 2, Weld Co., from J. F. Roberts & Sons, Tramway Bldg., Denver, $175,648; gravel surfacing and bridging 1.613 mi. Federal Aid Project 243-A, Archuleta Co., from Shields & Kyle, Pagosa Springs, $48,311.

Calif., Pittsburg — Improving Railroad Ave. (1) 93,565 sq.ft. 6 in. concrete (2) 3,895 sq.ft. concrete curb (3) 3,555 cu.yd. grading, from Hutchinson Co., Hutchinson Bldg., Oakland (1) $0.21 (2) $0.50 (3) $1.20; Heafey-Moore-McNair, 2030 High St., Oakland (1) $0.216 (2) $0.60 (3) $1.10.

Calif., San Diego — Improving Union, Brant & Curlew Sts., incl. 175,649 sq.ft. of 1½ in. sheet asphalt on 2½ in. bituminous, 5,810 sq.ft. concrete sidewalk, 1,190 lin.ft. concrete curb, also improving A, B, Ash, Granada, Fern and other streets, incl. 144,385 sq.ft. of 1½ in. sheet asphalt on 4 in. concrete, 496,588 sq.ft. of 1½ in. sheet asphalt on 2½ in. butiminous, 21,610 sq.ft. concrete sidewalk, 4,564 lin.ft. concrete curb, from Griffith Co., 25 14th St., $32,927 and $119,927 respectively; Woolman Ave. and N St., incl. 206,196 sq.ft. of 1½ in. Warrenite on 3 in. asphalt, 7,817 sq.ft. concrete sidewalk, 1,571 lin.ft. concrete curb from California Constr. Co., Union Bldg., $50,565. Noted Jan. 10 and Jan. 17.

Calif., San Francisco—Improving Silver Ave. between Merrill and Vienna Sts., from Municipal Constr. Co., 112 Lyon St., 7,000 cu.yd. cut $0.53, 28 brick catch basins $75, 102,016 sq.yd. concrete pavement, $0.0224, etc., total $31,374.

CONTRACTS AWARDED

New Hampshire—State Hy. Dept., Concord, paving with field stone and gravel 0.994 mi. road, 18 ft., in Peterboro, to R. E. Bull, 151 Harrison Ave., Fitchburg, Mass., $26,798. Noted Feb. 28.

Vermont — Dept. Highways, Montpelier, constructing 1.53 mi. Munson Flat Rd., Federal Aid Project 41, in Colchester, 3,321 cu.yd. one course rein.-con. 12,620 lb. reinforcing steel, 3,267 cu.yd. earth excav., 5,970 cu.yd. borrow, to Atwood, Thomas Constr. Co., Middleboro, Mass., $82,209.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Borough Asphalt Co., 1301 Metropolitan Ave., sheet asphalt paving Brooklyn Ave. $10,382, East 38th St. $7,201, Sheffield Ave. $8,180; to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., sheet asphalt paving Rutherford Pl. $7,970, curbing and sheet asphalt paving West 10th St. $20,843; to W. G. Grimm, curbing and flagging Ave. M $409; to W. J. McHale Contg. Co., 1250 Jefferson St., curbing and flagging Ovington Ave. $2,249; to Galecor Contg. Co., 507 Greenwich St., New York City, curbing and flagging Rutherford Pl. $3,563. Noted Feb. 28.

N. Y., Kenmore—Paving various streets, concrete, to Peoples Paving Co., 85 Roma Ave., Buffalo, $275,880.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to C. Kurth, 9519 126th St., Richmond Hill, grading, curbing, laying sidewalks, etc., on Ambrose and Edson Sts., $7,789 and $6,354 respectively to Highway Impvt. & Repair Co., grading, curbing, laying sidewalks, etc., on Chaffee St. $5,479, 80th St. $33,128, 85th St. $5,300, receiving basins and paving 39th St., $17,907. Noted Feb. 21.

Streets and Roads (Continued)

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, regrading, curbing, recurbing and sheet asphalt paving unpaved portion of Riverside Dr., etc., to C. D. Beckwith, Inc., 2875 Bway., $888,868. Noted Feb. 21.

D. C., Wash.—Dist. Comrs., resurfacing several streets from McGuire & Rolfe Inc., Virginia Ry. & Power Bldg., Richmond, Va., $200,000.

W. Va., Charleston—Kanawha Co., 7 mi. grading, etc., along Lens Creek, to I. J. Chandler, Virgilina, Va., $84,760.

W. Va., Huntington—Paving crossroads north from Norway Ave., Sycamore, Highland and 18th Sts., Underwood Ave., etc., 4 in. vitr. brick cement filler on 5 in. concrete, to G. Hinkle, Huntington, $58,746. Noted Feb. 7.

Alabama—State Hy. Comn., Montgomery, about 6 mi. grading and asphalt paving Bryce Insane Hospital Rd., 20 ft., to Finnell & Toothacker, Tuscaloosa, $86,096. Engrs. est. $90,000.

Ala., Birmingham — Grading, asphalt paving, etc., 10 blocks, new section of North Highlands, to be known as Sudduth Hill, 30 ft., to H. N. Bowdry, Empire Bldg., $69,823.

Ala., Birmingham—City Comn. improving 26th St., Ensley, to Ling & Poland, Birmingham, $5,000; 17th Pl., to W. Fromhold, Birmingham, $6,870; Ave. Q, Ensley, 49th, 50th and 52nd Sts., to Henning & Brown, Birmingham, $33,070; 35th St., to Southern Roads Co., American Trades Bldg., Birmingham, $7,900; 13th Ave. and 23rd St., to H. W. Bowdry, Birmingham, $6,200; 2nd Ave., 45th and 49th Sts., to P. Richter, 1801 Pearson Ave., Birmingham, $86,865.

Tenn., Pulaski—Will pave 1st, 2nd and 3rd Sts., limestone base, probably rock asphalt surface, by day labor. $130,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, engr.

Ky., Louisville — Reconstructing Clay, Logan, 31st, 22nd, 24th, and Wenzel Sts. to H. Bickel & Co., 443 Garden St., $49,100.

O., New Philadelphia—Tuscarawas Co. paving 7 mi. road, waterbound macadam, to Holmes Constr. Co., Wooster, $107 900. Noted Jan. 24.

Illinois—Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, grading and concrete paving, etc., 26.4 mi. Route 2, Div. B, from Pana to Vandalia, to C. J. Moritz, and Mantz & Oren, Effingham, $525,947; 32 mi. Route 2, Div. A, from Decatur to Pana, to W. C. Meneely Co., Decatur, $622,910.

Ill., Belleville—St. Clair Co., concrete paving 3 mi. East St. Louis-Granite City Rd., and 0.5 mi. East St. Louis-Gahokia Rd., both 18 ft. wide, to F. L. Dieckman, East St. Louis, $69,000 and $12,950 respectively; 1.25 mi. Scott Field-Belleville Rd., to Hoeffker Constr. Co., Belleville, $37,860. Noted July 19.

Ia., Atlantic—Improving 19 blocks various streets, 17,148 sq.yd. concrete paving, 10,309 lin. ft. concrete curb and gutter, to F. O. Akin, Atlantic, $2.44 per sq.yd. Noted Feb. 7.

Ia., Cedar Falls—Paving, concrete curbing, etc., 11,320 sq.yd. Lincoln and North Franklin Sts., to Moore-Young Constr. Co., Waterloo, $2.98 per sq.yd. for paving, $0.69 per lin.ft. for curbing. Noted Dec. 27.

Ia., Dubuque—Paving 14 mi. various streets; sheet asphalt to J. Rassmussen Sons Co., Oshkosh, Wis., $240,000; hard surfacing to Ullrich Paley Co., 422 Garfield Ave., $220,000. Noted Aug. 16.

Ia., Moulton—Paving 28 blocks, 7-in. rein.-con., to Wright Brothers Constr. Co., 211 Flynn Blk., Des Moines, about $91,500. Noted Feb. 7.

Minn., Minneapolis—City will pave 20 mi. streets and alleys, by day labor. Work involves 150,000 sq.yd. asphaltic concrete, 100,000 sq.yd. 3½-in. creosoted wood blocks, recut granite and 30,000 sq.yd. brick. $1,500,000. N. W. Elsberg, city engr.

Mont., Great Falls—Improving Central Ave. from Park Dr. to 6th St., 12,459 sq. yd. bitulithic, etc., to Birch & Son, Ford Blk., $42,169. Noted Feb. 21.

Tex., Alpine — Brewster Co. grading, gravel and caliche surfacing 15 mi. State Highway 3, 18 ft., to G. Alvis, Whitesboro, $76,948. Noted Jan. 31.

Tex., Lamesa—Paving 31,400 sq.yd. 1½ in. Amiesite on 5 in. concrete, 10,000 cu.yd. excav., 3,630 ft. curb and gutter, etc., on Square and miscellaneous business streets, to Panhandle Constr. Co., Amarillo, $85,000. Noted Dec. 20.

Utah — State Road Comn., Salt Lake City, grading and paving 8.56 mi. Payson-Juab Rd., 18 ft., 5- to 7-in. plain concrete, Utah Co., to Wasatch Grading Co., Provo, $261,469, engrs. est. $275,000; grading and gravel surfacing 39.55 mi. Knolls Wendover Rd., 20 ft., Tooele Co., to Kroft, Bundy, Zimmer & Lomus, Salt Lake City, $280,000, 13.87 mi. Chicken Creek-Millard Rd., 20 ft., Juab Co., to Hawley, Anderson & Hinckley, Salt Lake City, $135,300. Noted Nov. 22.

Wash., Seattle—Bd. Pub. Wks., paving North 59th St. et al., to Fiorito Bros., 3950 6th St. N. W., $56,757. Engrs. est. $64,987. Noted Feb. 28.

California — State Hy. Comn., Sacramento, improving 11.9 mi. highway between 2¼ mi. east of Sand Hills and Colorado River, Imperial Co., to Kisselburg, Schmidt & Hitchcock, South Central Ave. and Apache St., Phoenix, Ariz., 94,200 cu.yd. roadway excav. without classification $0.57, 156,500 sta.yd. overhaul $0.02, 25,800 cu.yd. crushed gravel or broken stone surface $2.58, hauling 70,000 yd. mi. crushed gravel or stone $0.40, 210 cu.yd. cement concrete $27, 175 cwts. bar reinforcing steel in place, $11.25, etc., total $165,437, engrs. est. $177,259. Noted Feb. 7.

Calif., Bakersfield—Kern Co., improving Rd. 283, 2 in. Willite on 4 in. bituminous, to J. A. Dowling, Bakersfield, $47,700. Noted Jan. 31.

Calif., Fresno — Improving Lewis Ave., 118,194 sq.ft. grading, 86,824 sq.ft. asphalt, 5,281 lin.ft. concrete curb, 8,973 sq.ft. concrete gutter, 24,814 sq.ft. cement walks, to Thompson Bros., Divisadero and G Sts., $38,784. Noted Feb. 14.

Calif., Inglewood—Improving Edgewood St., Manor Dr., etc., 164,840 sq.ft. grading, 100,207 sq.ft. 5 in. macadam, 12,282 sq.ft. walks, 4,860 ft. curb, to J. McNamee, 750 South Figueroa St., Los Angeles, $25,365.

Calif., Los Angeles—Improving Larchmont Blvd. between Melrose St. and Beverly Blvd., 76,664 sq.ft. Warrenite bituminous, to Los Angeles Paving Co., 2900 Santa Fe Ave., $25,225; Raymond Ave. between 59th Pl. and 64th St., 286,358 sq.ft. oil and roll, etc., to Chalmers & Ford, H. W. Hellman Bldg., $21,200. Noted Jan. 31.

Calif., Riverside—Riverside Co., Route 8, Beaumont to foot of Moreno Grade, Jack Rabbit Trail, 33,652 lin.ft. 20 ft. shaping, 33,652 lin.ft. 18 ft. macadam, etc., to R. T. Shea, Riverside, $107,375.

Calif., San Diego—La Jolla Properties, Inc., 655 Spreckels Bldg., grading and curbing roads, alleys, lanes, etc., in La Jolla Hermosa Subdivision 1, to Pioneer Truck Co., 954 3rd St., $76,780.

Calif., San Diego—Improving San Marcos Ave., Maple St., etc., incl. 188,080 sq.ft. of 1½ in. sheet asphalt on 4 in. cement concrete, 2,345 sq.ft. cement concrete sidewalk, to D. H. Ryan, 1615 Fern St., $40,948. Noted Feb. 7.

Calif., Stockton—San Joaquin Co., to W. Moreing, 232 West Vine St., improving 3.7 mi. Taylor-Ferry Rd., 3,000 cu.yd. grading, 7,690 tons gravel or 6,760 tons base rock, 2,700 tons top rock, 1,250 tons dressing for oil, 1,035 bbl. asphalt oil, $32,695; Eight Mile Rd., 9,520 cu.yd. grading, 9,930 tons gravel or 8,430 tons crushed rock, etc., $25,244; Harney Lane Rd., 1,200 cu.yd. grading, 5,450 tons gravel or 4,620 tons crushed rock, etc., $17,328. Noted Feb. 21.

Industrial Works

PROPOSED WORK

Mass., Peabody—Machine Shop—Smith & Walker, archts., 80 Boylston St., Boston, preparing plans 2 story, 50 x 150 ft. $65,000. Owner's name withheld.

R. I., Providence—Service Station—Providence Gas Co., Weybosset St., having plans prepared by Jenks & Ballou, 72 Weybosset St., storehouse, meter shop, filters shop, garage and offices, Potters Ave. and Dexter St.

N. Y., Buffalo—Factory—Fedders Mfg. Co., 57 Tonawanda St., purchased 120 x 175 ft. and 50 x 71 ft. sites, and plans to increase size of plant. Engineer and architect not selected.

N. Y., Buffalo—Factory—S. Bock, 77-79 Swan St., having preliminary plans prepared by Essenwein & Johnson, Ellicott Sq. Bldg., 4 story and basement, 140 x 240 ft., concrete and steel, Oak and Goodell Sts. To exceed $160,000.

N. Y., Long Island City—Housing Station—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids Feb. 11, housing station, 62nd Rd. and 94th St. Noted Feb. 21.

N. Y., New York—Publishing—Pictorial Review, 7th Ave. and 37th St., soon takes bids 14 story, 200 x 500 ft., rein.-con., brick and steel, plain foundation, 9th Ave. and 34th St., $6,500,000. C. Place, 70 East 45th St., engr. Renwick, Aspinwall & Tucker, 8 West 40th St., archts. Noted Jan. 3.

N. Y., Watertown—Plant—J. B. Wise Co., 401 Mill St., plans repairing and rebuilding concrete, brick and steel plant, recently damaged by fire. $40,000-$50,000. Address L. H. Mitchell, mgr.

Pa., Phila.—Shop—H. S. Getty & Co. Inc., 1539 Cabot St., having plans prepared by Walker & Carswell, 1015 Chestnut St., 1 story, 40 x 80 ft. and 32 x 80 ft. brick and steel, plain foundation, Stokley St. below Hunting Park Ave. $40,000.

W. Va., Arcola—Lumber Mill—Smoot Lumber Co. plans to rebuild lumber mill, recently destroyed by fire. $50,000.

Tenn., Milan—Factory—Milan Improvement Assn. plans cigar factory. $40,000. Amer. Cigar Co., lessee.

Tenn., Nashville — Plant — Nashville, Chattanooga & St. Louis R.R. Co., Exch. Bldg., St. Louis, Mo., plans ballast plant near here. $40,000.

Ky., Louisville—Tanks—Louisville Petroleum Co., Inter Southern Bldg., plans two large tanks at refinery near State Fair Grounds. $45,000.

Ky., Louisville — Factory — Kentucky Workshop for Adult Blind, Frankfort and Bellaire Aves., having plans prepared by Nevin, Morgan & Wischmeyer, Starks Bldg., 2 story and basement, 39 x 108 ft., brick and rein.-con. $80,000.

O., Cleveland—Factory—Motor Repair & Mfg. Co., 1549 Hamilton Ave., had plans prepared 1 and 2 story, 20 x 60 ft. and 60 x 100 ft. brick and steel factory additions. $40,000. C. Levinson, pres. Private plans.

O., Geneva—Plant—Champion Hardware Co. having plans prepared by Lockwood, Greene & Co., engrs., Hanna Bldg., Cleveland, 3 story and basement, 50 x 130 ft., rein.-con. addition.

O., Portsmouth—Plant—Kah-Patterson Printing Co. having plans prepared 3 story and basement, 62 x 107 ft., brick and concrete, 5th St. $60,000. Private plans.

Ind., Noblesville — Plant — New Process Steel Co. plans 2 additional units to plant. To exceed $40,000.

Ind., Valparaiso—Roundhouse and Shop—Pennsylvania R.R., Broad St., Phila., Pa., plans roundhouse and shop to replace those recently destroyed by fire, here. $40,000. H. R. Leonard, ch. engr. bridges and buildings.

Ill., Chicago—Factory—Western Shade Cloth Co., 22nd and Jefferson Sts., soon takes bids 2 story, 125 x 400 ft., fireproof, 22nd and Jefferson Sts. $500,000. Lockwood-Greene & Co., 38 South Dearborn St., archts.

Ill., La Salle—Gas Plant—Illinois Power and Light Corp., 232 South Clerk St., Chicago, having plans prepared water gas plant $50,000, high pressure mains, $30,000, here.

Wis., Milwaukee—Plant—Northern Conveyor & Mfg. Co., 3204 Auer Ave., plans 1 story, 98 x 250 ft., brick and steel, plain foundation. Engineer and architect not selected.

Wis., Milwaukee—Steam Turbine Room—Milwaukee Electric Ry. & Light Co., 2nd and Sycamore Sts., having preliminary plans prepared by F. A. Luber, archt. and engr., c/o owner, 2 story, brick and concrete addition, plain foundation.

Mo., Kansas City—Sub-Station—Kansas City Power & Light Co., 1330 Grand Ave., soon takes bids 1 story and basement, 60 x 107 ft., rein.-con., brick and steel. $40,000. Private plans.

Ark., Fayetteville—Plant—Local syndicate having preliminary plans prepared by Southern Gas Con. Co., 828 Littlefield Bldg., Austin, Tex., modern gas and coke plant. $175,000.

Tex., Haskell—Western Cotton Oil Co. prepared plans 50 x 150 ft. factory, brick and concrete, $100,000; plans 40 x 50 ft. power plant, $40,000. Private plans. Noted Oct. 25.

Tex., Houston—Packing House—Texas Packing Co., 110 Milan St., had plans prepared by J. Finger, Keystone Bldg., 3 story, basement and sub-basement, concrete and brick, at San Jacinto St. Bridge. $80,000-$100,000.

Wash., Longview—Plant—W. G. Schulz, Kelso, plans large plant on 40-acre site, near here.

California—Shops—See "Railways."

Calif., Los Angeles—Factory—Atchison, Topeka & Santa Fe Ry., 6th and Main Sts., Los Angeles, having preliminary plans prepared by W. J. Saunders, Laughlin Bldg., 6 story 115 x 375 ft., rein.-con., Imperial and 6th Sts. California Truck Co., 322 East 3rd St., lessee.

Calif., Los Angeles — Ice Plant — F. A. Maginnis, Kerckhoff Bldg., had plans prepared by Gay Eng. Co., 2650 Santa Fe Ave., rein.-con., 3rd St. To exceed $75,000.

Industrial Works (Continued)

Calif., Los Angeles—Ice Storage—Jefferson Ice Co., 157 East Jefferson St., having revised plans prepared by E. J. Borgmeyer, California Bldg., 5 story, 100 x 180 ft., rein.-con. Former bids rejected. Noted Jan. 31.

Calif., Sacramento—Packing Plant—J. P. Hynes Packing Corp., c/o Hemmings & Stark, archts., Ochsner Bldg., having plans prepared 1 story, 80 x 160 ft., rein.-con., E St. $40,000.

Calif., Ventura—Factory—Ventura Footwear Co. had plans prepared by Union Iron Wks., 5125 Santa Fe Ave., Los Angeles, 1 and 2 story, 40 x 140 ft., concrete and steel. Noted Jan. 31.

Que., Cap De La Madeline — Machine Room—St. Maurice Paper Co., having plans prepared machine room in connection with plant here. $50,000. G. A. Slater, engr. in charge.

Ont., St. Thomas — Shop and Round House—Canadian Natl. Ry. (C. B. Brown, Montreal, ch. engr.) and Wabash Ry. St. Thomas (R. H. Howard, St. Louis, Mo., ch. engr.) take bids about Apr. 1, rein.-con., here. $220,000.

BIDS DESIRED

N. J., Morris Plains—Boiler Plant—Mar. 26, at office Commissioner Institutions & Agencies, West Hanover St., Trenton, new boiler plant complete (rated capacity to 1700 hp.) at New Jersey State Hospital, here. A. B. Mills, dir. div. architecture and construction.

O., Toledo — Factory — Libbey-Owens Glass Co., Nicholas Bldg., taking bids and opens same about Mar. 12, 1 story (27 bays 24 x 136 ft. each), brick, steel and concrete. $1,000,000. Lockwood, Greene & Co., 24 Federal St., Boston, Mass., engrs. Noted Feb. 14.

Wis., Milwaukee—Factory—A. R. Investment Co., c/o C. J. Rice, 290 3rd St., taking bids 1 story, 62 x 120 ft., brick and timber, plain foundation, Holton St. $40,000. Private plans.

Wis., Milwaukee—Foundry—Mar. 15, by F. D. Chase, Inc., archts. and engrs., 645 North Michigan St., Chicago, brick and steel, plain foundation, Clinton St., for Prime Mfg. Co., 653 Clinton St. Noted Nov. 29.

Okla., Enid—Garage, Warehouse and Lumber Yard—Mar. 10, by R. W. Shaw, archt., 323 Masonic Temple, 2 story and part basement, 136 x 140 ft., brick, for Kiowa Lumber Co. $40,000.

BIDS RECEIVED

N. Y., Elba—Storage Plant—Elba Cold Storage Co., 73 East Eagel St., Buffalo, rein.-con., here, from Turner Constr. Co., 11 Goodell St., Buffalo, to exceed $75,000.

Ky., Louisville—Factory—Standard Sanitary Mfg. Co., 6th and A Sts., 4 story and basement, 160 x 450 ft., rein.-con., 7th and Jarvis Sts., from L. W. Hancock Constr. Co., Louisville Trust Bldg., about $700,000. Noted Jan. 31.

Calif., Sacramento—Shops, etc.—W. P. Fuller Co., 10th and R Sts., additions to 2 story and basement, rein.-con., brick and steel sash, storehouse and shops, from Herndon & Finnegan, 1814 17th St., $46,600. Noted Dec. 20.

CONTRACTS AWARDED

Mass., Holyoke—Mill—Crocker McElwain Co., 2 story addition to filter plant and factory, brick, Cabot St., to Daniel O'Connell Co., 480 Hampden St., $50,000.

Mass., Lawrence—Plant—Curran & Joyce Co., 435 Common St., 2 and 4 story, 204 x 240 ft., rein.-con., brick and steel, plain foundation, to S. C. Sperry Co., 299 Main St., Cambridge (Boston P. O.), $150,000. Noted Oct. 18.

N. Y., New York—Plant—New York Telephone Co., 15 Dey St., 3 story, rein.-con. and steel, White Plains Rd. and 242nd St., to Barney-Ahlers Constr. Corp., 110 West 40th St. Archts. est. $300,000.

N. Y., Yonkers—Plant—Alexander Smith Co., Elm. St. and Palisade Ave., 5 story, 100 x 321 ft., rein.-con. and steel plant addition, called picker building, to Barney-Ahlers Constr. Corp., 110 West 40th St., New York. Archts. est. $400,000.

N. J., Plainfield—Plants—International Photo Corp., two 4 story plant extensions, and 1 story heat treating plant, to Barney-Ahlers Constr. Corp., 110 West 40th St., New York City. Archts. est. $500,000.

Pa., Latrobe—Plant—Latrobe Ice & Provision Co., 1 story and part basement, 35 x 40 x 85 ft. brick and tile addition, to Permanent Constr. Co., Latrobe. Archts. est. $40,000.

Pa., Phila. — Factory — R. J. Ederer Thread Co., Unity and Elizabeth Sts., 3 story, 75 x 200 ft. rein.-con. and brick, plain foundation, to W. Steel & Sons Co., 219 North Broad St.

Pa., Phila.—Factory—Electric Storage Battery Co., 19th and Allegheny Aves., 1 and 2 story, 80 x 120 ft. brick and steel, plain foundation, to W. Steele & Sons Co., 219 North Broad St.

Pa., Pittsburgh — Factory — Pittsburgh Screw & Bolt Co., Preble Ave., will build 1 story, 100 x 250 ft. addition, by day labor. $100,000.

Pa., Pittsburgh — Factory, etc. — Pittsburgh Auto Equipment Co., 5933 Baum Blvd., 5 story and basement, rein.-con., brick and steel factory and store, Baum Blvd., to D. T. Riffle, 1006 Forbes St. Archts. est. $100,000.

Md., Baltimore—Plant—W. Knabe & Co. Div. of Amer. Piano Co., Eutaw and West Sts., 1 story, 111 x 247 ft., brick, plain foundation, Eutaw and West Sts., to Frainie Bros. & Haigley, 19 West Franklin St., $60,000. Noted Feb. 28.

Md., Dundalk (Branch of Baltimore)—Factory—Glidden Co., Madison St., N. W., Cleveland, O., 1 and 5 story, 50 x 120 ft., steel and corrugated iron, here, to Austin Co., 16112 Euclid Ave., Cleveland, O., $60,000.

Va., Portsmouth — Foundry — Southern Wheel Co., Railway Exch., St. Louis, Mo., 1 story, 90 x 150 ft., rein.-con. and steel, to Roberts & Co., Tuft Bldg., Atlanta, Ga.; bridge and iron work, to Virginia Bridge & Iron Co., Real Estate Exch. Bldg., Richmond. Engrs. est. $125,000.

Tenn., Knoxville—Plant—Fulton Mfg. Co., Kingston Park, steel and concrete addition, to J. M. Dunn & Co., Bway and Depot, $40,000.

Tenn., McKenzie—Plant—McKenzie Ice Co., 1 story, brick and concrete, 12 ton capacity, to E. Frazier & Co., McKenzie, $65,000.

O., Middletown—Factory—Oglesby Paper Co., 3 story and basement, 100 x 215 ft., brick, concrete and steel factory addition, to F. K. Vaughn Building Co., Dayton and Lowell Sts., Hamilton, $100,000. Noted Dec. 13.

Ind., Indianapolis—Freight Station, etc. —Chicago, Indianapolis & Louisville R.R., 608 South Dearborn St., Chicago, freight station and office building, concrete and steel, here, to Thompson & Binger, 223 North New Jersey St.; 275 tons structural steel to Corrugated Bar Co., 20 West Jackson Blvd., Chicago. Noted Feb. 28 under "Material and Equipment."

Mich., Detroit — Plant — Williams & Houghton, 222 West Conger St., 3 story and basement, 50 x 80 ft., rein.-con., brick and stone printing plant Wayne and Larned Sts., to Everett Winters Co., 1024 Book Bldg.

Minn., Minneapolis — Factory, etc. — Juckem Co., E. J. Juckem, pres., 215 8th St. S., 2 story and basement, 60 x 132 ft., rein.-con. and brick, 217 9th St. S., general contract to Farnam Constr. Co., 5047 Gladstone Ave. Total $45,000. Noted Feb. 7.

Minn., St. Paul—Factory—Collis Products Co., 201 Custer St., 1 story, 62 x 98 ft., brick and concrete, 65-75 Plato St., general contract to H. C. Struchen, 404 Dakota Bldg. Total cost $45,000.

Mo., St. Louis — Factory — Haynes-Langenberg Mfg. Co., 4525 North Euclid Ave., will build 1 story, 110 x 160 ft., steel and rein.-con., Euclid Ave. and Kingshighway N. E., by day labor. $40,000. J. C. Martin, Syndicate Trust Bldg., engr.

Tex., Dallas—Warehouse—See "Buildings" under Office.

Tex., Houston—Compress-Houston Compress Co., Ship Channel, 50 x 1,500 ft., concrete compress, to Raymond Concrete Pile Co., 611 Amer. Bank Bldg., Kansas City, Mo., $190,000.

Tex., San Juan—Cannery—Rio Grande Valley Canning Co., Brownsville, brick and concrete plant, 20,000 cans daily capacity, to J. M. Cochran, Marcedes. $41,000.

Okla., Ponca City—Plant—T. C. Woodruff, archt., Reynolds Bldg., Fort Worth, Tex., 2 story, 48 x 140 ft., brick, plain foundation, Grand Ave., to O. F. Keck, Ponco City. $65,000. Noted Dec. 13.

Calif., Los Angeles—Factory—Hawthorne Furniture Shops, 1200 East 8th St., 3 story, 75 x 100 ft., brick, Kohler St., to Nance Constr. Co., 5503 Sunset Blvd.

Calif., Los Angeles — Factory — Morris Furniture Co., 45th and Alameda Sts., 165 x 195 ft., to A. Chase, 223 Stock Exch. Bldg.

Calif., Los Angeles — Factory — G. L. Orccuo, c/o constractor, 1 story, 50 x 100 ft., brick, 60th St., to Austin Co. of California, Bartlett Bldg.

Calif., Los Angeles—Factory—Safety Electric Products Co., 1330 East 16th St., will build 1 story, 95 x 250 ft., brick, 16th St., by day labor.

Calif., Los Angeles—Planing Mill—Black Planing Mill, 641 Maple St., 1 story, 50 x 140 ft., brick, 62nd St., to Austin Co. of California, Bartlett Bldg.

Calif., South San Francisco (branch San Francisco)—Ice Plant—Pacific Fruit Express Co., 65 Market St., San Francisco, rein.-con. and frame, 90 ton artificial ice plant, Visitacion Valley section, here, to D. R. Wagner, Call Bldg., San Francisco, $82,935.

Ont., Hamilton — Foundry — Canadian Westinghouse Co., Aberdeen St. W., 1 story, 100 x 500 ft. rein.-con., brick and steel, plain foundation, Aberdeen St. W., general contract to W. H. Yates Constr. Co., 17 Main St. E., structural steel to Hamilton Bridge Wks., Waterfront. Archts. est. $400,000.

Buildings

PROPOSED WORK

Mass., Boston—Apartment—D. Carlin and W. W. Cherney, 5 Beals St., Brookline (Boston P. O.), plan apartment, 36 Monmouth St., here. $400,000.

Mass., Boston—Theater—B. F. Keith Theater Co., 545 Washington St., plans 3 story, Essex and Chauncy Sts. $300,000. A. H. Bowditch, 44 Bromfield St., archt.

Mass., Brighton (Boston, P. O.)—High School—Bd. Aldermen, City Hall, Boston, plans high school, here. $1,000,000.

Mass., Brighton (Boston, P. O.)—Normal School—Commonwealth of Massachusetts, Bd. Educ., State House, Boston, had preliminary plans prepared brick normal school, here. $950,000.

Mass., Roxbury (Boston P. O.)—School and Library—School House Dept., City Hall, Boston, having plans prepared by H. A. Atwood, 61 Alban St., Dorchester (Boston P. O.), 3 story, Townsend St., here. $2,500,000.

Mass., Westfield — High School — City School Com. plans brick. $200,000-$300,000. Engineer and architect not selected.

Conn., New Haven—Business—Security Insurance Co., 115 Elm St., having plans prepared by H. K. Murphy, 1 Pershing Sq., New York City, brick and stone, fireproof, Whitney Ave. $500,000. Noted Mar. 1.

N. Y., Albany—Museum—State Building Comn. had plans prepared by W. P. R. Pember, archt. and engr., 24 James St., 1 story and basement, 100 x 300 ft., steel, plain foundation, Sheridan Park. $2,500,000.

N. Y., Buffalo—Office—T. Lasser, Prudential Bldg., plans 12 story, 120 x 180 ft., rein.-con., brick and steel, West Genesee St. $700,000. Engineers and architects names withheld.

N. Y., Brooklyn—High School—T. E Malloy, bishop, c/o Robert J. Reiley, archt. and engr., 50 East 41st St., New York City, having preliminary plans prepared 4 story, brick, steel and stone, plain foundation, Eastern Parkway near Washington Ave. $1,000,000.

N. Y., Buffalo—Warehouse—D. Schunke, 463 Amherst St., having preliminary plans prepared by C. Schmill & Son, Prudential Bldg., 2 story and basement, 125 x 135 ft., rein.-con. $150,000.

N. Y., Dunkirk—School—Bd. Educ. having plans prepared by E. E. Joralemon, 482 Delaware Ave., Buffalo, 2 story and basement, 194 x 200 ft. school. $500,000.

N. Y., Glens Falls—Hospital—Warren Co. plans tuberculosis hospital, Gurney Lane, 4 mi. north of here. $300,000. Engineer and architect not selected.

N. Y., Great Neck—Club House—Lakeville Golf & Country Club having plans prepared by A. F. Gilbert, archt., 80 Maiden Lane, New York City, brick and stone, plain foundation. $150,000.

N. Y., Hamilton—Gymnasium—Colgate University having plans prepared by F. B. and A. Ware, archts. and engrs., 1170 Bway., New York City, brick, steel and stone, plain foundation, College St. $150,000.

N. Y., Lowville—High and Grade School —Union Free School Dist. 2, plans 2 story and basement, brick and stone. $500,000 voted. Address S. B. Richardson, chn. building com. A. F. Gilbert, 80 Maiden Lane, New York City, archt.

N. Y., Mt. Pleasant—Nurses Home and Dormitory—Grassland Hospital soon takes bids brick, steel and stone, plain foundation. Walker & Gillette, 128 East 37th St., New York City, archts. and engrs.

N. Y., New York—Apartment—F. Sidemand, c/o Margon & Glaser, archts. and

Buildings (Continued)

engrs., 2804 3rd Ave., having plans prepared 5 story, brick, steel and stone, plain foundation, Haven Ave. and 171st St. $200,000.

N. Y., New York—Bank and Office—Harriman Natl. Bank, 5th Ave. and 44th St., soon takes bids brick, steel and stone, plain foundation, 531 5th Ave. $3,000,000. J. R. Pope, 527 5th Ave., archt. Steel contract awarded to Weiskopf & Ticksworth, 11 East 42nd St. Noted Jan. 24.

N. Y., Oswego — Schools — Bd. Educ. plans 2 schools. $500,000. F. Leighton, supt. schools and chn. building com.

N. Y., Saranac Lake—Hotel—Saranac Lake Business Mens Assn. had plans prepared by Amer. Hotels Corp., 25 West 45th St., New York City, and J. G. White Eng. Corp., 43 Exch. Pl., New York City, new 125 room hotel. $450,000-$500,000. Address W. Lagendorf, Saranac Lake, or F. H. Anderson, c/o J. G. White Eng. Corp., 43 Exch. Pl., New York City.

N. Y., Schenectady—Chapel—Union College had plans prepared by McKim, Mead & White, archts. and engrs., 101 Park Ave., New York City, memorial chapel, on campus. $200,000.

N. Y., St. George—Hotel—General Organization Co. of Chicago, c/o D. Hodson Lewis, chn. building com., 67 Bay St., having plans prepared by Delano & Aldrich, 126 East 38th St., New York, 7 story, brick, steel and stone, plain foundation. $850,000.

N. Y., Watertown—Court House—Jefferson Co. plans 2 story addition. $150,000-$200,000. P. F. Porter, superv.

N. Y., White Plains—School—Bd. Educ. having plans prepared by A. F. Gilbert, 80 Maiden Lane, New York City, brick, steel and stone, plain foundation. $300,000.

N. J., Camden—Hotel—Community Hotel Corp., W. Kennedy, secy., 533 Market St., plans hotel. $1,250,000 raised for project. Engineer and architect not selected.

N. J., Irvington (branch of Newark)—Exchange—New York Telephone Co., 15 Dey St., New York City, plans rein.-con., brick, steel and stone, plain foundation, Clinton Ave., here. $750,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., New York City, archts. and engrs.

Pa., Elizabethtown—Home for Boys—Masonic Home Assn. had plans prepared by E. A. Wightman, Heed Bldg., Phila., and takes bids about Mar. 19, John Smith Home for Boys, here, 3½ story and basement, 65 x 110 ft. rein.-con., steel and tile. $250,000.

Pa., Mt. Carmel—School and Convent—Our Mother of Consolation Church having plans prepared by P. A. Monaghan, 1713 Sansom St., Phila., 2½ story and basement, 62 x 150 ft. brick and stone, plain foundation. $150,000.

Pa., Phila.—Apartment—K. K. Otto, archt., 1828 Arch St., will revise plans 4 story and basement, 41 x 100 ft. brick and steel, plain foundation, 19th and Green Sts. $175,000. Former bids rejected. Owners name withheld. Noted Feb. 7.

Pa., Phila.—Church and School—St. Huber Roman Catholic Church having plans prepared by P. F. Getz, 1634 North 6th St., 2 story and basement, 67 x 120 ft. stone, plain foundation, Cottman St. and Towesdale Ave. $150,000.

Pa., Phila.—Church and Sunday School—Methodist Episcopal Church, Oak Lane, having plans prepared by W. L. Blithe, 608 Chestnut St., 2 story and basement, 115 x 150 ft. stone, plain foundation, 12th St. and City Line. $350,000.

Pa., Phila.—Hospital—Samaritan Hospital, Broad and Ontario Sts., having revised plans prepared by A. W. Barnes, Perry Bldg., and takes bids in few weeks, 7 story and basement, Broad and Ontario Sts.

Pa., Phila.—Hotel—C. S. Adams, archt., 2038 Spruce St., soon lets contract 12 story and basement, 55 x 88 ft. brick, steel and limestone, plain foundation, 13th and Spruce Sts., for Fried & Fishman, 262 South 17th St. $500,000.

Pa., Phila.—Office—Liberty Title & Trust Co., Broad and Arch Sts., having preliminary plans prepared by Dennison & Hirons, 288 Lexington Ave., New York City, 18 story, brick, steel and stone, plain foundation, Broad and Arch Sts. $1,250,000.

Pa., Pittsburgh—High School—Bd. Educ., Fulton Bldg., having plans prepared by R. M. Trimble, Ferguson Bldg., for Squirrel Hill High School, 2 or 3 story and basement, Shady Ave. $900,000.

Pa., Williamsport — High School — Bd. Educ. plans 4 story and basement, on 400 x 810 ft. plot on Rural Ave. E. I. Taylor, pr

Md., Baltimore — Administration — Johns Hopkins University, Charles St., having plans prepared by John Russell Pope, 15 West 46th St., New York City, 4 story, brick, plain foundation, Charles St. $500,000.

Md., Baltimore—Apartment—S. Olivier, Standard Oil Bldg., having plans prepared by Parker, Thomas & Rice, Union Trust Bldg., 3 story, 50 x 150 ft., concrete and brick, plain foundation, Charles St. and Homeland Ave. $150,000.

N. C., Greensboro—Hotel—J. T. Morehead plans 12 story and basement, Green and Sycamore Sts. $650,000.

Ga., Albany—Hotel and Store—Chamber of Commerce, G. E. Reynolds, pres., representing stock company which plans Thronateeska Hotel, 7 story, to contain 110 rooms, Pine St. $300,000.

Fla., Clearwater — Apartment — T. H. Kingston, Somerville, Mass., having plans prepared 3 story, 144 x 166 ft., rein.-con., Osceola and Drew Sts. $200,000. Private plans.

Fla., West Palm Beach—Apartment—Alhambra Investment Co. having plans prepared by Harvey & Clark, West Palm Beach, 3 story, to contain 88 apartments, Olive St. and 2nd Ave. $250,000.

Ala., Birmingham—Schools, Library, Fire Stations and Auditorium — City Comn. plans to vote on $3,100,000 bonds: schools $2,000,000, library $750,000, fire stations and equipment $150,000, completing auditorium $200,000.

Miss., Laurel — Church — Presbyterian congregation plans church. $200,000. Engineer and architect not selected.

Ky., Bowling Green — Hospital — City plans 3 story, 8th St. and Park Ave. $150,000.

O., Cleveland—Apartment—S. Passov & D. Miller, 1054 Linn Dr., plan 3 story and basement, brick, on 120 x 240 ft. lot, North Moreland Blvd. $400,000. Engineer and architect not selected.

O., Cleveland—Store, Apartment and Garage—J. Babin, 307 Williamson Bldg., having plans prepared by N. Petti, 307 Williamson Bldg., 4 story and basement 210 x 220 ft., brick, steel and concrete, Euclid Ave. and Mayfield Rd. $900,000.

O., Dayton—Hotel—Miami Hotel Co., 2nd and Ludlow Sts., had plans prepared by Schenk & Williams, Mutual Home Bldg., and soon takes bids 11 story and basement, 41½ x 100 ft., rein.-con., brick and terra cotta addition, plain foundation, Ludlow St. $400,000.

O., Dayton — School — Corpus Christi Parish, Forest Ave., plans 3 story, brick and concrete. $150,000. J. W. Fogarty, pastor. Engineer and architect not selected.

O., Dayton—Temple—Masonic Temple Co., 134 South Main St., having plans prepared by Herman & Brown, 1129 Reibold Bldg., 3 story and basement, 160 x 255 ft., rein.-con., brick and limestone, plain foundation, Riverview St. $2,000,000. Noted April 26.

O., Lakewood — Apartment—L. Arnoff, 11118 Clifton Blvd., Cleveland, plans 3 or 4 story, brick, off Detroit Ave., here, $1,000-000. G. Rudolph, Hunkin-Conkey Bldg., Cleveland, archt.

O., Lakewood — Warehouse — Lakewood Fireproof Storage Co., 14401 Detroit Ave., plans 6 story and basement, brick and rein.-con., Detroit Ave. $250,000. J. J. Gund, pres. Engineer's and architect's names withheld.

O., Loudonville—High School—Bd. Educ. plans 2 story and basement, brick. $165,000. Vernon Redding and associates, Bird Bldg., Mansfield, archts.

O., Silverton (mail Pleasant Ridge branch Cincinnati P. O.) — Home — St. Theresa Home for Aged, 2021 Auburn Ave., Cincinnati, having plans prepared by Crowe & Schulte, 914 Main St., 2 story, 150 x 280 ft., brick, plain foundation, here. $250,000.

O., Zanesville—Warehouse—Mosaic Tile Co. having plans prepared by Lockwood, Greene & Co., engrs., Hanna Bldg., Cleveland, 3 story and basement, 80 x 140 ft., rein.-con.

Ind., Indianapolis — High School — Bd. School Trustees, 150 North Meridian St., having plans prepared by A. Scherrer, Indiana Trust Bldg., 3 story and basement, brick. $400,000. R. O. Johnson, business mgr.

Mich., Saginaw—Bank and Office—Second Natl. Bank having plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., Detroit, 10 story and basement, rein.-con., brick and steel, plain foundation, $350,000.

Ill., Chicago—Apartment—J. H. Larson, c/o J. Hocke, archt., 7602 Chappel Ave., plans 3 story, 60 x 154 ft., fireproof, Coles and 73rd Sts. $150,000.

Ill., Evanston — Apartment — Scherman Constr. Co., 84 East Jackson St., plans 3 story and basement, fireproof, Oakton and Ridge Sts. $500,000. S. Minchin, 19 West Jackson St., archt.

Ill., Joliet—Church—First Presbyterian Congregation, c/o W. E. Tomlinson, 717 Reggie Bldg., soon takes bids 2 story and basement, 132 x 146 ft., rein.-con., brick and stone church, Sunday school, etc., Raymond and Western Aves. $150,000. Private plans.

Wis., Kenosha — High School — Evangelical Lutheran Friedens Congregation, C. Buegner, 65 Ridge St., pastor, having revised plans prepared by H. Bothe, 65 Ridge St., 2 story and basement, 88 x 160 ft., brick, tile and concrete, plain foundation, Middle St. $150,000.

Wis., Milwaukee—Apartment—Prospect Ave. Realty & Investment Co., c/o H. V. Miller, archt., 646 24th St., making plans 3 story and basement, 100 x 120 ft., brick and tile, plain foundation, Farwell Ave. $150,000.

Wis., Racine—Hotel and Store—E. B. Funston Co., archts., Janes Bldg., prepared plans and soon takes bids 6 story and basement, 82 x 100 ft., brick and concrete, plain foundation, Main St., for Friedman Hotel Corp., 505 Main St. $650,000. Noted Dec. 6.

Wis., Racine—School—School Bd., A. H. Schafer, secy., having preliminary plans prepared by J. M. Matson, Main St., 2 story and basement, brick and tile, plain foundation, Superior St. $150,000.

Wis., Sheboygan—Garage—E. A. Juul, archt., Security Bldg., preparing plans 4 story, 100 x 140 ft., garage and repair shop, brick, rein.-con. and steel, plain foundation. $150,000. Owners name withheld.

Ia., Burlington — Hospital — Hospital Assn., J. J. Seerley, pres., having plans prepared by G. H. Washburn, 51 Parsons Blk., Burlington, and W. F. Weibley, Tama Bldg., 4 story, basement and sub-basement, rein.-con., brick, tile and stone addition. $150,000.

Minn., Minneapolis—School—Bd. Educ., City Hall, plans 2 story and basement, rein.-con., brick and tile, 42nd St. and Sheriden Ave. S. $150,000. G. F. Womrath, business supt. Bureau of Buildings, Bd. Educ., archt.

Kan., Ft. Scott—Temple—Jesbert Lodge of Perfection, A. S. S. R., Main and 1st Sts., making preliminary plans 3 story and basement, brick and stone. $150,000. Private plans.

Kan., St. Marys—College—St. Marys College, c/o B. J. Rodman, having preliminary plans prepared 2 story and basement, rein.-con., brick and stone, plain foundation, Campus. $200,000. Private plans.

Mo., Clayton—Academy and Convent—Sister of St. Joseph, Kansas and Minnesota Aves., St. Louis, having revised plans prepared by A. B. Grove, Stock Exch. Bldg., St. Louis, and takes new bids 2 and 3 story and basement, rein.-con., brick and stone. $700,000. Noted Jan. 17.

Mo., St. Louis — Apartment — E. M. Worthington, 535 Blet Ave., having preliminary plans prepared 8 story and basement, 130 x 213 ft., rein.-con., brick and stone, Lindell Blvd. $750,000. Private plans.

Mo., University (St. Louis P. O.)—Apartment—M. Finkelstein having preliminary plans prepared 4 story and basement, 100 x 195 ft., rein.-con., brick and stone, Syracuse St. $200,000. Private plans.

Mo., University (St. Louis P. O.)—Store and Apartment—J. C. Janopoulo, 726 Kingsland Ave., St. Louis, having preliminary plans prepared 3 story and basement, 100 x 100 ft., rein.-con., brick and stone, Delmar and Kingsland Aves., here. $160,000. Private plans.

Ark., El Dorado—Church—First Presbyterian Church, c/o J. K. Mahoney, chn., having preliminary plans prepared by R. H. Hunt, James Bldg., Chattanooga, Tenn., 2 story, brick and stone, church and Sunday school. $200,000.

Ark., El Dorado—High School—City having plans prepared by Thompson & Harding, Southern Trust Bldg., Little Rock, 3 story, rein.-con. and brick. $300,000.

Ark., Hot Springs—Office—Rector Trust Estate, c/o J. A. Rector, Federal Reserve Bldg., St. Louis, Mo., having preliminary plans prepared 4 story, 100 x 160 ft. rein.-con., brick and stone, Central Ave., here. $250,000. Private plans.

Ark., Little Rock—Medical—Medical Arts Building plans building on site to be selected. $300,000. W. E. Gray, Donaghey Bldg., secy.

Buildings (Continued)

Ark., Little Rock—Museum—City making preliminary plans 2 story and basement, rein.-con., brick and stone, City Park. $250,000.

Tex., Houston—Office—J. M. West, 2nd Natl. Bank Bldg., having plans prepared by J. Finger, Keystone Bldg., brick and concrete, additions, Main and Walker Sts. $200,000.

Tex., San Antonio—Apartment—S. L. Jeffers, 1 Bushnell Pl., having plans prepared by H. T. Phelps, Hicks Bldg., 10 story, 80 x 110 ft., rein.-con., brick and stone, plain foundation, Ave. E and 3rd St. $425,000.

Tex., San Antonio—Church—First Baptist Church, 126 4th St., had plans prepared by W. N. Noonan, archt., 240 Moore Bldg., and W. E. Simpson Co., engrs., Natl. Bank Commerce Bldg., 2 story, 140 x 200 ft., brick, stone and rein.-con., plain foundation. $150,000. Noted Jan. 31.

Tex., San Antonio—Garage and Theatre—S. L. Jeffers, 1 Bushnell Pl., having plans prepared by H. T. Phelps, Hicks Bldg., 4 story, 65 x 212 ft., rein.-con. and brick garage, plain foundation, $150,000 and 150 x 190 ft., rein.-con. and brick or tile and stucco, theatre, plain foundation, $300,000; both at Ave. E and 3rd St.

Okla., Ardmore—City Hall and Police Station—City having plans prepared by W. G. Doak, Ardmore, 2 story and basement, 50 x 140 ft., rein.-con. and brick, plain foundation, 2nd St. $150,000.

Okla., Collinsville—High School and Gymnasium—Bd. Educ. having surveys made 3 story, 80 x 150 ft., brick, plain foundation. $200,000. Architect not selected.

Okla., Muskogee—Hospital—Methodist Church, c/o J. Hawkins, pastor, having plans prepared by M. Jayne, Muskogee, 3 story, 80 x 150 ft., rein.-con. and brick, plain foundation, south of city. $250,000.

Okla., Okmulgee—Church, School, etc.—St. Anthonys Church, c/o G. Forbes, trustee, having preliminary plans prepared 1 and 2 story, brick and stone. $250,000. Private plans.

Okla., Pauls Valley—Warehouse—H. D. Nicholson preparing plans 1 story, 140 x 275 ft., rein.-con., brick and steel, plain foundation, Chickasaw St $160,000. Engineer and architect not selected.

Okla., Tulsa—School—Bd. Educ. voted $2,000,000 bonds for 4 new high schools. Engineer and architect not selected. Noted Feb. 7.

Okla., Tulsa—Schools—Election Mar. 26, $2,000,000 bonds, 2 new high schools and additions to 2 schools. Noted Feb. 7.

Colo., Denver—Church—First Baptist Church, 18th and Stout Sts., plans church, 14th and Grant Sts. $350,000. Engineer and architect not selected.

Wash., Seattle—Chamber of Commerce—Chamber of Commerce plans building, 2nd and Columbia Sts. $200,000-$250,000. Schack, Young & Myers, Central Bldg., Seattle, archts.

California—Memorial—Contra Costa Co. (Martinez), having working plans prepared by J. T. Narbett, 910 Macdonald Ave., Richmond, four 1 and 2 story, hollow tile, at Martinez, Danville, Richmond and Walnut Creek. To exceed $150,000.

Calif., Gardena—Bank and Office—First Natl. Bank having plans prepared by R. D. King, Van Nuys Bldg., Los Angeles, and F. Goodwin, Compton, associate, 2 story and basement, 50 x 100 ft., brick.

Calif., Hollywood—Club—Studio Club, Carlos Ave., having plans prepared by J. Morgan, Merchants Exch. Bldg., San Francisco, 125 x 225 ft., fireproof, Lexington St. and Lodi Ave. $150,000.

Calif., Inglewood—School—Inglewood Union High School Dist. plans to vote on $200,000 bonds for 20 room school and gymnasium.

Ont., Kingston—School—Bd. Educ. plans 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation. $150,000. Engineer and architect not selected.

Calif., Long Beach—Schools—Bd. Educ. having plans prepared by H. L. Gogerty, 239 East Bway., Long Beach, and Noernberg & Johnson, Ry. Bldg., Los Angeles, 18 classroom addition, probably brick, $200,000; by F. H. Gentry, engr., Marine Bank Bldg., and P. O. Wright, archt., Marine Bank Bldg., 10 room fireproof unit Burnett School, $150,000. Noted Feb. 7.

Calif., Long Beach—Warehouse—Southern California Edison Co., 306 West 3rd St., plans fireproof, Hill St. and Perris Rd. To exceed $150,000.

Calif., Los Angeles—Apartment—M. Cohen, Mercantile Arcade Bldg., is head of company organized to finance construction 11 story, Class A, Wilshire Blvd. and Rampart St. $1,000,000.

Calif., Los Angeles—Apartment and Store—M. Kirsch, et al., 5516½ Lexington Ave., having preliminary plans prepared by C. W. Kreis & Son, 1410 Sunset Blvd., 3 story and basement, 120 x 125 ft., frame and plaster, Sutherland St. and Sunset Blvd. $150,000.

Calif., Los Angeles—Church—Second Baptist Church having plans prepared by N. F. Marsh, Bway. Central Bldg., and P. Williams, Stock Exch. Bldg., 2 story and basement, 125 x 130 ft., brick, 24th St. and Griffith Ave. $150,000.

Calif., Los Angeles—Hall—Bd. Supervs. Los Angeles Co. will have revised plans prepared and soon receive new bids for general contract, Hall of Justice. Noted Feb. 21.

Calif., Los Angeles—Hotel—Eastern Realty Co., c/o H. Genser, archt., Hibernian Bldg., having plans prepared 4 story, 100 x 150 ft., fireproof, Union Ave. To exceed $150,000.

Calif., Los Angeles—Hotel—J. Rittigstein, 500 South Bway., having preliminary plans prepared by Charlton & Charlton, 111 East Bway., Glendale, fireproof, Boylston St. $200,000.

Calif., Los Angeles—Lodge—Knights of Pythias, Belvedere Lodge 326, had plans prepared by W. H. Ruggles, 2684 North Workman St., 2 story and basement, 50 x 150 ft., brick, Townsend St.

Calif., Los Angeles—Police Stations—City plans to vote on $3,000,000 bonds for central police station and ten district stations.

Calif., Los Angeles—Store and Office—G. Edwards, et al., having plans prepared by Walker & Eisen, Pacific Finance Bldg., 13 story and basement, 100 x 100 ft., rein.-con. and brick, 6th St. and Grand Ave.

Calif., Los Angeles—Temple—Los Angeles Co. will have new plans prepared for granite work for Temple of Justice. New bids will be asked. Former bids rejected. Noted Feb. 21.

Calif., Los Angeles—Warehouse—Barker Bros., 724 South Bway., plans 6 story (ultimately 10 story) and basement, 140 x 160 ft., rein.-con., Palmetto and Hewitt Sts. From $300,000 to $400,000.

Calif., Oakland—Warehouse—W. C. Lowe, archt., Monadnock Bldg., San Francisco, preparing plans 4 story, 80 x 200 ft., rein.-con., flat slab construction, Brush and 1st Sts. From $150,000 to $175,000. Owners name withheld.

Ont., Ottawa—Hospital—Bd. Control takes bids in early spring new building for male patients at Lady Grey Hospital, Carling Ave. $250,000. Architect not selected.

Calif., Pasadena—Apartment—Littleton Co., archts., 608 East Colorado St., preparing plans 6 story and basement, fireproof, East St. $150,000. Owners name withheld.

Calif., Pasadena—Hotel—S. H. Brown, archt., Union League Bldg., Los Angeles, preparing plans 4 story and basement, brick, to contain 120 rooms, Marengo Ave., here. $150,000. Owner's name withheld.

Calif., Pasadena—Theatre, Office and Store—Bard, Fellows, Bershon, Inc., c/o L. Smith, archts., Lily-Fletcher Bldg., Los Angeles, having plans prepared fireproof, to contain 9 stores, 15 offices, theatre, seating capacity 3,000, Catalina and Colorado Sts. To exceed $350,000.

Calif., Pomona—Manual Training, etc.—Pomona High School Dist. having working drawings prepared by W. H. Weeks, 369 Pine St., San Francisco, and R. H. Orr, Corporation Bldg., Los Angeles, 2 story, brick, gymnasium, manual arts, bleachers, etc. $150,000. Noted Nov. 8.

Calif., Sacramento—Church—Pioneer Memorial Church, formerly First Congregational Church, had preliminary plans prepared by Hemmings & Stark, Ochsner Bldg., 1 story, brick and terra cotta, 27th and L Sts. $150,000.

Calif., Sacramento—Store and Office—W. S. and H. H. Hart, c/o F. A. Foale, archt., Ochsner Bldg., Los Angeles, having plans prepared 3 story (ultimately 12 story) and basement, Class A, brick, steel and terra cotta, K St., here. Noted Sept. 13.

Calif., San Diego—Apartment—N. W. Mohr, archt., 310 California St., San Francisco, preparing plans 8 story and basement, rein.-con., here. $500,000. Owners name withheld.

Calif., San Francisco—Apartment—N. W. Mohr, archt., 310 California St., preparing preliminary plans 3 story and basement, frame and stucco, to contain 225 rooms, Western Addition. $150,000. Owners name withheld.

Calif., San Francisco—Garage—L. R. Lurie, 315 Montgomery St., plans 10 to 12 story and basement, on 155 x 300 ft. site, class A, probably rein.-con., 4th St., Jessie to Stevenson Sts. $1,500,000. Preliminary plans prepared by O'Brien Bros., Inc., 315 Montgomery St.

Calif., San Francisco—Garage—N. W. Mohr, archt., 310 California St., preparing plans 3 story, rein.-con., vicinity Southern Pacific depot. $150,000. Owners name withheld.

Calif., San Francisco—Garage—T. P. Ross, archt., 310 California St., preparing preliminary plans 2 or 3 story, rein.-con., 150 car capacity, Bush St. Owner's name withheld.

Calif., San Francisco—Schools—City and San Francisco Co. voted $12,000,000 bonds for schools. J. Reid, Jr., 1st Natl. Bank Bldg., city archt.

Calif., San Francisco—Warehouse—California Prune & Apricot Growers Assn., Market and San Antonio Sts., San Jose, plans fireproof, here. $150,000. A. W. Mortensen, genl. mgr.

Calif., San Francisco—Warehouse—Dalziel Estate, 550 Mission St., having plans prepared by W. C. Lowe, Monadnock Bldg., 4 or 5 story and basement, rein.-con., flat slab construction, Jessie St. $150,000.

Calif., San Francisco—Warehouses—San Francisco Terminals, Inc., 240 Battery St., having working drawings prepared by F. J. Amweg, 251 Kearny St., three 3 story, rein.-con. with concrete piling, to contain 1,000,000 sq.ft. of floor space, Mission Rock. $3,000,000 or more. H. S. Scott, pres.

Calif., Santa Barbara—Hotel—A. C. Blumenthal, et al., Loew State Bldg., Los Angeles, having preliminary plans prepared by J. F. Walker, Santa Barbara, 6 story, fireproof. To exceed $150,000.

Calif., Turlock—Home—Swedish Old Peoples Home, c/o G. N. Hilburn, archt., Turlock, soon takes bids first unit, brick or rein.-con., Lander Ave. Total cost $200,000.

Calif., Venice—Auditorium—City plans to vote on $200,000 bonds for rein.-con. auditorium. Noted Dec. 6.

Ont., Toronto—Office—London Life Insurance Co., 72 Queen St. W., plans 7 story and basement, concrete or structural steel frame construction, plain foundation, Bloor St. W., $500,000. Engineer and architect not selected.

BIDS DESIRED

Mass., Orange—High School—Mar. 19, by Bd. Educ., brick, steel and stone, plain foundation, Pleasant St. $150,000. Tooker & Marsh, 101 Park Ave., New York City, archts. Noted Nov. 1.

N. Y., Brooklyn—Mar. 11, by W. H. Gompert, archt. and supt. School Buildings, Flatbush Ave. extension and Concord Sts., addition to P. S. 97, easterly side of Stillwell Ave. between Aves S and R, for Bd. Educ., 500 Park Ave., New York City.

N. Y., Buffalo—School—Mar. 26, by Bd. Educ., 1400 Telephone Bldg., P. S. 71, 2 story and basement, 190 x 215 ft., rein.-con. and brick, Lang Ave. $500,000. Associated Buffalo Architects, 232 Delaware Ave., archts. Noted Jan. 24.

N. Y., Troy—Public—Mar. 21, by Bd. Contr. & Supply, City Hall, 3 story and basement, brick and steel, plain foundation, State St. $450 000.

N. J., Atlantic City—Hotel—Mar. 15, by W. Smedley, archt., St. Girard Bldg., Phila., 9 story and basement, 57 x 185 ft., and 6 story and basement, 53 x 143 ft., brick and steel, wood pile foundation, here, for Hotel Dennis, Michigan Ave. and Beach.

N. J., Montclair—School—Mar. 18, by Bd. Educ., constructing Rand School, brick, steel and stone, plain foundation, Chestnut St. $300,000. Starrett & Van Vleck, 8 West 40th St., New York City, archts. and engrs.

Pa., Camp Hill—Clubhouse—Mar. 7, by Seeburger & Rabenold, archts., 1524 Chestnut St., Phila., 2½ story and basement, 60 x 130 ft. stone, plain foundation, here, for Manufacturers Club, Broad and Walnut Sts., Phila. $150,000. Noted Jan. 24.

Pa., Olney Sta. (Phila. P. O.)—Mar. 8, by Richer & Eiler, archts., Reading, 1 story and basement, 65 x 118 ft. stone and steel, plain foundation, Fishers Lane and 1st St., for Zion Lutheran Church, 117 East Tabor Rd. $200,000.

Pa., Phila.—Apartment—Mar. 10, by L. Rothschild, archt., 215 South Broad St., 21 story and basement, 52 x 135 ft. brick and steel, plain foundation, 19th and Walnut Sts., for Heyman & Bros., Heyman Bldg. $1,000,000.

Pa., Phila.—Warehouse, Show Room, etc. Mar. 7, by McCormick & French, archts., Wilkes-Barre, 4 story and basement, 56 x 97 ft. brick and steel, plain foundation, for Haines, Jones & Cadbury Co., 1136 Ridge Ave. $150,000.

Pa., Pittsburgh—Warehouse—Kaufman & Baer Co., 6th and Smithfield Sts., taking bids 6 story and basement, 120 x 364 ft., rein.-con., brick and steel. $500,000. J. Piper and H. Kropf, Oliver Bldg., archts.

Pa., Stony Creek Mills—High School—Mar. 25, by Lower Alsace Twp. School Bd.,

Buildings (Continued)

3 story and basement, 183 x 216 ft. brick and steel, plain foundation, $600,000. E. Z. Schull, 136 Robeson St., Reading, archt.

Md., Baltimore—High School—Mar. 19, by Bd. Awards, 3 story and basement, concrete and brick, plain foundation, Gwynns Falls Park, for Public Impvt. Com., $1,250,000. Smith & May, Calvert Bldg., archts.

La., New Orleans—School—Mar. 14, by Orleans Parish School Bd., 3 story, 71 ft. high, 189 x 244 ft. rein.-con. and steel, Carrolton Ave., Belfast, Apricot and Short Sts. $250,000. A. E. Christy, City Hall Annex, archt.

La., Shreveport — Hospital — Tri-State Sanitarium, c/o T. E. Williams, doctor, taking bids 3 story, 66 x 80 ft. and 35 x 60 ft., rein.-con., brick and tile. $160,000. J. O. Mitchell, Shreveport, archt.

Ky., Louisville—Garage and Sales Room —Mar. 17, by Summers-Herman, Inc., 905-11 South 3rd St., 3 story, 90 x 100 ft., brick, 3rd and Breckenridge Sts. $150,000. D. X. Murphy & Bros., Louisville Trust Bldg., archts. Noted June 7.

Ky., Louisville—Office—Mar. 15, by Commonwealth Life Insurance Co., 106-110 South 15th St., 6 story, 60 x 120 ft., brick, 5th St. $250,000. D. X. Murphy & Bro., Louisville Trust Bldg., archts. Noted Nov. 22.

O., Cleveland—Apartment—B. Bialosky, 2388 Ontario St., taking bids 3 story, 52 x 130 ft., brick, 2052 Cornell Rd. $175,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland Heights (Warrensville P. O.)—Commercial and Garage — C. A. Matheny, archt., 1969 East 70th St., Cleveland, taking bids and opens same about Mar. 12, 2 story and basement, 80 x 140 ft., brick and metal lumber, Mayfield and Superior Rds., here, for Louise Stone Estate, 501 Rockefeller Bldg., Cleveland. $150,000.

O., Findlay—High Schools—Mar. 14, by Bd. Educ., constructing North and South Junior High Schools, 2 story and basement, rein.-con. and brick. $200,000 each. T. McLaughlin, Savings Bldg., Lima, archt. Noted Jan. 31.

O., Massillon—Mar. 12, by Directors Y. M. C. A., 4 story and basement, brick and steel, East Tremont St. $350,000. Noted Jan. 31.

O., Newark—School—Mar. 18, by Building Com. of Church of St. Francis De Sales, K. C. Bldg., 3 story and basement, brick and rein.-con. $200,000. J. McCarthy, chn. Noted Dec. 6.

Ind., Hammond—Hospital—Mar. 12 (extended date), by D. X. Murphy & Bro., archts., Louisville Trust Bldg., Louisville, Ky., 4 story, 46 x 288 ft., here, for Franciscan Sisters of the Poor, Hammond. $300,000. Noted Dec. 27.

Ind., Michigan City—Hospital—Mar. 12, by D. X. Murphy & Bro., archts., Louisville Trust Bldg., Louisville, Ky., 3 story and basement addition to St. Anthonys Hospital, here. $150,000.

Mich., Detroit—Temple—B. C. Wetzel & Co., archts., 2317 Dime Bank Bldg., taking bids and opens same about Mar. 10, 4 story and basement 70 x 112 ft. rein.-con., brick and steel, plain foundation, Gratiot Ave., for Amaranth Lodge, 3106 Gratiot Ave. $150,000.

Mich., Grosse Pointe Park (mail Grosse Pointe branch Detroit P. O.)—School—Mar. 12, by C. A. Paye, secy. Bd. Educ., 2 story and basement, 65 x 164 ft. rein.-con., brick and steel, plain foundation, Kercheval Ave. $200,000. G. J. Haas, 1101 Kresge Bldg., Detroit, archt.

Ill., Chicago—Apartment—Loewenberg & Loewenberg, archts., 111 West Monroe St., taking bids 3 story, 120 x 147 ft., fireproof, Ainslee and Ridgeway Sts. $175,000. Owners name withheld.

Ill., Chicago—Apartment—Ohrenstein & Hild, 222 East Ontario St., taking bids 3 story and basement, 124 x 180 ft., fireproof, 69th and Oglesby Sts., for A. C. Ketler, 3143 South California St. $200,000.

Ill., Wilmette—Apartment—R. F. France, archt., 155 North Clark St., Chicago, taking bids 3 story and basement, 110 x 196 ft., fireproof, 5t hand Linden Sts., here, for R. F. Davis, c/o architect. $350,000.

Wis., Burlington—High School—Mar. 19 (extended date) by School Bd., N. E. Karcher, clk., 2 story, 185 x 247 ft., brick, tile and concrete, plain foundation. $300,000. Oppenhamer & Obel, Nicollet Bldg., Green Bay, archts. Noted Feb. 28.

Wis., Kenosha—Bank and Office—Mar. 10, by Lindl, Lesser & Schutte, archts., 82 Wisconsin St., 4 story and basement, 47 x 87 ft., brick and stone, plain foundation, for Merchants & Savings Bank, 252 Main St. $200,000. Noted Dec. 27.

Wis., Milwaukee—Church—Mar. 10, (extended date) by Riesch & Hess, archts., 302 West Water St., 2 story, 130 x 136 ft., brick and concrete, plain foundation, 11th and Clarke Sts., for St. Boniface Congregation, H. Stemper, pastor, 1118 Clarke St. $250,000. Noted Feb. 21.

Wis., Milwaukee—Store and Loft—Mar. 10, by Hotel Wisconsin Realty Co., 172 30th St., 4 story and basement, 50 x 150 ft. Holabard & Roche, 104 South Michigan Ave., Chicago, archts.

Wis., Mineral Point—High School—Mar. 12, by School Bd., A. Tucker, pres., 2 story, 90 x 115 ft. and 38 x 40 ft., brick and tile, plain foundation. E. Tough, 409 Washington Bldg., Madison, engr. Noted Sept. 13.

Wis., Watertown—Hotel—Badger Hotel Co., c/o M. F. Blumenfeld, 10 Pickney St., Madison, taking bids 5 story and basement, 66 x 108 ft., brick, rein.-con. and steel, plain foundation, here. $150,000. Balch & Lippert, Gay Bldg., Madison, archts.

Wis., Wyocena — Asylum — Columbia County, (Portage), H. R. Tongero, clk., taking bids 2 story and basement, 44 x 161 ft., brick, rein.-con. and steel, here. $150,000. Claude & Starck, Badger Annex, Madison, archts.

Minn., Gilbert—School—Mar. 20, by Secretary Bd. Educ., 2 story and basement, 75 x 212 ft., rein.-con., brick and tile, $300,000. W. T. Bray, and W. G. Smith, Torrey Bldg., Duluth, archts. and engrs.

Mo., St. Louis — Seminary — Mar. 24 (extended date), by T. Graebner, secy. Building Comm., Concordia Seminary, 3618 Texas Ave., dormitories, academic, dining hall, library, assembly hall, lecture hall, infirmary, professors house and power plant, etc., rein.-con., limestone and local stone, plain foundations. $2,000,000. Day & Klauder, Franklin Bank Bldg., Phila., archts. H. H. Morrison, Fullerton Bldg., St. Louis, engr. Noted Feb. 14.

Colo., Pueblo—Temple—Mar. 28, by B. F. Scribner, chn. Building Com., Scottish Rite Shrine Building Assn., Box 749, 5 story and basement, 120 x 206 ft., brick, steel and terra cotta, 4th and Main Sts. $550,000. Roe Stickney & Gile, 740 Thatcher Bldg., archts.

Calif., Colma—High School—Mar. 18, by Trustees Jefferson Union High School Dist., 1 and 2 story, rein.-con., to contain 15 rooms and auditorium. $180,000. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted Jan. 17.

Calif., San Bernardino — High School — Apr. 1, by Bd. Educ., 2 story, 220 x 255 ft., rein.-con. $225,000. H. E. Jones, Katz Bldg., San Bernardino, archt.

BIDS RECEIVED

N. J., Irvington (branch of Newark)—High School—Bd. Educ., Feb. 20, brick, steel and stone, plain foundation, Clinton Ave., from T. M. Gibbs Constr. Co., Heyman Bldg., Phila., Pa., $804,990. Noted Jan. 24.

Pa., Phila.—Art Museum—Comrs. Fairmount Park, Room 217 City Hall, constructing certain portions of Phila. Museum of Art, in Fairmount Park, (a) Pink Georgia granite (b) White Bethel granite, (c) Minnesota granite, (d) Ohio sandstone, from F. W. Mark Constr. Co., Commercial Trust Bldg., (a) $2,049,000 (b) $2,415,000 (c) $2,129,000 (d) $1,859,000. Noted Feb. 14.

Md., Baltimore—Bath and Field House—Bd. Park Comrs., Gay and Lexington Sts., 1 story, 87 x 160 ft., brick, plain foundation, Druid Hill Park, from Price Constr. Co., Maryland Trust Bldg., $188,000.

Ia., Sioux City—Hospital—St. Josephs Mercy Hospital, 5 story and basement, rein.-con., tile, brick and stone addition, 21st and Court Sts., from B. E. Short, 418 Court St., $186,800. Noted Feb. 7.

CONTRACTS AWARDED

Me., Portland—Apartment—C. W. Whitehead, Noyes St., 3 story, 80 x 180 ft., brick, Noyes and Deering Aves., to F. A. Rummery, 21 Portland St., $250,000.

Mass., Brookline (Boston P. O.)—Apartment—Brookline Realty Associates, Inc., Alton Court, will build 3 story, brick and stone, plain foundation, Alton Pl., by day labor. $150,000. Private plans.

Mass., Chelsea (Boston, P. O.)—School—Bd. Educ., 3 story, 230 x 232 ft., brick, rein.-con., steel and stone, Tudor St., to Simpson Bros. Corp., 77 Summer St., Boston. Archts. est. $700,000.

Mass., Somerville (Branch of Boston)—Apartment—J. E. Locatelli Co., Inc., 46 Cornhill, Boston, will build 4 story, 110 x 140 ft., brick and timber, 155 Summer St., here, by day labor. $150,000. Noted Feb. 28.

Mass., Springfield—Express, Mail, etc.—Boston & Albany R.R., South Sta., Boston, 4 story, 60 x 330 ft., brick, stone and steel, plain foundation, Lyman St., here to Tredennick Constr. Co., 10 High St., Boston, $150,000.

Conn., Waterbury—Apartment—H. A. Pease, 182 Church St., Torrington, 6 story, brick, plain foundation, 1st Ave., here, to Torrington Building Co., 182 Church St., Torrington. $200,000.

N. Y., Brooklyn — Schools—Bd. Educ., 500 Park Ave., New York, P. S. 215, Ave. S, here, to Lustig & Weil, 103 Park Ave., New York, $785,300, deduct $20,000; P. S. 206, Ave. V, here, to Frymier & Hanna Co., 25 West 46th St., New York, $1,006,000, deduct $25,000. Noted Feb. 7.

N. Y., Harrison—School—Bd. Educ., brick, steel and stone, plain foundation, to Wennemer Constr. Co., 103 Park Ave., New York City, Archts. est. $300,000. Noted Feb. 14.

N. Y., Long Island City—School—Bd. Educ., 500 Park Ave., New York, P. S. 125, Nelson Ave., here, to Concord Constr. Co., 276 Seneca Ave., Brooklyn, $972,800, deduct $33,000. Noted Feb. 7.

N. Y., New York—Bath House—J. Miller, pres. Manhattan Boro, Municipal Bldg., general contract for bath house, 34 West 134th St., to Blumar Constr. Co., 25 West 43rd St., $324,200; plumbing, to D. Brandt, Inc., 467 East 155th St., $29,987; heating and ventilating, to Teran Lange, Inc., Grand Central Terminal, $26,875. Noted Feb. 14.

N. Y., New York — Garage — Lenmore Realty Corp., c/o J. M. Felson, archt. and engr., 1133 Bway., will build 2 story, brick, steel and stone, plain foundation, Bway., by day labor. $150,000.

N. J., Hightstown—High School—Bd. Educ. Feb. 18, general contract 2 story, brick and steel, to F. D. Priory, 11 West State St., Trenton, $198,000.

N. J., Newark—Apartment—M. Zeses, c/o R. Botelli, archt. and engr., 207 Market St., will build 5 story, brick, steel and stone, plain foundation, High St., by day labor. $200,000.

Pa., Clairton—High School—Bd. Educ., 2 story and basement, to C. D. Keyser Co., Bellaire, O. Archts. est. $400,000. Noted Jan. 10.

Pa., Grove City—Home—I. O. O. F., 2 story and basement addition to home for aged here, general contract to H. Wimer, Butler Co. Natl. Bank Bldg., Butler. Archts. est. $150,000.

Pa., Phila.—Bank—Heacock & Hokanson, archts., Bailey Bldg., 1 story and basement, 40 x 150 ft. rein.-con., steel and limestone, plain foundation, Ridge Ave. and Green Lane, to F. A. Haven, 845 North 19th St., for Roxborough Trust Co., Ridge Ave. and Green Lane. Archts. est. $250,000.

Pa., Phoenixville—Bank—A. D. Eaches, cashier Natl. Bank of Phoenixville, 1 story and basement, 50 x 88 ft. brick and steel, plain foundation, Bridge St., to Roberts & Roller, 1904 Sansom St., Phila. Noted Jan. 31.

Md., Baltimore—Church, etc.—St. Johns Concordia Evangelical Lutheran Church, c/o F. J. Heldrich, archt., 1156 Longwood St., 1 and 2 story, 71 x 175 ft., stone church, community building and parsonage, Reistertown Rd. and Elgin Ave., to T. Hicks & Son, 106 West Madison St., $150,000. Noted Feb. 21.

D. C., Wash.—Apartment—F. H. Smith & Co., 815 15th St., rein.-con. and limestone apartment house, Massachusetts Ave. and 21st St., to R. P. Whitty, Union Trust Bldg., 15th and H Sts., $1,000,000. Noted Jan. 31.

W. Va., Bluefield—Office—T. E. Perry, 8 story, 60 x 100 ft., rein.-con. and brick, Bland and Federal Sts., to D. S. Phipps, Roanoke, $235,000.

N. C., Davidson—College—Davidson College (1st unit) Chambers Hall, brick, recently destroyed by fire, to Blythe & Isenhour, Charlotte, $150,000. Noted Feb. 14.

O., Bellaire—High School—Bd. Educ., 2 story and basement, 85 x 250 ft., brick, stone and concrete, to C. D. Keyser, Bellaire, $350,000.

O., Canton—Mercantile—Stark Dry Goods Co., 2 story and basement, 74 x 200 ft., brick and steel, Tuscarawas St. E., to R. G. Witters Co., Cleveland Ave. N. W., $140,000.

O., Cleveland—Bank and Commercial—A. G. Hall, archt., 322 Euclid Ave., 2 story and basement, 80 x 120 ft., brick, steel and concrete, St. Clair and Blenheim Aves., to McCreary Co., Bangor Bldg., for Cleveland Trust Co., East 9th St .and Euclid Ave. Archts. est. $150,000.

O., Hamilton — School — Notre Dame Academy, 2nd St., 4 story, 50 x 95 ft. school with 46 x 75 ft. wing, rein.-con. and brick, plain foundation, to E. Honnert, 19 South Hamilton St., Mt. Healthy, $180,000. Noted Jan. 10.

Mich., Detroit—Garage and Sales—E. R. Cain, 2128 Penobscot Bldg., 4 story and basement, 92 x 145 ft., rein.-con., brick and stone, Cass Ave. and York St., to Everett Winters Co., 1024 Book Bldg., Olds Motor Car Co., 7 Sproat St., lessee.

Ill., Beardstown — High School — Bd. Educ., 2 story and basement, rein.-con., brick and stone, general contract to W. F. Wessell, Beardstown. Archts. est. $150,000. Noted Feb. 7.

Buildings (Continued)

Ill., Chicago—Bank and Office—Sheridan Trust and Savings Bank, 4738 Bway., 8 story, 105 x 147 ft., fireproof, Bway. and Lawrence St., to R. C. Wieboldt, 1534 West Van Buren St. Archts. est. $1,000,000. Noted Nov. 1.

Ill., Edwardsville—Bank and Office—Bank of Edwardsville, 5 story and basement, brick and rein.-con. addition, Public Sq., to St. Louis Bank Equipment and Fixture Co., 811 Walnut St., St. Louis, Mo. Archts. est., $150,000.

Wis., Appleton — High Schools — School Bd., two 2 story and basement, brick, tile and concrete, plain foundations, one to J. C. Nelson & Son, 5044 36th Ave. S., Minneapolis, Minn., other to Hoeppner-Bartlett Co., Eau Claire. Archts. total est. $400,000. Noted Jan. 31.

Wis., Chippewa Falls—School—St. Marys Congregation, J. M. McGuirk, pastor, 117 Allen St., 2 story and basement, 60 x 155 ft., brick, tile and stone, plain foundation, to Schafer & Olson, 222 Bay St. Noted Dec. 13.

Minn., Redwood Falls — School — Bd. Educ., general contract 2 story and basement, 147 x 150 ft., rein.-con., brick and tile, to E. A. Carlstron, Mankato, $127,000. Noted Feb. 14.

Minn., St. Paul — Nurses Home — St. Lukes Hospital, 402 Merchants Natl. Bank Bldg., 4 story and basement, 130 x 150 ft., rein.-con., brick and tile, Smith St. and Sherman Ave., general contract to G. J. Grant Constr. Co., 902 Exchange Bank Bldg. Cost complete $250,000. Noted Mar. 22.

Kan., Coffeyville — Hotel — Coffeyville Building & Improvement Co., 6 story and basement, 100 rooms, fireproof, to Manhatten Constr. Co., Agency Hill, Muskogee, Okla. Archts. est. $175,000. Noted Jan. 24.

Kan., Salina — Church — First Presbyterian Church, 2 story and basement, 75 x 178 ft., rein.-con., brick and stone, to Eberhardt Constr. Co., Salina. Archts. est. $175,000.

Mo., University (St. Louis)—Apartment—Westdel Realty Co., c/o Weisels-Gerhart Real Estate Co., 8th and Chestnut Sts., St. Louis, 3 story and basement, rein.-con., brick and stone, here, to V. Chinberg, 808 Chestnut St. Archts. est. $150,000.

Mo., Webster Groves—Church—Webster Groves Presbyterian Church 1 story and basement, 75 x 160 ft., rein.-con., brick and stone, Lockwood and Gore Aves., to Murch Bros. Constr. Co., Railway Exch. Bldg., St. Louis. Archts. est. $160,000. Noted Jan. 17.

Ark., Texarkana — Hotel — Texarkana Hotel Co. 8 story, 75 x 105 ft., rein.-con., steel, brick, stone and terra cotta, to Stewart & McGee, Kahn Bldg., Little Rock. Archts. est. $600,000.

Tex., Corsicana—Hotel—G. A. McGregor Kirby Bldg., 5 story and basement, 84 x 100 ft., brick, concrete and steel, 11th and 4th Sts., to Southern Constr. Co., Slaughter Bldg., Dallas, $300,000. Noted Jan. 17.

Tex., Dallas—Garage—Wofford & Lipsitz, Western Indem Bldg., general contract, 3 story, 210 x 287 ft., brick and steel, Pacific St., to Trinity Constr. Co., 1715 Live Oak St., $150,000.

Tex., Dallas—Office, etc.—Missouri, Kansas & Texas R.R., Katy Bldg., 8 story and basement, 100 x 200 ft., brick, concrete and steel, office and warehouse, to Bellows & McLay Constr. Co., Kirby Bldg., $500,000. Noted Feb. 7 under "Industrial Works."

Wash., Seattle—Apartment—Colonial Investment Co., Amer. Bank Bldg., 4 story, 120 x 120 ft. concrete and steel, Terry Ave. and Spring St., to H. Hudson, Amer. Bank Bldg. Archts. est. $400,000.

Calif., Los Angeles — Lodge Hall — Odd Fellows Building Assn. of Los Angeles, 3 story and basement, 105 x 175 ft., brick and steel, to Bradley Constr. Co., 1925 East 16th St., $375,000. Noted Dec. 6.

Calif., Los Angeles—Store and Hotel—J. W. MacDonald, Higgins Bldg., 4 story and basement, 80 x 110 ft., brick, Figueroa and 27th Sts., to Winter Constr. Co., Railway Bldg., $150,000.

Calif., Marysville—Auditorium—P. Rideout, 2 story, rein.-con. and steel, to I. C. Evans, 802 E St., $167,000.

Calif., San Francisco—Dance Hall, Office and Store—Trowbridge & Perkins, c/o E. E. Young, archts., 2002 California St., 4 story and basement, brick and concrete, Market and 9th Sts., concrete to Pioneer Concrete Co., 180 Jessie St., structural steel to Herrick Iron Wks., 18th and Campbell Sts., Oakland. Total cost $250,000. Noted Jan. 3.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn—Roads and Walks—Spec. 4953—Bureau Yards & Docks, Navy Dept., Wash., D. C. plans roads and walks at Naval Hospital here.

N. Y., New York—Ash Handling System—Spec. 4959—Bureau Yards & Docks, Navy Dept., Wash., D. C. plans pneumatic ash handling system here.

Pa., Pittsburgh — Lock — U. S. Engineer Office, plans to enlarge lock No. 5, Monongahela River, and extend concrete guide walls several hundred feet.

Va., Norfolk—Alterations—Spec. 4951—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans alterations to main building.

S. C., Charleston—Barracks, etc.—Spec. 4958—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans marine barracks, paving roads, etc., here.

Ala., Florence—Steel Gates—U. S. Engineer, Florence, plans to purchase 58 steel regulating gates, 18 x 38 ft., for Wilson Dam.

Ky., Louisville—Sewers, etc., Corps Area Quartermaster, Ft. Thomas, plans sewerage and water supply systems at Bowman Field, near here.

Ky., Louisville—Steel Hull Boats—U. S. Engineer, P. O. Box 72, takes bids about Apr. 1, two steel hull maneuver boats, one for Huntington Dist.

O., Cincinnati—Bank—U. S. Treas. Dept., Wash., D. C., having plans prepared by Walker & Weeks, 1900 Euclid Ave., Cleveland, 5 story and basement, 4th and Race Sts.

Wash., Destruction Island—Radio Sta.—Spec. 4954—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans radio compass sta. here.

Calif., Mare Island—Dike—Spec. 4960—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans reconstructing Dike 14.

Calif., Mare Island—Oil Wharf—Spec. 4956—Bureau Yards & Docks, Navy Dept., Wash., D. C. plans oil wharf here.

Calif., Point St. George—Radio Sta.—Spec. 4952—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans radio compass sta. here.

Calif., San Diego—Hospital—Spec. 4955—Bueau Yards & Docks, Navy Dept., Wash., D. C., plans hospital buildings, here.

BIDS DESIRED

N. Y., Fort Wright (Fishers Island P. O.)—Road Work—Mar. 25, by Constructing Quartermaster, concrete road concrete work, grading, etc.; adv. E. N.-R. Mar. 6.

N. Y., New York—Extension to Slip—Mar. 13, by Constructing Quartermaster Office, Room 510, 39 Whitehall St., New York, extending Governors Island ferry slip.

Pa., Phila.—Foundations—Spec. 4949—Mar. 19, by Bureau Yards & Docks, Navy Dept., Wash., D. C., permanent foundations for frame buildings at hospital here. Noted Feb. 21.

Va., Hampton Roads—Breakwater Pier—Spec. 4944—Mar. 19 by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to north breakwater pier. Noted Feb. 21.

N. C., Ft. Bragg—Road Graders, etc.—Mar. 10, by Post Quartermaster, furnishing 2 road graders, with back slope attachment, 2 disc harrows, and four 3 way road drags.

Ga., Savannah—Dredging Pump—U. S. Engineer, Savannah, in market for one 12 in. dredging pump.

Ill., Rock Island—Steam Shovel—U. S. Engineer, Rock Island, in market for one steam shovel mounted on caterpillar, ¾ yd. size.

New Mexico—Roads—Apr. 2, by E. S. Wheeler, dist. engr., Bureau Pub. Rds., U. S. Dept. of Agriculture, 242 West Washington St., Phoenix, Ariz., constructing and improving Canoncito-Pecos National Forest Highway located in Santa Fe National Forest, Santa Fe and San Miguel Counties, incl. 28,110 cu.yd. two course crushed stone surface or 23,425 cu.yd. one course crushed stone surface with oil mat.

BIDS RECEIVED

Mass., Chelsea—Dredging—Dist. Engineer, Custom House, Boston, dredging at lighthouse depot, 37 Marginal St., here, from Bay State Dredging & Contg. Co., 62 Condor St., Boston, $0.75 per cu.yd. Noted Feb. 7.

Mass., Plymouth—Dredging—U. S. Engineer, Custom House, Boston, dredging in Plymouth Harbor, here, from Bay State Dredging & Contg. Co., 62 Condor St., Boston, Mass., dredgings to be deposited behind bulkhead $0.53 per cu.yd., dredgings to be dumped at sea $0.531 per cu.yd. Noted Jan. 31.

Ky., Addison—Soft Steel Roads, etc.—U. S. Engineer, P. O. Box 72, Louisville, furnishing 70 tons round soft steel rods and structural steel angles, from Knoxville Iron Co., Lonsdale Ave., Knoxville, Tenn., $2.81 per cwt. Noted Feb. 14.

Ky., Owensboro—Lumber—U. S. Engineer P. O. Box 72, Louisville, 7,920 pieces 2 x 12 in. yellow pine No. 2, common and better, in 16, 18, 20 and 24 ft. lengths, 349.92 ft., for Dam 46, here, from Marsh & Truman Lumber Co., 332 South Michigan Ave., Chicago, $35.45 per M. Noted Feb. 14.

CONTRACTS AWARDED

W. Va., Huntington — Operating Machinery—U. S. Engineer, Huntington, valve operating machinery for Dam 32, Ohio River, to J. and J. B. Milholland, Co., 714 5th Ave., Pittsburgh, Pa., $6,500.

Ga., Augusta—Hospital—Spec. 4922—F. T. Hines, dir. U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., constructing new buildings at U. S. Veterans Hospital, here to Batson-Cook, West Point. $412,000. Noted Feb. 7 and 21.

Ala., Florence—Barges—U. S. Engineer, Florence, 8 steel barges, to American Bridge Co., Frick Bldg., Pittsburgh, Pa., $137,800. Noted Feb. 7.

Ala., Florence — Clearing Land — U. S. Engineer, clearing land along Tennessee River above Wilson Dam, 2,889 acres, to W. D. Winchell Co., Columbus, O., $216,750. Noted Jan. 3.

Ala., Florence—Crane—U. S. Engineer, Florence, furnishing and erecting one electric traveling crane for Wilson Dam, to Niles-Bement-Pond Co., 111 Bway., New York City, $33,450. Noted Jan. 24.

Ala., Florence—Reinforcing Steel—U. S. Engineer Office, Florence, furnishing 445,307 lb. reinforcing steel, to Corrugated Bar Co., Candler Bldg., Atlanta, Ga. Prices range from $2.46 to $3.76 per 100 lb.

Tenn., Memphis — Post Office — Treas. Dept., Wash., D. C., post office here, to A. Blair, 11 South Lawrence St., Montgomery, Ala., $99.839. Noted Feb. 21.

Ky., Addison—Hard Wood Piles—U. S. Engineer, P. O. Box 72, Louisville, furnishing 100 hard wood piles, 40 ft. long, Lot A, to L. J. Lyons, Addison, $6 each. 1,500 hard wood piles 25 ft. long, Lot B, to Withers Bros., West Point, $3.74 each.

Ky., Addison—Lumber—U. S. Engineer, P. O. Box 72, Louisville, furnishing 266,000 ft. No. 1, sound yellow pine also 269,000 ft. No. 1, common crib timbers, to Marsh & Truman Lumber Co., 332 South Michigan Ave., Chicago, $37.47 and $41.07 per M respectively.

Ky., Owensboro—Steel and Bolts—U. S. Engineer, P. O. Box 72, Louisville, 123 tons structural steel and bolts for Dam 46, Ohio River, to Lakeside Bridge & Steel Co., North Milwaukee, Wis., $13,870. Noted Feb. 21.

Ky., Owensboro—Steel Piling—U. S. Engineer, P. O. Box 72, Louisville, furnishing 1,219 tons steel sheet piling for Dam 46, Ohio River, to Carnegie Steel Co., Carnegie Bldg., Pittsburgh, $57 per ton. Noted Dec. 6.

Ky., Owensboro—Yellow Pine Lumber—U. S. Engineer, P. O. Box 72, Louisville, 2,000 pieces, 6 x 8 x 24 ft. No. 1 yellow pine, 192,000 ft., to Lord & Bushnell Co., 2424 South Laflin St., Chicago, $32.75 per M.

Wis., Milwaukee—Cement—U. S. Engineer, Milwaukee, furnishing 6,000 bbl. portland cement to Western Lime & Cement Co., 68 Wisconsin St., $13,500. Noted Feb. 28.

Unclassified

PROPOSED WORK

Hydro-Electric Development — Gouverneur, N. Y. — Village Bd. Trustees had plans prepared 200 hp. hydro-electric development. $100,000. Also plans high and low tension distribution systems and ornamental lighting system. L. C. Reynolds, Geneva, consult. engr.

Gas Mains and Transmission Lines—Bluefield, W. Va.—Bluefield Gas & Power Co. plans extensions to suburbs. $60,000.

Elimination of Grade Crossings—Alabama—See "Railways."

Electric Power Extensions—Tennessee—Tennessee Public Utilities Comn. approved $3,000,000 bond issue for Tennessee Electric Power Co. Hamilton Natl. Bank Bldg., Chattanooga, for plant extensions, improvements, new lines, etc. in various parts of state.

Recreation Field, etc.—Evansville, Ind.—City soon takes bids golf course, refreshment stands, locker rooms, shelter house, club house, etc., for Helfrich Recreation Field. $25,000. W. H. Elmendorf, mayor.

Gas Mains—La Salle, Ill.—See "Industrial Works."

Electrification — Texas — Texas Midland R.R., Terrell, making plans electrification 110 mi. from Ennis to Paris via Terrell. $1,750,000. L. G. Wells, genl. mgr.

Transmission Line—Oklahoma—Oklahoma Central Power Co., Muskogee, had surveys made 87 mi. 66,000 volt transmission line from Muskogee to Drumright. $300,000.

Unclassified (Continued)

Byllesly Eng. Co., 208 South La Salle St., Chicago, engrs.

Electrolier Lighting System — Chico, Calif.—Plans electrolier lighting system on portion Bway., Main and other streets. $25,000. F. A. Lammison, city engr.

Transit Sheds—Los Angeles, Calif.—City had plans prepared by J. W. Ludlow, Byrne Bldg., transit sheds at Berths 177 and 178, Mormon Channel. From $190,000 to $200,000.

Fountains—San Francisco, Calif.—City and San Francisco Co. plan two ornamental fountains in Civic Center. $100,000 each.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., plans 14,889 ft. 4, 6, 8 and 12 in. c.i. gas mains in 31 various streets, avenues, blvds. and roads. $33,640. E. S. Stanton, supt. gas distribution.

Electric Light and Power System—Ontario—Toronto Twp. Hydro Comn., Dixie, plans electric light and power systems in villages of Dixie, Cooksville, Lakeview and Lorne Park. $60,000. J. R. Kennedy, clk.

Power Lines—Ontario—Ontario Hydro Comn., London, plans to extend power line from Georgetown to Norval. $35,000.

Grain Elevator—Keewatin, Ont.—Lake of the Woods Milling Co., Lumsden Bldg., Toronto, plans reinforced and mass concrete grain elevator, concrete bins, etc., here. $750,000.

Pipe Line—Niagara Falls, Ont.—Hydro Electric Power Comn., 190 University Ave., Toronto, plans 3rd pipe line to Ontario Power Co. power house, here, concrete lined tunnel, 20 ft. diam., ½ mi. long in rock excav. $1,200,000. F. A. Gaby ch. engr.

Park Improvements—Toronto, Ont.—City Council plans to expend $810,000 extending and improving parks, grading and extending cinder, asphalt and concrete roads and drives, water piping, shelters, comfort stations, etc. R. C. Harris, city engr

BIDS DESIRED

Rein.-con. Floor—Buffalo, N. Y.—Mar. 11, by Dept. Parks and Buildings, City Hall, 6 in. rein.-con. floor in wading pool, (500 ft. diam.) in Humboldt Park, involves 3,650 cu.yd. rein.-con. $36,000.

Power and Lighting System—Annapolis, Md.—Mar. 11, by State Rds. Comn., Baltimore, power and lighting system on Severn River Bridge, near here. J. N. Mackall, chn.; adv. E. N.-R. Mar. 6.

Chimney, etc.—Rocky Mount, N. C.—Mar. 26, by T. T. Thorne, mayor, and Bd. Aldermen, power plant equipment, 225 ft. radial brick chimney, 11 ft. inside top diameter; 30 ton turbine room crane with motor hoist, 30 ft. span with rails, track girders, etc. W. C. Olson, Raleigh, consult. engr.

Levees—Mercedes, Tex.—Mercedes Dist. taking bids earthworth levees and concrete passages, etc. $100,000. F. W. Shaw, c/o Amer. Rio Grande Co., Brownsville, engr.

Electric Light and Power System — Grimsby, Ont.—Town taking bids electric light and power distributon system. $25,000 to $50,000. W. F. Randall, town clk.

BIDS RECEIVED

Grade Separation—Springwells, Mich.—Village, Schaefer Rd. grade separation on main line of Michigan Central R.R., here, incl. grading and paving 1,425 ft. pumping station, 3 span deck bridge of steel encased in concrete with rein.-con. piers and wall, from M. E. White Co., 130 North Wells St., Chicago, $389,000. Noted Jan. 31.

Retards—Missouri—State Hy. Dept., Jefferson City, two 100 ft., eight 150 ft. and eight 200 ft. current retards for Missouri River bank protection project in connection with bridge at Glasgow, Federal Aid Project 217, Howard and Saline Counties, from Wood Bros. Constr. Co., Lincoln, Neb., $189,000. Noted Feb. 14.

CONTRACTS AWARDED

Gas Holder — Pawtucket, R. I. — Pawtucket Gas Co., 233 Main St., steel gas holder, to Stone & Webster, 147 Milk St., Boston. $300,000.

Bulkhead—Bayonne, N. J.—Hudson Co. Park Comn., 1 Exchange Pl., Jersey City, bulkhead at Bayonne Park, here, to George B. Spearin, Inc., 90 West St., New York City, $230,950. Noted Feb. 14.

Car Barns and Sand House—Wheeling, W. Va.—Wheeling Traction Co., 1 North Huron St., car barns and sand house, 3rd St. to R. R. Kitchen Co., Natl. Bank of W. Va. Engrs. est. $50,000.

Sand and Gravel Bins—Madison, Wis.—Castle & Doyle Co., 125 State St., will build sand and gravel bins, etc., by day labor. F. Kronenberg, Carroll Blk., engr. Noted Feb. 14.

Stadium — Manhattan, Kan. — Kansas State Agricultural College rein.-con. and steel stadium, 7,000 seating capacity, to W. B. Stingley, Manhattan, $55,000. Additional sections to be let later.

Transmission Line—Oklahoma—Blackwell High Line Co., Blackwell, having surveys made 35 mi. 13,200 volt transmission line from Blackwell to Medford. $60,000. Work will be done by day labor. G. Bellatti, secy.

Foundation—Denver, Colo.—School Dist. 1, foundation for 3 story, 250 x 450 ft., to W. J. Cameron & Co., Chamber Commerce Bldg., $56,263.

Tunnel Lining — California — Southern Pacific R.R. Co., 65 Market St., San Francisco, will build concrete lining of tunnel, 2,000 ft. long, between Elmore and Pollock, by day labor. $50,000 per month will be appropriated until work is completed.

Street Lighting System — Bakersfield, Calif.—Electrolier system on portion Chester Ave., etc., to Robinson Electric Co., 1162 Bway., $26,600. Noted Feb. 21.

Lighting System—San Diego, Calif.—Ornamental lighting system on 7th, 8th, 9th, and 10th and other streets to Southern Electrical Co., 866 3rd St., $38,647.

Power Development — Montreal, Que. — Southern Power Co., 20 St. Nicholas St., developing power at Hemming Falls, to Foundation Co., Ltd., St. James St., $1,500,000.

Ferry Docks—Windsor, Ont.—Detroit & Windsor Ferry Co., two cement and steel ferry docks to Considine & Reid Ltd., Windsor. Engrs. est. $500,000.

Material and Equipment

PROPOSED WORK

Roller — Watertown, N. Y. — Bd. Pub. Wks. plans to purchase 10 ton steam driven roller. J. W. Ackerman, city mgr.

Paving Materials—Minneapolis, Minn.—Soon takes bids 100,000 sq.yd. 3½-in. creosoted wood block and 30,000 sq.yd. brick. N. W. Elsberg, city engr.

Road Machinery—Texas—State Bd. Control, c/o R. B. Walthall, Purchasing Div., Austin, returned all bids unopened for furnishing State Hy. Dept., Maintenance Div., with approximately $1,000,000 worth road machinery, pending litigation affecting maintenance law. When settled new bids will be called. Noted Feb. 7.

BIDS DESIRED

Asphalt, etc.—Holyoke, Mass.—May 6, by Bd. Pub. Wks., asphalt for penetration, cement, coal, cold patch, curbing, expansion joint, pitch, reinforcing rods, road oil, tar for penetration and trap rock for 1924 season. G. F. Stone, assistant clk.

Tractors—Albany, N. Y.—Bd. Contr. & Supply, in market for two 10 ton tractors. L. W. Herzog, comr. Pub. Wks.

Lime, etc.—Long Island City, N. Y.—Mar. 10, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 550 net tons lime to various disposal plants, also 5,000 cu.yd. white sand grit or broken stone chips of trap rock, 11,000 cu.yd. sand, 14,000 tons steam ashes, 864 ft. 12 in. iron pipe, 21,000 cu.yd. broken stone and screenings to Bureau of Highways as directed.

Rip Rap—New York, N. Y.—Mar. 10, by E. W. Buckley, comr. Purchase, Municipal Bldg., rip rap to Dept. Plant & Structures.

Cement, etc.—Cape May, N. J.—Mar. 13, cement, sand, gravel, reinforcing steel mesh and prepared joint filler. G. P. Wentzell, comr. streets and pub. impvts.; adv. E. N.-R. Mar. 6.

Oil and Tar—Trenton, N. J.—Mar. 11, by Bd. Freeholders Mercer Co., oil and tar for coming year, to treat 100 mi. road. $70,000. H. F. Harris, Court House, engr. Noted Feb. 7.

Steel Shed—Charleston, S. C.—Mar. 22, by Port Utilities Comn., at its office, Room 712, Peoples Bldg., steel shed on Union Pier. H. M. Gallagher, genl. mgr.; adv. E. N.-R. Mar. 6.

Rock—Jacksonville, Fla.—Mar. 10, by Duval Co., Court House Bldg., furnishing rock as follows: 500 to 3,000 tons of 2½ to 1½ in.; 100 to 600 tons of 1 to ½ in.; 50 to 300 tons of ¾ in. and down, f.o.b. Jacksonville. R. H. Carswell, Chn.

Cement — Alabama — Mar. 28, by State Hy. Comn., Montgomery, 66,000 bbl. Portland cement in cloth bags and 66,000 bbl. in paper bags, f.o.b. railroad cars at points on Louisville & Nashville R.R. between and incl. Calera and Clanton. W. S. Keller, state highway engr.

Crane — Birmingham, Ala. — Southern R.R. Co., Southern Bldg., Wash., D. C., in market for electric overhead crane for new shops, here.

Dump Trucks, etc. — Cleveland, O. — Comrs. Cuyahoga Co. in market for 2 and 3½ ton dump trucks, tractor, asphalt heater, road grading machine, and 3-wheel steam roller with scarifier. A. J. Heiber, clk.

Conveyor Equipment—Mingo Junction, O.—Carnegie Steel Co., Carnegie Bldg., Pittsburgh, Pa., in market for duplex hoisting and loading rigs, conveyor equipment, for dock, here.

Truck—Milwaukee, Wis.—Barry Transfer Co., 301 Jefferson St., taking bids 5 ton dump truck.

Lumber, etc.—Toledo, Ia.—Mar. 11, by Tama Co., 7 cars bridge lumber, 5,800 ft. culvert pipe, alternate bids on concrete and corrugated metal pipe. L. W. Croft, Toledo, engr.

Lumber, etc.—Waterloo, Ia.—Mar. 10, by Black Hawk Co., 5 cars full sawn bridge lumber and 8,404 ft. culvert pipe. Alternate bids on corrugated metal pipe and concrete pipe. W. D. Johnston, Waterloo, engr.

Reinforcing Steel — Minnesota — See "Bridges" under "Contracts Awarded."

Paving Materials—St. Paul, Minn.—Mar. 11, by H. W. Austin, city purch. agt., materials for paving various streets, 86,428 sq.yd. 3-in. vertical fibre brick, also portland cement, reinforcing steel, etc. G. M. Shepard, city engr.

Scarifying Grader — Winona, Minn. — Mar. 17, by A. Baeuerlen, aud. Winona Co., one 9,300-lb. Rip Snorter scarifying grader. E. P. Effertz, Winona, engr.

Clamshell Bucket and Sidewalk Tile—St. Paul, Minn.—Mar. 11, by H. W. Austin, city purch. agt. 1 clamshell bucket, two thousand 18-in. and ten thousand 24-in. square cement sidewalk tile. G. M. Shepard, city engr.

BIDS RECEIVED

Granite Paving Blocks, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., Feb. 28, 50,000 granite paving blocks, from St. George Granite Co., 90 West St., $7,425; 500 tons asphalt filler and 30,000 gal. gasoline, from Standard Oil Co., 26 Bway., $9,450 and $6,000 respectively; 4,000 cu.yd. coarse aggregate, from Seaboard Sand & Gravel Corp., 26 Cortlandt St., $9,200; 3,000 tons inorganic dust, from New York Trap Rock Corp., 101 Park Ave., $18,720; 3,000 cu.yd. concrete sand, from Gallagher-Shand, Inc., 420 East 105th St., $4,950; 6,000 cu.yd. binder stone, from Calvin Tompkins & Co., 30 Church St., $11,580; one tandem steam roller, from Buffalo Springfield Roller Co., 150 Nassau St., $2,813. Noted Feb. 21.

Fibre Conduit — Baltimore, Md. — Bd. Awards, Feb. 20, 50,000 ft. more or less 3-in. fibre conduit, from Johns-Manville Co., 334 North Charles St., $79.35 per 1,000 ft. Noted Feb. 14.

CONTRACTS AWARDED

Sand Grits—New York, N. Y.—H. Bruckner, pres. Bronx Boro. 3rd and Tremont Aves., 7,500 cu.yd. sand grits, to Ames Building Material Co., 3437 Kingsbridge Rd., $16,800. Noted Feb. 21.

Paving Brick — Detroit, Mich. — Dept. Pub. Wks., City Hall, furnishing 400,000 paving bricks 3 x 3.5 x 8.5 in., to Metropolitan Paving Brick Co., Renkert Bldg., Canton, O., $38.50 per M.

Lumber, etc.—Adel, Ia.—Dallas Co., 2,240 ft. corrugated culvert metal, to Iowa Pure Iron Co., East 8th and Elm Sts., Des Moines, $3,016, 139,347 ft. lumber, to Wheeler Lumber, Bridge & Supply Co., 200 Southwest 9th St., Des Moines, $5,341, 4,400 ft. vitr. clay pipe, to National Sewer Pipe Co., Webster City, $2,156.

Lumber, Piling, etc. — Denison, Ia. — Crawford Co. 334,687 ft. lumber and 4,435 ft. piling, to Nebraska Bridge Supply & Lumber Co., 448 Peters Trust Bldg., Omaha, Neb., $14,424; 900 ft. concrete pipe to Wickham Bridge Co., 27 South 19th St., Council Bluffs, $2,085; 7,227 ft. corrugated culvert to Klauer Mfg. Co., 9th and Washington Sts., Dubuque, $11,765.

Portland Cement—St. Paul, Minn.—H. W. Austin, city purch. agt., 1,550 bbl. portland cement for Dept. Pub. Wks., to Capital City Lime & Cement Co., 1415 Marshall Ave., $2.52 per bbl. on cars. Noted Jan. 31.

Wood Block, Limestone Dust, etc.—St. Paul, Minn.—H. W. Austin, city purch. agt., 1,200 sq.yd. 3½-in. cresoted wood block, to Republic Creosoting Co., St. Louis Park, $2.60 per sq.yd.; 170 tons limestone dust, to Gopher Stone Co., 1500 Johnson St., Minneapolis, $5.50 per ton; manhole **frames and covers, to Washington Fdry. & Machine Wks.**, Washington and Eagle Sts., 72 manhole frames Diam. A $8.15 each, 50 manhole covers, Diam. B $3.50 each, 75 manholes covers, Diam. C $3.50 each. Noted Feb. 28.

Sand—Jefferson City, Mo.—State Hy. Dept., 100,000 tons sand, to Wood Bros. Constr. Co., Lincoln, Neb., $0.20 per ton.

Asphaltum, etc.—Spokane, Wash.—City Council, 800 tons D grade asphaltum and 50,000 gal. fuel oil, to Standard Oil Co., Realty Bldg., $11 per ton f.o.b. refinery, Richmond, Calif. and $1.45 per bbl. respectively.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: March 14.

Steel Bridge

BERKSHIRE AVENUE BRIDGE

Springfield, Mass.

Sealed proposals for the furnishing, fabricating and delivery at the bridge site, but not including erecting, of structural steel of a 66′ 0″ span bridge at Berkshire Avenue over the Boston and Albany Railroad, Springfield, Massachusetts, will be received at the office of the City Clerk, Room 105, Administration Building, Springfield, Massachusetts, until twelve o'clock noon, March 14, 1924. All proposals must be made upon the blank form attached hereto, and the envelope containing the same, sealed and addressed to the Board of Supervisors, care of the City Clerk, Administration Building, Springfield, Massachusetts, and conspicuously endorsed "Proposal for Steelwork, Berkshire Avenue Bridge, over the Boston and Albany Railroad."

Each proposal must be accompanied either by a certified check made payable to the order of the Treasurer of the City of Springfield, Massachusetts, in the amount of One Thousand ($1,000) Dollars, or by a voucher showing that an equal sum of money has been deposited with the Treasurer of the City of Springfield, Massachusetts, as a guarantee that the bidder will enter into the proposed contract within the time specified. Should any bidder whose proposal has been accepted by the City refuse or neglect to enter into contract for the performance of the work and furnish a satisfactory bond therefor, the City shall deduct from said check or sum of money an amount equal to the difference between such accepted bid and the amount of the contract as let. This deduction will be in the form of liquidated damages to the City of Springfield, and not in the form of a penalty. The checks accompanying rejected bids will be promptly returned to the bidders upon the signing of the contract.

Plans, specifications, proposal blanks, and form of contract may be obtained at the office of the Superintendent of The Department of Streets and Engineering, Room No. 326, Administration Building, Springfield, Massachusetts. All contract forms and specifications must be returned with the proposals.

The steelwork consists of twelve plate girders with struts and bracing, bearing plates, etc., and is estimated as weighing approximately 273,220 lbs. All bids will be on a lump sum basis for work shown on the above described plans with a price per pound for any incidental material furnished in addition to that shown on plans.

The accepted bidder will be required to furnish a satisfactory surety company bond in the amount of Ten Thousand ($10,000) Dollars to be executed by a Surety Company authorized to do business within the Commonwealth of Massachusetts, and all bidders must furnish the name and address of such a Surety Company which will furnish said bond.

Bidders shall, upon request, furnish the Board of Supervisors with adequate evidence of their ability to correctly and expeditiously perform the work if awarded the contract.

The Board of Supervisors expressly reserves the right to reject any or all proposals and the right to acept any proposal or to award the work as deemed for the best interests of the City. Written notification of the acceptance of any proposal sent by Registered Mail to the address given on the proposal form shall be considered an adequate notice of the award of the contract.

Department of Streets and Engineering.
By ROBERT P. MARSH,
Superintendent.

OFFICIAL PROPOSALS

Bids: March 14.

Street Improvement

West Allis, Wis.

Office of the Acting Board of Public Works, West Allis, Wis., February 28th, 1924. Sealed proposals will be received at this office until March 14th, 1924, at 7:30 o'clock p.m. of that day for furnishing all material and doing all the work necessary and required to improve the following avenues in the City of West Allis, Wisconsin, to wit:

49th Avenue from National Avenue to Rogers Street.

49th Avenue from National Avenue to Thomas Avenue.

52nd Avenue from Lapham Street to Mitchell Street.

54th Avenue from National Avenue to Burnham Street.

60th Avenue from C. & N. W. Rt. of Way to Lincoln Avenue.

61st Avenue from Mitchell Street to Lincoln Avenue.

62nd Avenue from National Avenue to Greenfield Avenue.

56th Avenue from Burnham Street to Mitchell Street.

65th Avenue from C. & N. W. Rt. of Way to George Street.

66th Avenue from George Street to Wood Street.

74th Avenue from Scott Street to John Street.

76th Avenue from George Street to John Street.

77th Avenue from Greenfield Avenue to Lincoln Avenue.

67th Avenue from Shenners Avenue to No. Line of Fairview Park.

51st Avenue from No. City Limits to Beloit Road.

National Avenue from 47th Avenue to 51st Avenue.

Bids will be received on the following kinds of pavement:

A Sheet Asphalt pavement with binder (heavy traffic).

A Sheet Asphalt pavement with binder (light traffic).

A Concrete wearing surface.

Vibrolithic concrete pavement.

The successful bidder will be required to commence the work of performing this contract on the 15th day of May, 1924, and the whole said work must be completed on or before September 15th, 1924.

The approximate number of square yards of pavement to be laid is 105,500, the approximate number of cubic yards of cut is 29,869, and the approximate number of cubic yards of fill is 10,243.

For detailed information and copy of official advertisement communicate with the Superintendent of Public Works of the City of West Allis.

The right is especially reserved to reject any and all bids.

A. L. WICHNER,
Superintendent of Public Works.

Bids: March 22.

Steel Shed

PORT UTILITIES COMMISSION

Charleston, S. C.

Sealed proposals will be received by the Port Utilities Commission of Charleston, S. C., at its office, Room 712, Peoples Building, until noon, March 22, 1924, and then publicly opened, for furnishing, erecting and painting structural steel for a Steel Shed on Union Pier, Charleston, S. C.

Specifications and proposal forms will be furnished to prospective bidders on deposit of $5.00, which will be refunded to depositors on return of sets. Further information on application.

H. M. GALLAGHER,
General Manager.

February 27, 1924.

OFFICIAL PROPOSALS

Bids: March 6.

Bituminous Concrete Road

Providence, R. I.

Sealed proposals for building a bituminous concrete road about 4 miles in length in the Town of Scituate, R. I., extending from the existing Plainfield Pike at a point about ½ mile southeast of the Village of Ashland and 10 miles west of the City of Providence to the recently completed North Scituate-Rockland Road at a point about ¾ mile east of the Village of Ponaganset, will be received at the office of the Water Supply Board, City Hall, Providence, R. I., until 2:30 p.m. on Wednesday, March 26, at which time and place they will be publicly opened and read.

The work will include grading, culverts, a 2-inch bituminous concrete surfacing, guard rails and other necessary appurtenances. The principal estimated quantities are:

Earth excavation and borrow	58,000 cu.yds.
Rock excavation	13,000 cu.yds.
Concrete	320 cu.yds.
Stone foundation	7,600 cu.yds.
Gravel foundation	7,000 cu.yds.
Crushed stone base	14,000 tons
Bituminous surfacing	38,000 sq.yds.
Asphalt cement	350 tons
Wooden guard rails	13,000 lin.ft.

Pamphlets containing plans, information for bidders, form of proposal, contract and bond, specifications and drawings may be obtained from the Secretary of the Board, City Hall, or from the Chief Engineer, 661 Westminster Street, Providence, R. I.

B. THOMAS POTTER,
Chairman.
City of Providence, Water Supply Board.
SAMUEL N. GRAMMONT,
Secretary.
FRANK E. WINSOR,
Chief Engineer.

Bids: March 11.

Tunnels, Bridge and Heating Work

Sonyea, N. Y.

Sealed proposals for Construction—Tunnels and Bridge and Heating Work—Additional Heating System for Villa Flora Group, School and Laundry, Craig Colony, Sonyea, N. Y., will be received by Hon. Percy L. Lang, President, Board of Managers, Craig Colony, Sonyea, N. Y., until 2 o'clock p.m., on Tuesday, March 11, 1924, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 4256 and 4257. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Craig Colony, Sonyea, N. Y., at the New York office of the Department of Architecture, 18th Floor, Fuller Building, Broadway and 23rd Sts., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: February 13, 1924.

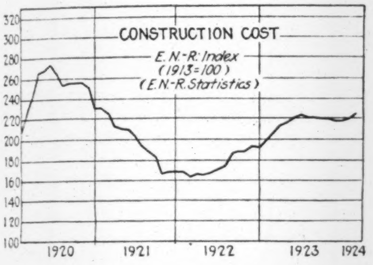
CONSTRUCTION NEWS

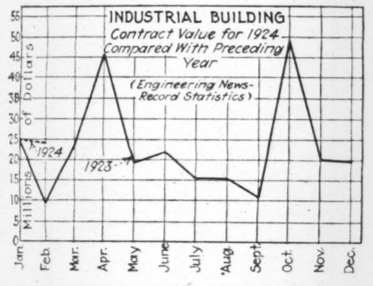
Engineering News-Record, March 13, 1924

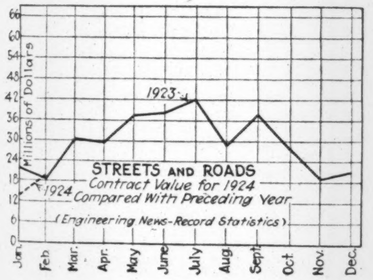
The Construction Barometer

Volume of Construction Increasing With Present Cost Level Above Highest Point Reached Last Year

CONSTRUCTION cost is now over one per cent above July, 1923, the highest point reached last year. Following the July cost peak came the "buyers' strike" and immediately after that in August, the lowest volume of construction for any month in the entire year. While cost is higher than at any time last year, volume is increasing and the danger of a buyers' strike is more remote than ever. Current buying is confined mostly to moderate quantities for immediate use. Danger of materials' shortages does not confront the buyer in the present market to the same extent as it did a year ago. A fairly high production rate is being maintained in the basic materials, with demand following closely behind the output, as shown by unusually heavy car loadings for this time of the year.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Feb. 21	$15,802,000	$38,386,000	$54,188,000
Feb. 28	18,333,000	30,839,000	49,172,000
Mar. 6	18,660,000	15,917,000	34,577,000
3 weeks	$52,795,000	$85,142,000	$137,937,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

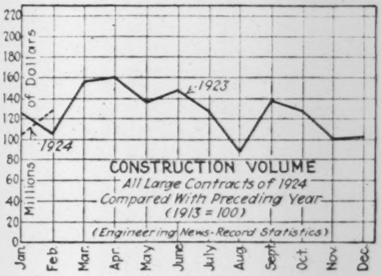
Week Ended	No.	Public Work	No.	Private Work
Feb. 21	7	$4,154,000	38	$31,438,000
Feb. 28	22	6,556,000	47	14,061,000
Mar. 6	12	5,300,000	36	9,438,000
3 weeks	41	$16,010,000	121	$54,937,000

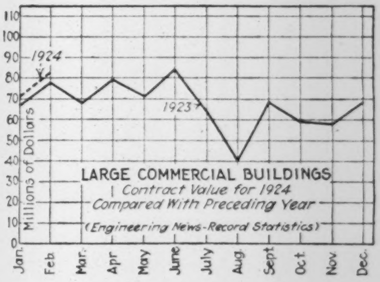
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

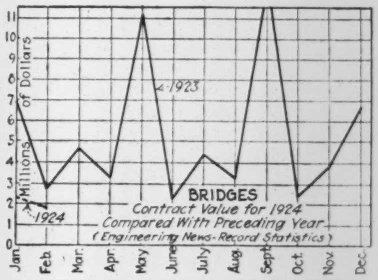
Week Ended	Private	All Buildings	Public: Streets and Roads	Public: Waterworks and Sewers	Public: All Public
Feb. 21	39	56	54	31	192
Feb. 28	41	60	61	33	188
Mar. 6	45	70	80	35	229

PRICES OF BASIC MATERIALS FIRM DURING LAST TWO WEEKS

	Quoted on Mar. 13 at	Price Was	On
Structurals, Pittsburgh, 100 lb.	$2.40 @2.50	$2.35 @2.50	Feb. 7
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M. ft.	65.00	62.00	Feb. 28
Fir, San Fran., M. ft.	36.00	38.00	Jan. 24
Common labor, hr	.55	.54	Feb. 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Mar. 14	Evansville, Ind.	Mar. 13
Mar. 17	Black River Falls, Wis.	Feb. 21
Mar. 17	Kohler, Wis.	Feb. 28
Mar. 17	Norfolk, Neb.	Mar. 13
Mar. 17	Wash., D. C.	Mar. 13
Mar. 17	Shorewood (Milwaukee P. O.) Wis.	Mar. 13
Mar. 18	Oklahoma City, Okla.	Mar. 13
Mar. 18	Columbus, O.	Mar. 13
Mar. 18	Mount Prospect, Ill.	Feb. 14
Mar. 19	San Francisco, Calif.	Mar. 13
Mar. 19	Silver Creek, N. Y. Adv. Mar. 6 and 13.	Mar. 6
Mar. 19	Cleveland, O.	Mar. 13
Mar. 19	Portage, Wis.	Mar. 13
Mar. 20	Austin, Tex.	Mar. 6
Mar. 20	Paulsboro, N. J. Adv. Mar. 13.	Mar. 13
Mar. 20	Palmyra, Mo.	Mar. 13
Mar. 21	Trenton, N. J.	Mar. 13
Mar. 24	Park Ridge, N. J.	Mar. 6
Mar. 25	Ferriday, La.	Mar. 13
Mar. 26	Litchfield, Ill.	Feb. 21
Mar. 27	Dunn, N. C. Adv. Mar. 6 and 13.	Mar. 6
Mar. 27	Newberry, S. C. Adv. Mar. 6 and 13.	Mar. 6
Mar. 31	Barberton, O. Adv. Mar. 13.	Mar. 13

SEWERS

Bids Close		See Eng. News-Record
Mar. 17	Harvey, Ill.	Mar. 13
Mar. 18	Columbus, O.	Mar. 13
Mar. 18	Hartford, Conn.	Mar. 6
Mar. 18	Charlotte, N. C. Adv. Mar. 6 and 13.	Mar. 13
Mar. 19	Cleveland, O.	Mar. 13
Mar. 19	St. George, N. Y.	Mar. 13
Mar. 19	Brooklyn, N. Y.	Mar. 13
Mar. 20	Madison, Ill.	Mar. 13
Mar. 21	Wash., D. C. Adv. Mar. 13.	Mar. 13
Mar. 21	Miami Beach, Fla. Adv. Mar. 13.	Mar. 13
Mar. 25	Trenton, N. J.	Mar. 13
Mar. 25	Oilton, Okla.	Mar. 13
Apr. 1	Toledo, O. Adv. Mar. 6 and 13.	Mar. 6
Apr. 5	Pottstown, Pa. Adv. Mar. 13.	Mar. 13
Apr. 8	Springfield, Mass. Adv. Mar. 13.	Mar. 13

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Mar. 18	Toronto, Ont.	Feb. 21

BRIDGES

Bids Close		See Eng. News-Record
Mar. 18	Nevada, Ia.	Mar. 6
Mar. 19	Sullivan, Me.	Feb. 21
Mar. 19	Greenwood, Miss.	Feb. 28

Bids Close		See Eng. News-Record
Mar. 19	Phila., Pa.	Feb. 21
	Adv. Feb. 21 to Mar. 13.	
Mar. 19	Alabama	Feb. 28
Mar. 20	Charleston, S. D.	Feb. 21
Mar. 20	Blakely, Minn.	Mar. 6
Mar. 21	Port Huron, Mich.	Mar. 13
Mar. 21	Missouri	Mar. 13
Mar. 25	Springfield, Mass.	Mar. 6
	Adv. Mar. 6 and 13.	
Mar. 25	North Carolina	Mar. 13
	Adv. Mar. 6 and 13.	
Mar. 27	Buffalo, N. Y.	Mar. 6
Mar. 27	Youngstown, O.	Mar. 13
Mar. 31	Vancouver, B. C.	Mar. 13
Mar. 31	Houston, Tex.	Mar. 6
Mar. 31	Alabama	Mar. 6
Mar. 31	Rochelle Park, N. J.	Mar. 13
	Adv. Mar. 13.	
Apr. 1	Clarksville, Tenn.	Mar. 13
	Adv. Mar. 13.	
Apr. 1	Portland, Ore.	Mar. 6
Apr. 1	Pennsylvania	Mar. 13
	Adv. Mar. 13.	
Apr. 7	Alabama	Mar. 13
Apr. 7	Sacramento, Calif.	Mar. 13
Apr. 8	West Virginia	Mar. 13
	Adv. Mar. 13.	
Apr. 15	Chamberlain, S. D.	Mar. 13
May 1	Tientsen, North China	Oct. 11

DAMS

Mar. 27	Tacoma, Wash.	Mar. 6

RAILWAYS

Apr. 1	Indiana	Jan. 24

EXCAVATION, DRAINAGE IRRIGATION

Mar. 18	Oconto, Wis.	Feb. 28
Mar. 18	Green Bay, Wis.	Mar. 6
Mar. 18	Lena, Wis.	Mar. 13
Mar. 20	Milwaukee, Wis.	Mar. 13
Mar. 20	Green Bay, Wis.	Mar. 13
Mar. 22	Ville Platte, La.	Mar. 13
Apr. 13	Buffalo, N. Y.	Mar. 13
	Adv. Mar. 13.	

STREETS AND ROADS

Mar. 14	New York, N. Y.	Mar. 6
Mar. 14	New York	Feb. 28
	Adv. Feb. 28 to Mar. 13.	
Mar. 14	Ohio	Mar. 6
Mar. 15	Geneva, Ill.	Feb. 28
Mar. 17	St. Paul, Minn.	Feb. 28
Mar. 17	Pennsylvania	Feb. 28
	Adv. Feb. 28 to Mar. 13.	
Mar. 17	Buffalo, N. Y.	Mar. 6
Mar. 17	Cape Girardeau, Mo.	Mar. 6
Mar. 17	Akron, O.	Mar. 6
Mar. 17	Burgin, Ky.	Mar. 6
Mar. 17	Connecticut	Mar. 13
	Adv. Mar. 13.	
Mar. 17	Long Island City, N. Y.	Mar. 13
Mar. 17	Dayton, O.	Mar. 13
Mar. 17	White Fish Bay, Wis.	Mar. 13
Mar. 18	Columbus, O.	Mar. 13
Mar. 18	Buffalo, N. Y.	Mar. 13
Mar. 18	Cincinnati, O.	Mar. 13
Mar. 18	Juneau, Wis.	Mar. 6
Mar. 18	Washington	Feb. 7
Mar. 18	Ontario	Feb. 28
Mar. 18	Starke, Fla.	Mar. 6
Mar. 18	Michigan	Mar. 6
Mar. 18	Indiana	Mar. 6
Mar. 18	Trenton, N. J.	Mar. 6
Mar. 18	Charlotte, N. C.	Mar. 13
	Adv. Mar. 6 and 13.	
Mar. 18	Nashville, Tenn.	Mar. 13
Mar. 18	London, Ont.	Mar. 13
Mar. 19	Cleveland, O.	Mar. 13
Mar. 20	Indiana	Mar. 13
Mar. 20	Louisiana	Mar. 13
Mar. 20	Louisiana	Mar. 6
Mar. 21	Cresson, Pa.	Mar. 6
Mar. 21	Alabama	Mar. 6
Mar. 21	Huntington, W. Va.	Mar. 13
Mar. 21	Missouri	Mar. 13
Mar. 21	Illinois	Mar. 13
Mar. 21	Miami Beach, Fla.	Mar. 13
	Adv. Mar. 13.	
Mar. 22	Kansas City, Kan.	Feb. 28
Mar. 22	Richmond, Ind.	Mar. 13
Mar. 24	Moorhead, Minn.	Mar. 6
Mar. 24	Michigan	Mar. 13
Mar. 24	San Diego, Calif.	Mar. 13
Mar. 25	Greenville, Tex.	Mar. 13
Mar. 25	Michigan	Mar. 13
Mar. 25	Washington	Feb. 28
Mar. 25	North Carolina	Mar. 13
	Adv. Mar. 13.	
Mar. 25	Minnesota	Mar. 6
Mar. 26	New London, Conn.	Mar. 6
Mar. 26	Delaware	Mar. 6
Mar. 26	Providence, R. I.	Mar. 6
	Adv. Mar. 6 and 13.	
Mar. 26	New Jersey	Mar. 13
Mar. 26	Marshfield, Wis.	Mar. 13
Mar. 26	Fairmount, W. Va.	Mar. 13
Mar. 26	Harrisburg, Pa.	Mar. 13
Mar. 26	Jacksonville, Fla.	Mar. 13
Mar. 26	Maryland	Mar. 13
	Adv. Mar. 13.	
Mar. 27	Michigan	Mar. 13

Bids Close		See Eng. News-Record
Mar. 27	Belzoni, Miss.	Mar. 13
	Adv. Mar. 13.	
Mar. 31	Pennsylvania	Mar. 13
	Adv. Mar. 13.	
Mar. 31	Escanaba, Mich.	Mar. 13
	Adv. Mar. 13.	
Apr. 1	Lewisburg, W. Va.	Mar. 13
	Adv. Mar. 13.	
Apr. 1	St. Louis, Mo.	Mar. 6
Apr. 1	Pennsylvania	Mar. 13
	Adv. Mar. 13.	
Apr. 2	Abbeville, La.	Mar. 13
Apr. 2	Ontario	Mar. 13
Apr. 2	Benson, N. C.	Mar. 13
Apr. 3	Canton, S. D.	Mar. 13
Apr. 7	Alabama	Mar. 13
Apr. 8	Summersville, Va.	Mar. 6
Apr. 10	Port Gibson, Miss.	Mar. 13

INDUSTRIAL WORKS

Mar. 31	Louisville, Ky.	Mar. 13
Apr. 2	Morris Plains, N. J.	Mar. 13
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Mar. 15	Bradford, Pa.	Feb. 21
Mar. 15	Barberton, O.	Feb. 28
Mar. 15	Atlantic City, N. J.	Mar. 6
Mar. 15	Phila., Pa.	Mar. 13
Mar. 15	Baltimore, Md.	Mar. 13
Mar. 16	Michigan City, Ind.	Mar. 6
Mar. 17	Minneapolis, Minn.	Feb. 28
Mar. 17	Green Bay, Wis.	Feb. 28
Mar. 17	Mendota, Wis.	Feb. 28
Mar. 17	Troy, N. Y.	Feb. 21
Mar. 17	North Plainfield (Watchung P. O.), N. J.	Feb. 21
Mar. 17	Louisville, Ky.	Mar. 6
Mar. 17	Juniata, Pa.	Mar. 13
Mar. 18	Lincoln, Neb.	Mar. 13
Mar. 18	Newark, O.	Mar. 6
Mar. 18	Montclair, N. J.	Mar. 6
Mar. 18	Orange, Mass.	Mar. 6
Mar. 18	St. Paul, Minn.	Mar. 13
Mar. 18	Detroit, Mich.	Mar. 13
Mar. 18	Gordon, Neb.	Mar. 13
Mar. 19	Burlington, Wis.	Mar. 6
Mar. 19	Baltimore, Md.	Mar. 6
Mar. 19	Mt. Clemens, Mich.	Mar. 13
Mar. 20	Gilbert, Minn.	Mar. 6
Mar. 20	Dayton, O.	Mar. 13
Mar. 21	Lockport, N. Y.	Feb. 21
Mar. 21	Troy, N. Y.	Mar. 6
Mar. 21	Bloomsburg, Pa.	Mar. 13
Mar. 21	Kenosha, Wis.	Mar. 13
Mar. 24	Easton, Pa.	Feb. 28
Mar. 24	St. Louis, Mo.	Mar. 6
Mar. 24	Phila., Pa.	Mar. 6
Mar. 25	Stony Creek Mills, Pa.	Mar. 6
Mar. 25	Emporia, Kan.	Mar. 13
Mar. 25	Greensboro, N. C.	Mar. 13
Mar. 25	Brooklyn, N. Y.	Mar. 13
Mar. 25	Ozone Park (Jamaica P. O.), N. Y.	Mar. 13
Mar. 25	St. Paul, Minn.	Mar. 13
Mar. 26	Greenville, Tex.	Mar. 13
Mar. 26	La Crosse, Wis.	Mar. 13
Mar. 26	Somerville, N. J.	Feb. 21
Mar. 26	Buffalo, N. Y.	Mar. 6
Mar. 26	Mahanoy City, Pa.	Mar. 13
Mar. 27	Newark, N. J.	Mar. 13
Mar. 28	Pueblo, Colo.	Mar. 6
Mar. 31	Wilson, N. C.	Mar. 13
Apr. 1	Oshkosh, Wis.	Mar. 13
Apr. 1	Akron, O.	Mar. 13
Apr. 1	Duluth, Minn.	Feb. 7
Apr. 1	Atlantic City, N. J.	Feb. 7
Apr. 1	Brainerd, Minn.	Feb. 28
Apr. 1	San Bernardino, Calif.	Mar. 6
Apr. 7	Whitewater, Wis.	Mar. 13
Apr. 8	New York, N. Y.	Mar. 13
Apr. 8	Brooklyn, N. Y.	Mar. 13
Apr. 8	Astoria (Long Island City P. O.), N. Y.	Mar. 13
May 1	Youngstown, O.	Feb. 7

FEDERAL GOVERNMENT WORK

Mar. 18	Post Office—Dubois, Pa.	Feb. 28
Mar. 19	Breakwater Pier—Hampton Roads, Va.	Mar. 6
Mar. 19	Foundations—Phila., Pa.	Mar. 6
Mar. 19	Roads—Portland, Ore.	Mar. 13
Mar. 20	Cement—Cincinnati, O.	Mar. 13
Mar. 20	Boats—Wash., D. C.	Feb. 28
Mar. 20	Dike and Sluice—Killochook Meadows, N. J.	Feb. 28
Mar. 21	Reservoirs—Wash., D. C.	Feb. 21
Mar. 22	Generators—Florence, Ala.	Feb. 14
Mar. 22	Generators—Sheffield, Ala.	Feb. 28
Mar. 25	Road Work, etc.—Fort Wright, (Fishers Island P. O.), N. Y.	Mar. 6
	Adv. Mar. 6 and 13.	
Mar. 25	Laundry Equipment—Knoxville, Ia.	Mar. 13
Mar. 26	Post Office—Midland, Mich.	Mar. 13
Mar. 28	Plumbing System—Wash., D. C.	Mar. 13
	Adv. Mar. 13.	
Mar. 28	Ice and Refrigerating Plant—Livermore, Calif.	Feb. 14
Mar. 28	Dredging — Providence, R. I.	Feb. 28
	Adv. Feb. 28 to Mar. 13.	

Bids Close		See Eng. News-Record
Apr. 2	Roads—Phoenix, Ariz.	Mar. 6
Apr. 4	Post Office—Orange, Tex.	Mar. 13
Apr. 4	Dredging—New York, N. Y.	Mar. 13
Apr. 8	Cement—Louisville, Ky.	Mar. 13
	Adv. Mar. 13.	
Apr. 12	Dredging — Providence, R. I.	Mar. 13
Apr. 22	Steel Gates — Florence, Ala.	Mar. 13
	Adv. Mar. 13.	

UNCLASSIFIED

Mar. 14	Subway Entrance—New York, N. Y.	Mar. 13
Mar. 21	Transit Sheds—Los Angeles, Calif.	Mar. 13
Mar. 22	Steel Shed—Charleston, S. C.	Mar. 6
	Adv. Mar. 6 and 13.	
Mar. 25	Jetty—Belmar, N. J.	Mar. 13
	Adv. Mar. 13.	
Mar. 26	Chimney—Rocky Mount, N. C.	Mar. 6
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIAL AND EQUIPMENT

Mar. 17	Scarifying Grader—Winona, Minn.	Mar. 6
Mar. 17	Lumber—Milwaukee, Wis.	Mar. 13
Mar. 18	Bituminous Material, etc.—Ottawa, Ont.	Mar. 13
Mar. 18	Paving Blocks—New York, N. Y.	Mar. 13
Mar. 18	Steam Boiler Ashes—New York, N. Y.	Mar. 13
Mar. 19	Tractor—Benson, Minn.	Feb. 7
Mar. 20	Frogs, etc. — Houston, Tex.	Mar. 13
Mar. 21	Track Material—New York, N. Y.	Mar. 13
Mar. 24	Road Oil, etc.—Minneapolis, Minn.	Mar. 13
Mar. 25	Street Signs, Asphalt Filler, etc.—St. Paul, Minn.	Mar. 13
Mar. 26	Asphalt Cold Mix—Evansville, Ind.	Mar. 13
Mar. 28	Cement—Alabama	Mar. 6
Apr. 16	Power House Equipment—Tacoma, Wash.	Mar. 13
	Adv. Mar. 13.	
May 6	Asphalt, etc.—Holyoke, Mass.	Mar. 6

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y. Albany — Had plans prepared laboratory, alum hoppers and sedimentation basins, etc., for water plant. $500,000. Hazen & Whipple, 25 West 43rd St., New York City, engrs.

N. Y., Glenpark—Election soon to vote on ($30,000-$50,000 bonds) new water supply system.

N. Y., Medina—Plans new water line and pumping station. $50,000.

Pa. Duquesne — Having plans prepared reservoir and system of filters. $200,000. Address Boro. Engineer, Municipal Bldg.

Neb., Beatrice — Plans filtration plant $65,000. L. Pethond, city clk.

Md., Baltimore—Making plans 1 story pumping station, concrete and brick, plain foundation, on Back River. $50,000. V. B. Siems, City Hall, water engr.

Va., Staunton—Making plans waterworks incl. pipe line and reservoir. $700,000 bonds approved. Fuller & McClintock, 179 Bway., New York, engrs.

Fla., Live Oak—Mar. 25, to vote on $35,000 bonds extending mains and sinking well on W. C. White Pl.; $39,500 bonds sinking well and constructing waterworks on Hill 3. G. B. Hills Co., Live Oak, engrs.

Ala., Florence — Election soon $100,000 bonds, improvements and extensions to waterplant, new mains, fire hydrants. $100,000. Bd. Pub. Wks., engrs.

Ky., Danville—Kentucky Hydro-Electric Co., M. E. Taylor Bldg., Louisville, soon takes bids new waterworks, here. $175,000. Noted June 14.

Ky., Owensboro—Soon takes bids extension to mains. $100,000. P. Burgess, Columbus, O., engr. Noted Oct. 6.

O., Bay Village—See "Sewers."

O., Cincinnati—See "Sewers."

O., Euclid — Takes bids in spring c.i. mains in Upson Rd., Euclid, St. Clair, Clifton, Beck and Canal Sts. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Waterworks (Continued)

Ill., Quincy—Making plans clearwater reservoir, 20 ft. deep, 100 ft diam., 1 m.g. capacity, rein.-con. $15,000. W. R. Gilston, supt. Mead & Seastone, Journal Bldg., Madison, Wis., engrs.

Wis., Menomonee Falls—See 'Sewers."

Wis., North Milwaukee—Making plans 1½ mi. 6 in. c.i. mains H. C. Webster, M. & M. Bank Bldg., Milwaukee, engr.

Kan., Brookville — Plans waterworks. $18,000. Ruckel Eng. Co., Interburan Bldg., Hutchinson, engrs. Noted Jan. 24.

Kan., Leavenworth—Plans made waterworks improvements. E. T. Archer, 609 New England Bank Bldg., Kansas City, Mo., engrs.

Kan., Newton—Having plans prepared and soon takes bids, 1 m.g. rein.-con. reservoir. $30,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs.

Kan., Riley—Making preliminary plans waterworks, incl. 50,000 gal. tank on tower, 11,136 ft. 4- to 8-in. c.i. pipe and fittings, 3,700 ft. 2 in. galvanized pipe, 23 hydrants, 8-in. cased well 120 to 140 ft. deep, deep well pump, etc. $32,000. Hensington Eng. Co., National Bldg., Omaha, Neb., engrs.

Neb., Hastings—Soon takes bids water works and electric light plant incl. pumps, engine, distribution mains, etc. $40,000. P. T. Naylor, city engr.

Ark., Magnolia—Making surveys and plans new waterworks. $40,000. E. T. Archer & Co., 609 New England Natl. Bank Bldg., Kansas City, Mo., engrs. Noted Feb. 21.

Mo., Hannibal—Making plans distributing mains, also 6 m.g. filter, motor driven low and high service pumping plant. $350,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, engrs.

Okla., Altus—Having surveys made new 500 hp. oil engine generator set together with pumps for water and light plant. $65,000. C. Reid, Altus, engr.

Okla., Cushing—Mar. 18, to vote on $407,000 bonds for earth dam, pipe line, filter plant, basins, motor driven centrifugal pumps and main extensions. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs. Noted Jan. 4.

Okla., Wetumka—Having surveys made rapid sand filter plant. 15,000 ft. 10 in. c.i. pipe and motor driven centrifugal pumps. $65,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Calif., Clarksburg — Holland Land Co. soon takes bids complete pumping plant, from 4,500 to 10,000 g.p.m. capacity. It is planned to purchase three large pumping plants later. I. H. Smith, c/o owner, engr. Noted Mar. 15.

Calif., Pine Knot—Bear Valley Utility Co. having plans prepared, 2 wells, casing, 2 pumping plants, 6 mi. 4- to 12-in. riveted steel pipe, concrete reservoir, 250,000 gal. capacity. To exceed $100,000. C. H. Loveland, Balboa Bldg., San Francisco, consult. engr.

Ont., Forest—Plans waterworks system incl. reservoir or water tank, pumps, hydrants, c.i. mains, etc. $30,000 to $40,000. W. J. English, town clk.

Ont., Smith Falls—Having plans prepared rein.-con. filtration plant. $25,000 to $30,000. S. B. Code, Town Hall, engr.

Ont., Waterford—Having plans prepared waterworks system incl. c.i. pipe, valves, specials, hydrants, pumps, motor, pumphouse and reservoir. $35,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Weston—Town plans 1½ mi. 6 in. c.i. mains. $25,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

N. J., Paulsboro—Mar. 20, by Paulsboro Water Co., furnishing 335 pieces 8 in., 880 pieces 6 in. and 220 pieces 4 in. Class B c.i. pipe and laying same with 3½ ft. covering, 5 tons special castings, seventy 4, 6 and 8 in. gate valves, fifteen 4 and 6 in double nozzle fire hydrants, stand pipe, 110 ft. high, 25 ft. diameter, etc. G. Pfeiffer, Jr., 37 East Walnut Ave., Merchantville, engr.; adv. E. N.-R. Mar. 13.

N. J., Trenton — Mar. 21, about one thousand two hundred ¾ in. curb stops, Mueller or equal; about two thousand ¾ in. and about three hundred 1 in. lead lined couplings; about two thousand five hundred ft. ¾ in. and five thousand ft. 1 in. lead lined pipe; one thousand four hundred ft. ¾ x ¾ in. and 250 ft. 1 x 6 in. lead lined nipples; 1,500 corporation cocks (brass) Mueller or equal 14,000 lb. leadite (McCay brand); 6,000 lb. pig lead; 1,200 curb boxes complete; 250 street valve boxes; 50 tons 4 in., 150 tons 6 in., 235 tons 10 in., 32 tons 12 in. and 125 tons 16 in. c.i. pipe, etc., f.o.b. Trenton. A. Swan, city comr.

D. C., Wash.—Mar. 17, by Dist. Comrs., one motor driven centrifugal pumping outfit with starting compensator, etc.

La., Ferriday—Mar. 25, by P. H. Corbett, mayor, waterworks system incl. pump house, pumps, steel tower and tanks, fire hydrants, water pipe, reservoir house connection, etc. $40,000. H. A. Mentz, Magnolia, Miss., consult. engr.

O., Barberton—Mar. 31, by J. F. Mentzer, dir. Pub. Serv., complete delivery system from water purification plant to present mains. W. G. Clark, 1046 Spitzer Bldg., Toledo, consult. engr.; adv. E. N.-R. Mar. 13. Noted Dec. 6.

O., Cleveland—Mar. 19, by Cuyahoga Co. 2,850 ft. 12 in. c.i. mains in Biddulph Rd. Impvt. 49. To exceed $25,000. R. F. MacDowell, Court House, engr.

O., Columbus—Mar. 18, by Bd. Comrs. Franklin Co., 7,385 ft. 6- to 12-in. c.i. mains, etc., in Sewer Dist. Clinton 2, North High St. area, Contr. 35, $40,000; 7,266 ft. 6 in. c.i. mains in Sewer Dist. Clinton 2, Chaseland area, Contr. 36, $15,000; 8,565 ft. 6 and 12 in. c.i. mains, etc., in Sewer Dist. Clinton 2, Sharon Height area, Contr. 37, $20,000; 3,075 ft. 6 in. c.i. mains, etc., in Sewer Dist. Prairie 1, Area 2, Contr. 38, $6,000.

O., Columbus—See "Streets and Roads."

Ind., Evansville — Mar. 14, by Bd. Trustees Water Dept., 350 tons 6- and 8-in. Class C, c.i. bell and spigot pipe; 1 carload calking lead for water pipe, f.o.b. Evansville.

Wis., Portage—Mar. 19, by C. L. Loomis, city clk., new water purification plant, pumping station and distribution system. City to furnish materials. $100,000. Pearse, Greeley & Hansen, 39 South Adams St., Chicago, engrs. Noted Dec. 13.

Wis., Shorewood (Milwaukee, P. O.)—Mar. 17, by Village Bd. laying 10,670 ft. 6- to 16-in. c.i. mains in various streets. $25,000. H. A. Schmitt, 1288 Murray Ave., engr.

Neb., Norfolk—Mar. 17, by S. R. McFarland, city clk., extensions to water system in Dists. 73 to 77 inclusive. $15,074. H. H. Tracy, city engr.

Neb., Primrose—Taking bids 50,000 gal. steel tank on 60 ft. tower, 8 in. tubular well, 60 ft. deep, two 75 g.p.m deep well pumps, pipe, etc. $12,000. Henningson Eng. Co., Natl. Bldg., Omaha, engrs.

Mo., Palmyra — Mar. 20, by H. M. Howard, city clk. and supt. Light & Water Dept., 100,000 gal. tank on elevated tower, also complete sewage plant. $25,000. W. B. Rolling & Co., 521 Ry. Exch. Bldg., Kansas City, engrs. Noted Dec. 20.

Okla., Oklahoma City—Mar. 18, by M. Peshek, Jr., city clk., improvements to water supply, incl. extension to main dams, additions and changes to existing dam structures, Ambursen type. B. M. Hart, city engr.

Calif., San Francisco—Mar. 19, by Bd. Pub. Wks. of City and San Francisco Co., centrifugal pumps and connections for Bay-Pulgas pumping plant, Contr. 94, Hetch Hetchy Project. M. M. O'Shaughnessy, city engr.

CONTRACTS AWARDED

N. Y., Gloversville—Bd. Water Comrs., 19 West Fulton St., Ayers Hill Reservoir, 21,300 cu.yd. earth and 100 cu.yd. rock excav., 350 cu.yd. screened gravel, 52,000 lb. reinforcing bars, 10,400 lin.ft. expansion joint, 100 ft. sewer pipe, etc., to E. P. Tupfer Corp., 592 Ellicott Sq., Buffalo, $56,820. Noted Jan. 31.

N. Y., New York—Bd. Water Supply, Gas & Electricity, Municipal Bldg., mains in Jerome Ave., to F. Hanratty, 605 Beach Terrace, $111,000. Noted Feb. 28.

N. Y., Palmyra—Bd. Village trustees, waterworks improvements, to T. Fischette, Clyde, Sect. A $23,625, Sect. B $10,373, Sect. C $7,293. Noted Feb. 7.

O., Lorain—Concrete filter beds, 100,000 lb. steel and 860 cu.yd. concrete, to Paterson Supply & Constr. Co., Bway., $36,000.

Wis., Neenah—Equipment at waterworks plant, to Fairbanks-Morse Mfg. Co., Beloit, oil engine $11,126, generator $2,370, motor for air compressor $1,248, switchboard $1,845, 1,000 gal. pump and motor $945; to Durey Compressor Co., Erie, Pa., electric air compressor $3,573. Pump house and storage tank not let.

Wis., White Fish Bay—See "Sewers."

Minn., Hibbing—Water softening plant, to Dohm Constr., 1911 3rd Ave., $15,786.

Neb., Dannebrog — Hennings Eng. Co., Natl. Bldg., Omaha, improving waterworks to Omaha Steel Wks., 48th and Leavenworth Sts., Omaha; to E. C. Archibald, 220 Ave. A, Council Bluffs, Ia., to F. F. Black, Council Bluff, Ia., to Waterous Fire Engine Wks., 80 East Fillmore St., St. Paul, Minn., to McWane Cast Iron Pipe Co., 27th Ave. N., Birmingham, Ala., c/o L. M. Petersen, Dannebrog. Total $21,477. Noted Jan. 31.

Neb., University Place (Lincoln, P. O.)—Improving waterworks incl. 500,000 gal. rein.-con. reservoir, high lift pumping station, 160 ft. deep well, two 500 g.p.m. centrifugal pumps, etc., general contract to C. C. Bickel, University Place, $27,814; c.i. pipe to U. S. Cast Iron Pipe Co., Amer. Trust Bldg., Birmingham, Ala., $5,290, installing pump to Power Utilities Co., Omaha, $2,660. Noted Feb. 7.

Sewers

PROPOSED WORK

O., Bay Village—Making plans sewers and water main. To exceed $25,000. Wight-O'Rourke Co., Rose Bldg., Cleveland, engrs.

O., Cincinnati—Hamilton Co. having plans prepared sewer and water districts for Indian Hill and Mt. Healthy Sewer Dists. L. C. Boyatt, Toledo, engr. R. E. Garvin, Davis & Farley Bldg., Cleveland, associated sanitary engr.

O., Euclid—Takes bids in spring sewers in Lloyd Rd., Shore View and Coulter Aves., Clifton and East 213th Sts. $100,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Ill., Dixon — Having preliminary plans prepared storm and sanitary sewers in west end of city, 20,000 lin.ft. 8- to 18-in. vitr. clay sewers, flush tanks, catchbasins, etc. T. W. Clayton, Dixon, engr.

Wis., Columbus—Making plans 2 mi. 8- to 10-in. sewers in West Columbus St W. F. Reichardt, 109 Main St., Watertown, engr.

Wis., Menomonee Falls—Making plans 1 mi. 8- to 15-in. sewers and 1 mi. 6- to 12-in. c.i. mains in various streets, also sewage disposal plant and elevated steel water tank. W. F. Reichardt, 109 Main St., Watertown, engr.

Wis., North Milwaukee—Making plans 3 mi. 8 in. vitr. clay sanitary sewers in various streets. H. C. Webster, M. & M. Bank Bldg., Milwaukee, engr.

Ia., Marshalltown—Plans 58,290 lin.ft. 6- to 10-in. vitr. sanitary sewers, 87 manholes, 40 lampholes, etc. $100,000. O. G. Hern, city engr.

Mo., Sikeston—Defeated $100,000 bonds for 48- to 72-in. storm sewers. Will probably resubmit same within 60 days. W. A. Fuller Co., Ry. Exch. Bldg., St. Louis, engrs. Noted Jan. 31.

Ark., Magnolia—Making surveys and plans new sanitary sewers. $60,000. E. T. Archer & Co., 609 New England Bank Bldg., Kansas City, Mo., engrs. Noted Feb. 21 under Waterworks.

Tex., Conroe — Plans election $40,000 bonds, sewers and disposal plant. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Tex., Winters—Mar. 25 to vote on $45,000 bonds, disposal plant and sewers. Municipal Eng. Co., Praetorian Bldg., Dallas, prepared plans. Noted Jan. 31.

Okla., Cushing—Mar. 18, to vote on $98,000 bonds for 3 mi. outfall sewer and disposal plant, Imhoff tanks and filters. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs.

Okla., Lawton—Mar. 20, to vote on $85,000 bonds for disposal plant, Imhoff tank and centrifugal pumps. W. V. Montin, city engr. Noted Jan. 10.

Okla., Sand Springs—Election in April $150,000 bonds for 3,000 ft. 8-in. storm sewers. Holway Eng. Co., 515 New Wright Bldg., Tulsa, consult. engrs.

Okla., Wewoka—Having surveys made 3 mi. sanitary sewer extensions in Okfuskey, Cedar, Park, Plum, Peach, Pear, Church, and Jackson Sts., incl. 13,000 lin.ft. of 8- to 12-in. vitr. clay pipe. $35,000. V. V. Long & Co., 1300 Colcord St., Oklahoma City, engrs.

Wash., Pullman — Plans to improve sewerage system and will issue bonds for $70,000. M. K. Snyder, city engr.

Calif., Pomona—Apr. 14, to vote on $25,000 bonds for completing outfall sewerage system. F. C. Troehde, city engr.

Ont., St. Thomas — Takes bids about Mar. 15, sewage disposal plant with electrically operated pumping station. $80,000. Prices wanted on materials and equipment. W. C. Miller, city engr.

Ont., Toronto—See "Streets & Roads."

Ont., Toronto—Having plans prepared sewage disposal plant and sanitary sewerage system, 25 mi. vitr. tile pipe, 8 in. and up, for York Twp. $500,000. R. C. Wynne-Roberts, 88 Church St., engr.

BIDS DESIRED

Mass., Springfield—Apr. 8, at office of City Clerk, 3 vertical shaft electric motor driven centrifugal sewage pumping units, etc. R. P. Marsh, supt. Dept. Streets and

Sewers (Continued)

Eng. Metcalf & Eddy, 14 Beacon St., Boston, consult. engrs.; adv. E. N.-R. Mar. 13.

N. Y., Brooklyn—Mar. 19, by E. Riegelmann, boro pres., Boro Hall, sewers in Rutland Rd., 20th, New York, Riverdale, 7th, 12th, Debevoise, Albany and 4th Aves., 53rd, East 95th, East 96th, Winthrop, West 9th, Montgomery, Beadel, Frost and 82nd Sts.; temporary sewer in Bedford Ave. between Aves. K and L, also Bedford Ave. between Aves. L and M; storm water and sanitary sewer in West 9th St. and Quentin Rd.

N. Y., St. George — Mar. 19, by J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sewers in Price St. and Clove Rd.

N. J., Trenton—Mar. 25, by Mercer Co. storm drain in Robbinsville-Yardville Rd. $50,000. H. F. Harris, Court House engrs.

Pa., Pottstown—Apr. 5, at office of Secretary Boro. Council, vitr. or concrete sanitary sewers. Gannett, Seelye & Fleming, Engineers, Inc., 1 North Market Sq., Harrisburg, engrs.; adv. E. N.-R. Mar. 13.

D. C., Wash.—Mar. 21, by Dist. Comrs., Room 509 District Bldg., 3,488 lin. ft. sewers; adv. E. N.-R. Mar. 13.

N. C., Charlotte—Mar. 18, by Bd. Comrs. sewers in various streets. J. Firth, city engr.; adv. E. N.-R. Mar. 13.

Fla., Miami Beach—Mar. 21, by City Council, City Hall, sanitary and storm sewers. C. W. Tomlinson, clk.; adv. E. N.-R. Mar. 13.

O., Cleveland—Mar. 19, by Cuyahoga Co., 23,000 ft. 8- to 42-in. vitr. clay and segmental block sewers in Biddulph Rd. Impvt. 50. R. F. MacDowell, Court House, engr.

O., Columbus—See "Streets and Roads."

O., Columbus—Mar. 18, by Bd. Comrs. Franklin Co. 9,000 ft. 8 and 10 in. vitr. sewers in Sewer Dist. Clinton 2, Sharon Heights area, Contr. 39, $20,000; 3,715 ft. 8- to 12-in. vitr. sewers in Sewer Dist. Clinton 2, Chaseland Area, Contr. 33, $28,000.

Ill., Harvey — Mar. 17, by Bd. Local Impvt., 36,000 ft. 10- to 18-in. sewer pipe, laid, 129 manholes, 176 brick catch basins, etc., Dist. Sewers 168, 169 and 170. J. A. Alten, secy.

Ill., Madison—Mar. 20, at Village Hall, North Side Sewerage System, 1,530 ft. 15-in. and 3,950 ft. 12-in. sewer. 950 ft. 12-in. and 1,250 ft 8-in. connecting pipe, etc. Sheppard & Morgan, Edwardsville, engrs.

Mo., Palmyra—See "Waterworks."

Okla., Oilton—Mar. 25, by C. Patchin, city clk., 2 mi. sanitary sewers in Lateral Dist. 2, incl. 14,700 lin. ft. 6- to 10-in. vitr. clay pipe. $27,500. Benham Eng. Co., Gumbel Bldg., Kansas City, Mo., engrs.

Ont., London—See "Streets and Roads."

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Mar. 4, sewers in Fisk Ave., from Duit Inc., (a) $359,793 (b) $339,783; Westside and Atlantic Aves., from E. Muccinni, $2,434 and $3,028 respectively; Cuthbert Pl. and Metropolitan Ave., from Green Contg. Co., 734 Vernon Ave., Astoria, $2,461 and $5,389; Queens and Northern Blvds., from Peace Bros., Inc., 57 North Laurence St., Flushing, $900 and $1,145 respectively; Woodward Ave., from J. J. O'Brien, Jr., William St., Jamaica, $729; 126th St., from P. J. Greenhoff Eng. Co., $1,636. Noted Feb. 28.

N. Y., Syracuse—Intercepting Sewer Bd. Mar. 3, screens and cleaning equipment, from Roberts Filter Co., 6th and Columbia Sts., Darby, Pa., $19,600; **4 pumps in** pumping station, from Hayton Pump & Blower Co., 575 2nd Ave., Appleton, Wis., $18,516; electric wiring from B. J. Cavanaugh 1220 Wadsworth St., $4,927; transformer station, from Mondo Constr. Co., City Bank Bldg., $2,859. Noted Feb. 14.

Calif., Los Angeles — See "Streets and Roads."

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Cooper Ave. and Market St., to Kennedy & Smith, Inc., 93 Amity St., Flushing, $10,030 and $8,913 respectively; in 85th St., to D. A. Gross, $1,976; in 101st St., to P. J. Greenhoff Eng. Co., $2,345; in 25th St., to Merritt-Chapman & Scott Corp., 17 Battery Pl., New York, $121,971. Noted Feb. 28.

Md., Baltimore—Bd. Awards, 4,000 lin. ft. 24-in., 1,000 ft. 27-in., 3,000 lin.ft. 30-in., 2,000 ft. 33-in., 2,500 ft. 36-in., 2,500 ft. 42-in., 4,000 ft. 48-in. and 2,700 ft. 54-in. rein.-con. pipe, to Lock Joint Pipe Co., 2556 Wilkens Ave., $69,410.

N. C., Charlotte—For 3½ mi. sewer line from present septic tank to new tank, to J. B. McCrary & Co., Citizens & Savings Bank Bldg., Atlanta, Ga., $152,000; septic tank, to A. H. Guion, Gastonia, $98,200. Noted Feb. 21.

O., Ashtabula—For 3,500 ft. 24 x 42 in. concrete outfall submerged pipe and river crossing, to Amer. Constr. Co., Marion Bldg., $207,162. Noted Mar. 6.

O., Akron—Sewer in West Market St., to L. Crane, Akron, $36,806. Engrs. est. $40,000.

Wis., White Fish Bay—Sewers and water mains in various streets, to F. E. Kaminski, Berlin, 5,929 ft. 8 in. vitr. pipe sanitary sewer $2.40 to $2.95 per ft., 864 ft. 10 in. vitr. storm sewer $2.72 and $2.95; 2,152 ft. 6 in. c.i. water mains $2.65 to $2.95.

Kan., Arkansas City—For 4.2 mi. sewers, incl. 6,015 ft. 8-in. vitr. pipe, manholes, flushtanks, etc., in Dists. 4 and 5, also 3 mi. mains and laterals, flush tank, etc., Dist. 7, to L. A. Galleciez, Arkansas City, $22,926. Noted Feb. 7.

Bridges

PROPOSED WORK

Connecticut—See "Streets and Roads."

New Jersey—State Hy. Dept., Trenton, plans steel and concrete bridges on Route 7, Asbury Park to Freehold, Monmouth Co. $124,000. J. L. Vogel, Broad St., Newark, engr.

Fla., Juniper — Palm Beach Co. (West Palm Beach), having plans prepared 450 ft. bridge over Loxahatchee River, near here. $50,000. C. H. Holstlaw, West Palm Beach, engr.

Tenn., Springfield—Dept. Hys. & Pub. Wks., Nashville, soon takes bids 160 ft. concrete bridge, four 40 ft. spans, over Sulphur Fork Creek, Robinson Co., near here. $25,000. Noted Aug. 31.

O., Bettsville — State and Seneca Co. (Tiffin) plans concrete bridge to replace present wooden bridge over Wolf Creek on Lima-Sandusky Rd., here. $44,000.

O., Cleveland—Election Apr. 29, $10,000,000 bonds concrete substructure, steel and concrete superstructure for bridge over Cuyahoga River. R. Hoffman, city engr.

O., Columbus—Making plans viaduct over several railroad tracks connecting 3rd and Summit Sts. $1,250,000. W. H. Simpson, city engr.

Kan., Abilene—Dickson Co. plans 160 ft. rainbow arch span. To exceed $25,000. Kansas Eng. Co., 1233 Western Ave., Topeka, engrs.

Tex., Belleville—See "Streets and Roads."

Tex., Leakey—See "Streets and Roads."

Tex., Rock Springs—See "Streets and Roads."

Kan., Iola—Allen Co. plans 140 ft. archt. ½ mi. from Humbolt, Federal Aid Project 168, Sect. B. A. R. Stroup, co. engr.

California—See "Streets and Roads."

BIDS DESIRED

N. J., Rochelle Park—Mar. 31, by State Hy. Dept., Trenton, concrete encased I-beam bridge incl. removing existing bridge over Saddle River, Route 10, M. P. 2.9, here. A. L. Grover, secy.; adv. E. N.-R. Mar. 13. Former bids rejected. Noted Dec. 13.

Pennsylvania — Apr. 1, by State Hy. Dept., Harrisburg, erecting 3 bridges; adv. E. N.-R. Mar. 13.

West Virginia—Apr. 8, by State Road Comn., Charleston, bridges in Mason, McDowell, Wayne, Marshall, Ohio, Wetzel Wood, Gilmer, Harrison, Lewis Marion, Webster, Grant, Hampshire and Randolph Counties. E. B. Carlskadon, secy.; adv. E. N.-R. Mar. 13.

North Carolina — See "Streets and Roads."

North Carolina—Mar. 25, by State Hy. Comn., Raleigh, Pee Dee River Bridge between Wadesboro, Anson Co. and Rockingham, Richmond Co. W. L. Craven, bridge engr.; adv. E. N.-R. Mar. 13.

Ga., Columbus—City and Central of Georgia R.R. Co., Macon, taking bids and opens same about Mar. 15, steel viaduct over 13th St. $25,000. C. K. Lawrence, Savannah, ch. engr. of railroad.

Alabama—Apr. 7, by State Hy. Dept., Montgomery, bridge on Abbeville-Houston Co. Rd., Federal Aid Project 129, Sect. B, Henry Co., 126,718 ft. treated timber, 6,900 lin.ft. treated timber piles, 1,089 sq.yd. bituminous surface, cold mix, etc., bridges in Greene Co., State Aid Project S-4, 307,612 ft. treated timber, 13,858 lin.ft. treated timber piles, 10,803 lb. structural steel, 2,760 sq.yd. 1.5 in. bituminous surface, cold mix, 14 test piles, 280 cu.yd. Class A concrete, 28,708 lb. steel reinforcing, etc., bridges on Federal Aid Project 1[illegible], Clay Co., 1,418 cu.yd. Class A and 12[illegible] cu.yd. Class B concrete, 245,992 lb. reinforcing, etc. W. S. Keller, state highway engr.

Tenn., Clarksville—Apr. 1, by Nashville Bridge Co., Nashville, superstructure for steel bridge over Cumberland River, here, adv. E. N.-R. Mar. 13.

O., Youngstown—Mar. 27, by Director Pub. Serv., steel superstructure for Belmont Ave. bridge. S. Young, clk.; adv. E. N.-R. Mar. 13. Noted Dec. 6.

Mich., Port Huron—Mar. 21, by State Hy. Comn., Lansing, one 35 ft. rein.-con. girder Bridge 771001, on State Trunk Line Rd. 27, in East China Twp., also rein.-con. deck girder Bridge 771301, two 75 ft. spans, 20 ft. roadway, over Black River, Grant Twp., St. Clair Co. G. C. Dillman, Lansing, ch. engr.

Illinois—See "Streets and Roads."

S. D., Chamberlain—Apr. 15, by State Hy. Dept., Pierre, 1,472 ft. high truss bridge, concrete piers and abutments, over Missouri River, here, 4,671 cu.yd. concrete, 2,789,350 lb. steel, etc. Noted Feb. 14.

Missouri—Mar. 21, by State Hy. Dept., Jefferson City, one 90 ft. steel truss and four 25 ft. I-beam spans, 2 rein.-con. piers, etc., over Salt Fork Creek, Saline Co., also one 60 ft. steel deck plate girder, two 20 rein.-con. slab, eight 40 ft., one 35 ft. and two 28 ft. rein.-con. deck girder spans, over Salt Creek and tracks of Missouri-Kansas & Texas R.R., Howard Co. B. H. Piepmeier, state highway engr.

Calif., Healdsburg—Supervs. Sonoma Co. (Santa Rosa) receiving bids bridge near here, concrete pile trestle. $25,000. E. A. Peugh, co. surv.

Calif., Sacramento—Apr. 7, by Supervs. Sacramento Co., bridge at Paintersville, incl. 1,267 cu.yd. concrete in piers and abutments, 396 cu.yd. concrete in arches, erecting 500,000 lbs. structural steel (furnished by county), etc.; double leaf Strauss bascule structure with 2 piers and abutments at Steamboat Slough, incl. 398 cu.yd. concrete in piers and abutments, erecting 500,000 lbs. structural steel (furnished by county), etc. C. W. Deterding, Jr., co. engr. Noted May 24.

B. C., Vancouver—Mar. 31, by City Council, reconstructing portion of Connaught Bridge, steel with creosoted timber deck and bitulithic pavement 485.7 tons steel, 300,000 ft. creosoted timber, 2880 yd. 3 in. bitulithic. Design and bid will also be received on rein.-con. $150,000. F. L. Fellowes, city engr. Noted Dec. 27.

BIDS RECEIVED

Florida—State Rd. Dept., Tallahassee, from Higgins Bridge Constr. Co., Vero, Project 36 A, North Relief Canal Bridge, 72 ft. long, $16,322, Project 620, Vero Bridge, 78 ft. long, total $22,439, foregoing in St. Lucie Co.; Project 608, Horse Creek and Otter Creek bridges, Brevard Co., 24 ft. long, 500 cu.yd. Class A concrete $31, 3,500 lin.ft. wood foundation piles $1, 33,000 lb. reinforcing steel $0.06, 15,000 ft. treated structural timber $120, etc., total $24,342. Noted Feb. 14.

Illinois—Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, Feb. 29, constructing bridges **(1 steel super. on 8-20C, Iroquois, means 1 steel superstructure on Route 8, Sect. 20C, Iroquois Co.)**, from Pub. Wks. Constr. Co., Century Bldg., St. Louis, Mo., 1 steel super. on 8-20C, Iroquois, $11,845; from W. H. Shons, Freeport, 1 concrete sub. and 2 concrete approach spans, on 1-38D, Johnson, $29,653, 1 concrete sub. and 2 concrete approach spans on 8-20B, Iroquois, $23,520, 1 concrete sub. and 2 concrete approach spans on 34-7B, Pope, $29,643; from St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., 2 steel supers. on 1-38E, Johnson, $13,906, 1 steel super. on 9-25C, Hancock Co., $21,134, 1 steel super. on 34-6C, Pope, $12,886, 1 steel super. on 34-7C, Pope, $19,578; from H. O. Olson Constr. Co., Waterloo, Ia., 3 subs. and 2 concrete approach spans on 3-28B, Warren, $46,236, 1 concrete slab on 3-33B, Warren, $4,800, 3 concrete girders on 3-35B Warren, $22,917, 1 steel super. on 5-28C, Jo Daviess, $14,530, 1 concrete girder on 5-29B, Jo Daviess, $25,474, 1 concrete girder on 5-30B, Jo Daviess, $27,177, 2 concrete girders on 5-31B, Jo Daviess, $25,868; from F. E. Marsh & Co., Jefferson, Ia., 1 concrete sub. and 2 approach spans on 5-28B, Jo Daviess, $20,429; from Clinton Bridge & Iron Wks., 101 South 2nd St., Clinton, Ia., 1 steel super. on 3-28C, Warren, $25,790, 1 steel super. on 9-24C, Hancock,

Bridges (Continued)

$7,525; from Stresenreuter Bros., 3020 South Halsted St., Chicago, 1 culvert and 1 plate girder on 46-A2, Cook, $82,959; from G. C. Fairole, Champaign, 1 slab, 1 sub. and 2 approach spans on 9-24B, Hancock, $33,934, 1 concrete girder on 9-37B, McDonough, $12,179; from A. P. Munson, Marion, Ia., 3 concrete slabs and 1 concrete sub. on 9-25B, Hancock, $52,913; from C. P. O'Reilly & Co., Wainwright Bldg., St. Louis, Mo., 1 concrete slab on 9-41B, Fulton, $6,778; from R. A. Cullinam, Freemont, 1 concrete sub. on 9-45B, Peoria, $18,785; from Illinois Steel Bridge Co., Jacksonville, 1 steel super. on 9-45C, Peoria, $7,626; from Zimmerly Bridge Co., Paris, 4 concrete girders, 1 culvert, 3 concrete slabs, 2 subs. for steel bridge and 4 approach spans on 16 and 32, Combination Q. Coles, Moultrie and Shelby, $92,000; from M. C. Marrows, Belleville, 1 concrete sub. and 2 approach spans on 34-6B, Pope, $42,610; from Vincennes Bridge Co., Vincennes, Ind., 2 span steel supers. on 32-2C, Moultrie, $16,118; from Barker & Lively, Oblong, 2 concrete girders on 36-10B, Adams, $12,844; from Whitewater Bridge Co., Whitewater, Wis., 1 concrete girder and 1 concrete slab and girder, on 41-12B, Fulton, $16,398. Noted Feb. 21.

Minn., St. Paul—Ramsey Co., Mar. 3, bridge over Mississippi River, 8 arch spans from 72 to 244 ft. long, total length about 1,086 ft. with 449 ft. approaches, 50-ft. roadway, 2 sidewalks, also paving, etc., between 3rd and Fillmore Sts., from Fegles Constr. Co., 706 1st Ave. N., Minneapolis, $1,936,310 ($1,621,310 if bridge is closed to traffic during construction, higher figures includes temporary bridge for use during construction). Noted Jan. 24.

Nevada—State Hy. Dept., Carson City, concrete and steel overgrade railroad crossing over Central Pacific R.R., Project 22 B, Eureka Co., near Dunphy, from Nelson & Roupke, Fresno, $36,939.

CONTRACTS AWARDED

Pa., Phila.—Dir. Pub. Wks., 216 City Hall, completing bridge at 40th St. over Pennsylvania R.R. tracks, to Mundy Paving & Contg. Co., 226 South Warnock St., $97,745. Noted Mar. 6.

Miss., Bay St. Louis—See "Streets and Roads."

Nevada—State Hy. Dept., Carson City, concrete and steel overgrade railroad crossings over Central Pacific R.R., Project 75, Contr. 99, Elko Co. near Deeth, to Bishop & Brooks, Sacramento, Calif., $32,870, Project 58 B, Cont. 100, Humboldt Co. near Rose Creek, to J. N. Tedford, Fallon, $25,896.

Colorado—State Hy. Dept., Denver, street truss bridge over Rio Grande-Del Norte River, State Project 811, Costilla and Conejos County line, timber floor, to C. A. Switzer & J. T. Dillon, 4571 Wolff St., Denver, $28,117. Noted Mar. 6.

Wyoming—See "Streets and Roads."

Wyoming—State Hy. Comn., Cheyenne, 4 concrete bridges, 26 to 30 ft. long, Buffalo-Sheridan Rd., Johnson Co., to J. F. Turpin, Wheatland, $21,225, engineers est. $25,000; 8 treated timber (timber furnished by state), 19-83 ft. long, Federal Aid Project 155, Moorcroft-Carlisle Rd., Crook Co., to Midland Bridge Constr. Co., 401 Ry. Bldg., Kansas City, Mo., $10,774. Noted Feb. 28.

Calif., Santa Ana—Orange Co., bridge over Santa Ana River, eight 30 ft. and two 31 ft. spans on concrete piles, two 20 ft., three 60 ft. spans, etc., to McKay Eng. Co., Railway Bldg., Los Angeles, $63,131. Noted Mar. 6.

Dams

PROPOSED WORK

Minn., Cannon Falls—See "Unclassified."

Okla., Cushing—See "Waterworks."

Calif., Fall Brook—The Fall Brook Irrigation Co., F. Myers, trustee, plans 800 ft. arched concrete dam, 150 ft. high, on Santa Margarita River, to impound water for irrigation, tapped by 24 in. pipe 800 ft. long. $750,000.

CONTRACTS AWARDED

N. J., Newark—North Jersey Dist. Water Supply Comn. of New Jersey, 20 Clinton St., completion of Wanaque reservoir dam, to Clifford F. MacAvoy Co., 507 Orange St., Newark, $3,318,990. Noted Feb. 14.

Neb., Superior — Southern Nebraska Power Co., subsidiary of United Light & Power Co., Abilene, Kan., timber crib and concrete dam, 380 ft. long, 8 ft. high, across Republican River near here, to Stone & Webster Inc., 147 Milk St., Boston, Mass.

Railways

PROPOSED WORK

Oklahoma—Acme Coal & Coke Co., Stigler, having surveys made 5 mi. 56 lb. track from Stigler to mines. $50,000. Engineer not announced.

Ontario — Temiskaming & Northern Ontario Ry., North Bay, voted $300,000 for completion of James Bay Extension between Mile 45 and 70, incl. track laying and ballasting, concrete and steel bridges and concrete culverts. Work will probably be done by day labor. S. B. Clement, ch. engr.

CONTRACTS AWARDED

Washington—Walla Walla Valley Ry. 5.5 mi. railroad from Milton to Umapine, to H. L. Wilson Co., Jaycox Bldg., Walla Walla, $125,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

New Jersey—State Hy. Dept., Trenton, plans dredging 7 mi. inland waterway channel between Manahawkin and Beach Haven, Ocean Co. $150,000 voted for project.

Kan., Newton—Sand Creek Dr. Dist. making plans clearing Sand Creek Channel. $30,000. Ruckel Eng. Co., Interurban Bldg., Hutchinson, engr.

Mo., Gideon—D. D. 38, New Madrid Co. had surveys made and making plans 43 mi. ditch enlargement for dragline excavators. 2,750,000 cu.yd. excav. $380,000. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., engrs.

Ark., Newport—See "Unclassified" under Flood Protection.

Tex., Crockett—Murray & Smith Bros. Plantation had plans prepared levees on Trinity River in Houston and Leon Counties, work will probably be done by day labor. $215,000. Smith Bros., Inc., Sumpter Bldg., Dallas, contracting engrs. (also part owners).

Calif., Fall Brook—See "Dams."

Calif., Fresno—City and Fresno Irrigation Dist. having plans prepared irrigation ditch and outlet. $20,000 and $5,000 respectively. W. Stranahan, city engr.

BIDS DESIRED

N. Y., Buffalo—Apr. 3, at office Dept. Pub. Wks., Municipal Bldg., completing Sub-division "B" of Sect. 2 of Buffalo River and Cazenovia Creek Impvt.; adv. E. N.-R. Mar. 13. Noted Feb. 21.

La., Ville Platte — Mar. 22, by Comrs. Manuel Point Blue D. D., Court House, excavating 160,000 cu.yd. earth. A. Tate, Court House, Ville Platte, consult. engr.

Wis., Green Bay—Mar. 20, by F. B. Desnoyer, secy. Brown Co. Farm Bd., 605 Cherry St., ditching and tiling 4½ mi. in Dist. 4, Scott and Humboldt Twps., incl. 28,300 lin. ft. 6-18 in. drain tile, 3 bulkheads, 67,000 cu.yd. ditching. L. M. Schindler, 721 Clark St., Appleton, engr.

Wis., Lena—Mar. 18, by Pensaukee D.D., T Roque, secy., 74 mi. open ditch work, 1,068,000 cu.yd. average depth 7 ft., 20 mi. tile drain, average depth 5½ ft., also 22 bulkheads, Shawano Co. $200,000. Private plans.

Wis., Milwaukee—Mar. 20, by Dept. Pub. Wks., dredging several rivers, canals and channels as may be ordered by Commissioner of Pub. Wks. during season ending Dec. 1. $45,000. J. Schwada, City Hall, engr.

BIDS RECEIVED

Calif., Long Beach—City, dredging in turning basin, incl. 2,288,000 cu.yd., 40 ft. depth, from United Dredging Co., Central Bldg., Los Angeles $0.1249 per yd.; connecting channel incl. 1,174,000 cu.yd., 40 ft. depth, from San Francisco Bridge Co., Nevada Bank Bldg., San Francisco, $0.1475 yd.; Channel 2, 1,640,000 cu.yd., from F. C. Franks Co., 260 California St., San Francisco, $0.117 yd.; Channel 3, 1,614,000 cu. yd., from Los Angeles Dredging Co., Seaside Park, Long Beach, $0.129. Noted Jan. 24 and Feb. 21.

CONTRACTS AWARDED

Tex., Ennis — Levee Impvt. Dist. 3, levees, etc., on Trinity River, Ellis Co., to Trinity Farm Constr. Co., Ennis, $140,000.

Tex., Leon Junction—See "Industrial Works" under Proposed Work.

Streets and Roads

PROPOSED WORK

New Jersey—State Hy. Dept., Trenton, plans widening White Horse Pike, 13 mi. southward from Camden, from 18 and 20 ft. to 29 ft., Camden and Atlantic Counties, $300,000; constructing 6.5 mi. Route 7, Corliss Ave. to Colts Neck, Monmouth Co., concrete $325,000, also 2.6 mi. Route 9 between Plainfield and Westfield, Union Co., concrete, $210,000; macadamizing 4 mi road from Burlington southward, Burlington Co., $100.000. W. G. Sloan, state highway engr.

N. J., Atlantic City—Plans asphalt paving various streets. $400,000. L. A. Steinbricker, 3505 Ventnor Ave., city comr.

N. J., Freehold—Monmouth Co. plans concrete paving 2.52 mi. Sect. 2 Farmingdale-Manasquan Rd., also 2.38 mi. Sect. 4 from Allenwood to Manasquan. G. B. Cooper, 60 Broad St., Red Bank, engr.

N. J., Newark—Plans grading, curbing, flagging and sheet asphalt paving 5,300 sq.yd. Clinton Pl. $30,494. J. W. Costello, City Hall, engr.

N. J., Newark—Plans improving 1,200 sq.yd. Conklin Ave., $3,821; sheet asphalt paving 3,510 sq.yd. Aldine St. and Brookdale Ave., $18,340, also 4,000 ft. Osborne Terrace, $18,453; grading, curbing, flagging and sheet asphalt paving 7,740 sq.yd. Tremont Ave., Underwood St., Mulford and Patton Places, $44,794. J. W. Costello, city engr.

N. J., Newark—Plans grading, curbing, flagging and sheet asphalt paving 1,100 ft. Maple Ave. $28,963. J. W. Costello, City Hall, engr.

N. J., Princeton—Boro Council plans asphalt and concrete paving University Pl., Bayard Lane and John St. $55,000. G. M. Brown, 28 Wiggin St., engr.

N. J., Trenton — Plans asphalt paving Logan, Houghton, Pennsylvania and Willow Sts. $77,155. J. E. English, City Hall, engr.

Pa., Pittsburgh—Soon takes bids grading, paving and curbing Norwich Ave. $65,000. F. W. Lyon, city engr.

Pa., Pittsburgh—Soon takes bids grading, paving and curbing Freedom Ave., $47,000. F. W. Lyons, city engr.

W. Va., Fairmont—Paw Paw, Mannington and Lincoln Dists., Marion Co., voted $324,000, $600,000 and $333,200 bonds respectively for roads. F. J. Wilfong, Fairmont, engr. Noted Feb. 7.

North Carolina — State Hy. Dept., Raleigh, plans improving 17.7 mi. Project 166, Duplin Co., $355,284; 9.511 mi. Project 167, Henderson and Buncombe Counties, $310,000. C. M. Upham, highway com.

Ga., Dalton — Plans paving 1.25 mi. streets, asphalt on concrete. C. C. McCainey, city engr.

Fla., Live Oak—Mar. 25, to vote on $85,000 bonds: brick paving, alternate proposals, 5th Ave., Houston, Walkers, Maple and Howard Sts., $26,500; Hamilton, Wilber and Church Sts., $27,000; Helveston Ave., White and Howard Sts., $31,500.

Fla., Pensacola—Escambia Co., election Mar. 24, $35,000 bonds for grading and paving. W. E. Wheat, Pensacola, engr.

Ala., Florence—Election soon $100,000 bonds, paving 78 blocks, incl. completion streets in business section and extension Royal Ave. and Huntsville Rd. B. B. Garner, comr. streets.

Ala., Florence — Plans paving 6.5 mi. streets, various types. $300,000. Bd. Pub. Wks., engrs.

La., Haynesville—Plans to grade and surface with rein.-con., asphaltic concrete or asphalt on concrete, 2,700 ft. 1st St., et. al., 26 ft. average width. $25,000.

Tenn., Nashville — Bd. Pub. Wks. soon takes bids asphalt (rock) and granite block paving 10 streets. W. W. Southgate, city engr.

Kentucky—State Legislature, Frankfort, passed $75,000,000 bond issue, will submit same to people at November election, $50,000,000 to be used for State highway work. J. S. Boggs, state highway engr.

O., Cleveland — Plans widening mains drives in Edgewater Park, $50,000, S. Newman, City Hall, engr.; opening and brick paving Chester Ave., $203,000. R. Hoffman, City Hall, engr.

O., Dayton—Plans paving Linda Vista and Ferndale Aves., rein.-con., asphalt or Kentucky rock asphalt, $52,281; Heaton Ave., rein.-con., $10,825; Harvard Blvd., wood block or asphalt $24,375; East 1st St., brick or brick and asphalt $175,500. J. F. Hale, city engr. Noted Nov. 29.

O., Euclid—Takes bids in spring asphalt paving South Lakeshore Blvd., Cut, Alberton, Donald and Shirley Rds., East Miller Ave., Orr, Hartland, Seabring and Guymoat Drives, East 246th, 228th, 226th, 270th and 211th Sts, to exceed $100,000; sidewalks

Streets and Roads (Continued)

on St. Clair Ave., East 221st St., Chardon, Babbitt, Upsom, Johnson and Hadden Rds., to exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Warren—Takes bids in spring paving ¾ mi. Kinsman St., 40 ft., $50,000-$60,000; paving ½ mi. High St., also widening same 12½ ft. on each side, total width 65 ft.

Ind., Evansville—Bd. Pub. Wks. soon takes bids paving 6 mi. streets, mostly asphalt. J. D. Saunders, city engr.

Mich., Detroit—Having plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete, 2,800 sq.yd. Longfellow Ave. $15,670, and 7,000 sq.yd. Winfield Ave., $38,500. G. Jerome, city engr.

Wisconsin—State Hy. Comn., Milwaukee, making plans concrete surfacing, etc., 2½ mi. Truesdell-Somers Rd., Federal Aid Project 378-A and 1¾ mi. Somers-Sylvania Rd., Federal Aid Project 378-B, Kenosha Co; 5 to 6 mi. Ripon-Fond du Lac Rd., Federal Aid Project 365, 18 ft., Fond du Lac Co.; 10 mi. Lake Shore Rd., Federal Aid Project 363, 18 ft., Sheboygan Co. Wisconsin Hy. Comn., Stephenson Bldg., Milwaukee, engrs.

Wis., Janesville—Had plans prepared paving, etc. various streets, 160,000 sq.yd. one course rein.-con., 30,000 lin.ft. combined concrete curb and gutter, 40,000 cu. yd. earth excav. C. V. Kerch, City Hall, engr.

Wis., Milwaukee—Plans paving and repaving various streets. $2,500,000. J. Schwada, City Hall, engr.

Wis., North Milwaukee — Plans paving 30,000 sq.yd. various streets, miscellaneous types to be considered. H. C. Webster, M. & M. Bank Bldg., Milwaukee, engr.

Wis., Oconto Falls—Making plans paving 10,000 sq.yd. Main St., vitr. brick, rein.-con. or sheet asphalt. W. F. Reichardt, 109 Main St., Watertown, engr.

Wis., Oshkosh — Winnebago Co. voted $205,000 bonds improving Oshkosh Ripon Rd., 18 ft. concrete, $100,000; Neenah-Mikesville Rd. (also known as Neenah-Winchester Rd.) 18 ft. concrete, $105,000. F. C. Steiner, comr.

Ia., Alden—Plans paving, curbing, guttering, etc., 5 blocks. $25,000. G. F. Bigelow, clk.

Kan., Emporia — Lyons Co. preparing plans brick or concrete surfacing 2.003 mi. Niosha Rapids Spur, 18 ft., Federal Aid Project 224, Sect. A. W. S. Ruggles, Emporia, engr.

Kan., Independence — Montgomery Co. preparing plans bituminous macadam paving 3 mi. Independence-Cherryvale Rd., 18 ft., Federal Aid Project 199, Sect. B. H. K. Hibbard, co. engr.

Kan., Iola — Allen Co. soon takes bids grading and surfacing with one course concrete 2.036 mi. Federal Aid Project 168, Sect. A. A. R. Stroup, co. engr.

Kan., Topeka—Shawnee Co. soon takes bids grading preparatory to hard surfacing 6.497 mi. Sect. C, and 3.933 mi. Sect. D, Federal Aid Project 141, 29.5 ft. A. C. Lagerwall, co. engr.

South Dakota—State Hy. Dept., Pierre, soon lets contract grading 18.5 mi. Federal Aid Project 182, Buffalo-Jerauld Counties. F. D. Hudgins, ch. engr.

Mo., Clayton—St. Louis Co. plans to issue $2,500,000 bonds concrete roads. $132,000 now available for 7 or 8 mi. macadam roads. H. Jablonski, Court House, engr.

Mo., Odessa—Plans 10,000 yd. paving, various types. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engrs.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, soon takes bids 7,400 sq.yd. concrete sidewalks in various parts of city, $25,206; concrete curbing, guttering and paving 2,210 sq.yd. Arlington Ave., warrenite on concrete, $15,000; paving 825 sq.yd. Theodore Ave., brick on concrete, $5,600, 21,245 sq.yd. Chouteau and Manchester Aves., asphalt on concrete, $61,400. W. W. Horner, city engr.

Arkansas—State Hy. Dept., Little Rock, plans concrete paving 29.57 mi. Project 175, Saline Co., $707,417; 12.83 mi. Project 176, Garland Co., $329,711. R. C. Limerick, highway engr.

Tex., Albany — Shackleford Co. voted $500,000 bonds improving various state highways and county roads. P. K. Clarke, co. engr. Noted Feb. 7.

Tex., Anson—Jones Co. voted $200,000 bonds improving Highway 81-B, Anson Special Rd. Dist., east and west through county, concrete or similar pavement. State to appropriate $200,000. J. F. Lindsey, co. judge. Noted Feb. 14.

Tex., Austin—Travis Co. making plans grading, etc., 34 mi. South Burnet Rd., 24 ft. $26,000. O. Leonard, Box 256, co. engr.

Tex., Batesville—Zavala Co. election soon to vote on over $100,000 bonds, improving highway in Precinct 1, from Frio Co. line to La Pryor. N. P. Hunt, co. judge.

Tex., Belleville—Austin Co. making plans grading, gravel surfacing and bridging 9.14 mi. Richmond-Brenham Rd., State Highway 36, 18 ft. $150,000. Plans bituminous topping to cost $30,000. H. Schroder, Belleville, engr.

Tex., Benjamin — Knox Co. defeated $250,000 bonds, improvements in Rd. Dist. 4. N. S. Kilgore, co. judge. Noted Feb. 28.

Tex., Electra—Plans improving 8 blocks. $35,000. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Tex., Glen Rose — Somervell Co. soon takes bids grading and gravel surfacing 13.25 mi. State Highway 68, 16 ft. $98,000. H. J. Cox, co. engr.

Tex., Goose Creek—Making plans paving various streets. $100,000. Nagle, Witt & Rollins, Keystone Bldg., Houston, engrs. Noted Jan. 10.

Tex., La Pryor—Zavalla Co. voted $165,000 bonds grading and surfacing various highways Rd. Dist. 4. Address J. B. Salmon, comr.

Tex., Leakey—Real Co. takes bids after Apr. 1, grading and bridging 18 mi. Kerrville-Rock Springs Rd., Federal Aid Project 407, 18 ft. $95,000. W. E. Simpson Co., N. B. C. Bldg., San Antonio, engrs. Noted Jan. 17.

Tex., Memphis—Hall Co. soon takes bids grading and surfacing 7.22 mi. State Highway 86 and 18, 24 ft., $47,650. C. L. Hasie, Box 168, engr.

Tex., Nayasota—Had plans prepared paving Holland and 10th Sts., various types incl. bituminous and brick. $35,000. R. H. Brule, city engr.

Tex., Rock Springs—Edwards Co. takes bids after May 1, grading, surfacing with waterbound macadam and bridging 12 mi. State Highway 41. $120,000. W. E. Simpson Co., N. B. C. Bldg., San Antonio, engrs.

Tex., Seguin — Guadalupe Co. election Apr. 3, $1,100,000 bonds highway improvements. J. B. Williams, co. judge.

Tex., Waco — Election soon $100,000 bonds miscellaneous street openings, paving, condemnation and wrecking. V. G. Koch, city engr.

Okla., Cleveland—Having surveys made grading and paving South 3rd St., 7,000 sq.yd. vertical fibre brick, 4,200 lin.ft. curbing, 2,000 cu.yd. earth excav. $60,000. Engineer not selected.

Okla., Chickasha—Election Apr. 4, $1,000,000 bonds roads and bridges. P. A. Little, Chickasha, engr. Noted Jan. 17.

Okla., Comanche—Soon takes bids 10,000 sq.yd. paving Dist. 1. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Miami—Ottawa Co. plans 2 mi. hard surfaced road. A. J. Lampkin, co. clk.

Okla., Pawhuska—Plans paving various streets in residence section, 31,000 sq.yd. concrete, 21,250 lin.ft. curbing, 8,600 cu.yd. earth excav., 750 cu.yd. rock excav. $165,000. J. M. Buckley, Pawhuska, engr.

Okla., Sapulpa—Plans grading and paving 9 blocks, South Walnut and East Thompson Sts., 9,600 sq.yd. concrete, 5,150 lin.ft. curbing, 3,000 cu.yd. excav. $28,000. F. E. Lawrence, Sapulpa, engr.

Okla., Stroud — Having surveys made grading and paving 6 blocks Main St., 60 ft. $80,000. Benham Eng. Co., Gumbel Bldg., Kansas City, Mo., engrs.

New Mexico—State Hy. Comn., Santa Fe, plans improving 5.26 mi. Project 137, Roosevelt Co., concrete and caliche, $68,763; 13.7 mi. Project 140, Lima Co., gravel, $66,369. J. A. French, state highway engr.

California—State Hy. Comn., Sacramento, having plans prepared 7 mi. Skyline Blvd. and 11.3 mi. road from San Mateo to Santa Cruz Co. line south, Santa Cruz Co.; 6.05 mi. Kings Mountain Rd. to La Honda Rd., 7.31 mi. La Honda Rd. to San Mateo-Santa Clara Co. line, and 7 mi. road from South San Francisco to San Mateo, San Mateo Co., over marshes, first unit of Bay Shore Highway, grading hydraulic fill method, also several bridges. R. M. Morton, state highway engr.

Calif., Covina—Had plans prepared improving portion 1st, 2nd, 3rd Sts., etc., 8,192 cu.yd. excav., 553,801 sq.ft. 4 in. asphaltic concrete, 21,405 lin.ft. concrete curb, 71,879 sq.ft. concrete gutter, 7,806 sq.ft. concrete sidewalks, 61,533 sq.yd. oil and rock pavement. F. L. Douglas, city engr.

Calif., Napa—Had plans prepared improving 1st St., 65,106 sq.ft. 5 in. concrete, etc. H. A. Harrold, city engr.

Calif., Oakland—City and Alameda Co. plans road across Bay Farm Island. W. W. Harmon, city engr. G. A. Posey, co. surv.

Calif., Orange—Soon takes bids 4 mi. of 5- to 7-in. concrete paving. C. C. Bonebrake, city engr.

Calif., Pomona—Election Apr. 11, $400,000 bonds for street paving. F. C. Troehde, city engr.

Ontario—Dept. Highways, Toronto, plans 5½ mi. concrete pavement on main road between Kitchener and Petersburg, Waterloo Co. $300,000.

Ontario—Provincial Hy. Dept., Parliament Bldg., Toronto, plans to resurface 5.9 mi. tarvia macadam roads from Beamsville to Park Rd. and Winona to Grimsby. $30,000. G. Hogarth, ch. engr.

Ont., Hamilton—Having plans prepared concrete pavements on Kenilworth and Sanford Ave. $200,000. W. L. McFaul, city engr.

Ont., Hamilton—Plans 17,000 sq.yd. asphalt pavements on Cannon and Sanford Aves. $80,085. W. L. McFaul, city engr.

Ont., London—Plans cement roadway on Wellington St., will probably be done by day labor, under supervision of W. A. Near, city engr. $40,000.

Ont., Mimico—Plans 10,000 sq.yd. concrete, asphalt or bitulithic pavement, concrete sidewalks. $50,000. C. J. Telfer, Town Hall, engr.

Ont., Toronto—Plans to extend Dundas St. 2 mi. from Broadview Ave. to Kingston Rd., will include pavements, sidewalks, grading and sewers. $650,000. R. C. Harris, city engr.

Ont., Toronto—Plans grading Norway Ave. $175,000. R. C. Harris, city engr.

Ont., Toronto—Plans asphaltic concrete pavement on Benson Ave. $11,290, asphaltic concrete and brick block on Golfview Ave. $19,094, bitulithic on Ossington St. $3,039, Cataract St. $2,891, Stacey St. $12,791, St. Clair Ave. E. $29,612, Wilburton Rd. $14,071, Kilbarry Rd. $13,318, asphalt on Pine Ave. $20,343, Heath St. $2,622 and Glebeholme Blvd. $12,838, all foregoing on concrete base with concrete curbs and gutters; concrete sidewalks on Lola Rd., Edith Dr., King St. W., Dawesville, Carthness, Coxwell and Moberly Aves. $21,141, concrete curbs on Pine and Benson Aves. $1,310, grading on Glebeholme Blvd., Lane Patterson, Cannon and Ossington Ave. $33,091. R. C. Harris, city engr.

BIDS DESIRED

Connecticut—Mar. 17, at office of State Hy. Comn., Hartford, paving highways in East Haddem and Salem, Westbrook and Old Saybrook, Old Lyme, East Lyme, Waterford, Groton, Montville, Stafford and Union, 124,063 ft. waterbound macadam, 66,749 ft. rein.-con., also abutments and steel superstructure for 120-ft. through truss span over Patchogue River in Westbrook. J. A. MacDonald, state highway comr.

N. Y., Buffalo—Mar. 18, by Commissioner Pub. Wks., repairing asphalt pavements. To exceed $30,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., Long Island City—Mar. 17, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc., on Buchman Ave., 42nd and 82nd Sts.; curbing and laying sidewalks on Kissena Blvd.; grading Winslow Pl. etc.; grading gutter space in Winslow Ave.; paving Hayes and 82nd St.; grading sidewalk space and laying sidewalks, etc., on 98th Ave.

New Jersey—Mar. 26, at office State Hy. Dept., Trenton, rein.-con. paving, etc., 36,586 sq.yd. Route 9, Sect. 13, White House to Somerset Co. line, Hunterdon Co.; 24,394 sq.yd. Route 9, Sect. 14, Somerset Co. line to North Branch, Somerset Co.; 51,100 sq.yd. Route 10, Sect. 6, Hackensack to Paterson, Bergen Co. A. L. Grover, secy. Noted Jan. 24 and Feb. 28.

Pennsylvania—Mar. 31, by State Hy. Dept., Harrisburg, constructing 48 mi. road; adv. E. N.-R. Mar. 13.

Pennsylvania — Apr. 1, by State Hy. Dept., Harrisburg, constructing 45 mi. roads; adv. E. N.-R. Mar. 13.

Pa., Harrisburg — Mar. 26, by H. A. Sherk, supt. Streets & Pub. Impvts., Room 408, Dauphin Bldg., 65,000 sq.yd. paving; adv. E. N.-R. Mar. 13.

Maryland — Mar. 26, by State Rds. Comn., Baltimore, sheet asphalt paving 0.67 mi. highway in Anne Arundel Co. Contr. AB-10-D. J. N. Mackall, chn.; adv. E. N.-R. Mar. 13.

W. Va., Fairmont—Mar. 26, by Marion Co., grading, paving, etc., 2.25 mi. Morgantown-Bridgeport Turnpike Rd., Winfield Dist. F. J. Wilfong, co. engr.

W. Va., Huntington—Mar. 21, by Bd. Comrs., grading, curbing and paving Burlington and Bradley Rds., Kanawha

Streets and Roads (Continued)

and James River Turnpikes, Washington Dr., Pogue, 24½, 37th, Locust, Vernon, Court, Vinson and Wayne Sts. A. B. Maupin, city engr.

W. Va., Lewisburg—Apr. 1, by Greenbrier Co., grading 4.5 mi. Frankfort-Unus Rd. H. L. Handley, co. engr.; adv. E. N.-R. Feb. 13.

North Carolina—Mar. 25, by State Hy. Comn., Raleigh, grading, hard surfacing with concrete or asphaltic Projects 201-B, 330, 421-B, 537-B, 686-B and 981; sand asphalt or macadam on Projects 447 and 568; top-soiling, sand clay or graveling Projects 102, 156, 162, 720 and 721; adv. E. N.-R. Mar. 13.

N. C., Benson—Apr. 2, by Mayor, paving 40,000 sq.yd. various streets, asphalt on concrete, combined concrete curb and gutter, granite curbs with concrete gutter, etc. W. C. Olsen, Raleigh, engr.

N. C., Charlotte—Mar. 18, by Bd. Comrs., paving streets, various types. J. Firth, city engr.; adv. E. N.-R. Mar. 13.

Fla., Jacksonville—Mar. 26, by E. P. Owen, city secy., Room 12, City Hall, 3,210 sq.yd. of concrete sidewalks and 37,648 sq.yd. tile sidewalks. W. E. Sheddan, Engineers Bldg., engr.

Fla., Miami Beach—Mar. 21, by City Council, City Hall, improving Lincoln Rd. and Meridian Ave.; Collins Ave., Miami Beach Dr., 29th, 2nd, 22nd, 21st, 3rd, 4th, 6th, 7th, 8th, 9th, 10th, 12th, 13th and 14th Sts., etc.; alleys in Blocks 51 and 52, Ocean Dr. and Collins Ave. C. W. Tomlinson, clk.; adv. E. N.-R. Mar. 13.

Alabama—Apr 7, by State Hy. Dept., Montgomery, constructing 14.293 mi. Ashland-Heflin Rd., Clay Co., 64.79 acres clearing, 93,666 cu.yd. earth and 46,146 cu.yd. rock excav., 27,847 sta.yd. overhaul, 478.64 cu.yd. Class A and 184.27 cu.yd. Class B concrete, 47,314 lb. reinforcing; 20.921 mi. Abbeville-Houston Co. line Rd., Henry Co., 26.755 acres clearing, 144,352 cu.yd. excav., 67,707 sta.yd. overhaul, 603.48 cu.yd. Class A and 224.43 cu.yd. Class B concrete, 61,267 lb. reinforcing, 4,443 cu.yd. gravel surfacing within 1 mile, 600 cu.yd. gravel ½ mi. additional haul, 68,000 cu.yd. sand clay surfacing within 1 mi. haul; 17.768 mi. Eutaw-Gainesville Rd., Green Co. Proposal (1) 96.44 acres clearing, 278,768 cu.yd. excav., 112,312 sta.yd. overhaul, 105.12 cu.yd. Class B and 723.34 cu.yd. Class A concrete, 75,731 lb. reinforcing, Proposal (2) surfacing, alternate (1): 150,000 half-mile units overhaul on 21,250 cu.yd. imported gravel, 189,750 half-mile units overhaul on 17,955 cu.yd. screened gravel, 73,450 half-mile units overhaul on 15,561 cu.yd. sand clay, alternate (2): 185,600 sq.yd. rawhide surfacing. W. S. Keller, state highway engineer.

Miss., Belzoni—Mar. 27, by Mayor and Bd. Aldermen, street improvements, Projects A, B, C and D. F. M. Pepper, city clk.; adv. E. N.-R. Mar. 13.

Miss., Port Gibson—Apr. 10, at Court House Claiborne Co., grading, gravel surfacing, etc., 6.681 mi. Project 153-B and 168, 12 ft. $88,815. H. C. Dietzer, state highway engr.

Louisiana—Mar. 20, by State Hy. Dept., Reymond Bldg., Baton Rouge, 8.35 mi. State Project 366 C, and 7.41 mi. State Project 366 B, Winnfield-Chestnut Highway, Winn Parish, also furnishing gravel for surfacing projects. J. M. Fourmy, ch. engr.

La., Abbeville—Apr. 2, by P. L. Blanc, secy. Varmillion Parish, Police Jury, grading and gravel surfacing 3.5 mi. in Rd. Dist. 2, also furnishing 11,200 cu.yd. washed gravel and sand clay gravel. $25,000.

Tenn., Nashville—Mar. 18, by Bd. Pub. Wks., granite block paving Meridian St. viaduct and adjacent approaches. $25,000. W. W. Southgate, city engr. Noted Dec. 13.

O., Cincinnati—Mar. 18, by Director Pub. Serv., City Hall, granite curbing and granite block paving 4,500 sq.yd. Baymiller St. $83,000. F. King, City Hall, engr.

O., Cleveland—Mar. 19, grading, curbing and paving Clearaire Rd. N. E., Ferris Ave. S. E., Harvard Ave. S. E., Nathaniel Rd. N. E., Natchez Ave. S. W., Revere Ave. S. E., East 112th, 119th, 176th and 140th Sts. R. Hoffman, City Hall, engr.

O., Cleveland—Mar. 19, by Bd. Comrs. Cuyahoga Co., grading, guttering and concrete paving 10,406 sq.yd. Highland Rd. 3. $48,300. F. Lander, Court House, engr.

O., Columbus—Mar. 18, by R. H. Simpson, city engr., grading, laying necessary water services and sewer connections and paving 1,858 ft. Huron Ave., 20 ft., brick $24,272, asphalt $21,415; 912 ft. alley west of Wager St., and alleys north of 14th St. and Linwood Ave., 20 ft., brick $7,499 concrete $6,643; 5,305 ft. Roys Ave., Guernsey, Olive and Palmetto Sts., 24 ft., brick $105,792, asphalt $94,362.

O., Dayton—Mar. 17, by Director Pub. Serv. paving 8 alleys with rein.-con., also Delaware, Buchanan, Herman, Pursell and Riverview Aves., brick, asphalt, Kentucky rock asphalt or wood block. $200,000. J. F. Hale, city engr.

Indiana—Mar 20, by State Hy. Comn., Indianapolis, 5.84 mi. bituminous macadam and 15.59 mi. surface treatment on roads in Wayne Co. J. D. Williams, dir.

Ind., Richmond—March 22, by Comrs. Wayne Co., grading and concrete paving 1.5 mi. William H. Haberkern Rd., Wayne Twp. $44,162. H. E. Thornburg, aud.

Michigan—Mar. 24, by State Hy. Dept., Lansing, surfacing 2,628 mi. Federal Aid Project 101, Sect. C, Van Buren Co., 31,410 sq.yd. concrete or bituminous concrete. G. C. Dillman, ch. engr.

Michigan—Mar. 25, by State Hy. Dept., Lansing, grading and surfacing 3.041 mi. State Trunk Line Rd. 13-44, Sects. A and B, St. Joseph Co., 32,070 sq.yd. concrete or bituminous concrete. G. C. Dillman, ch. engr. Noted Jan. 17.

Michigan—Mar. 27, by State Hy. Dept., Lansing, surfacing 4.206 mi. Federal Aid Rd. 63, Sect. B, Bay Co., 44,602 sq.yd. concrete or bituminous concrete. G. C. Dillman, ch. engr. Noted Jan. 17.

Mich., Escanaba—Mar. 31, at office City Manager, grading and paving South 7th, 9th and 11th Sts., 3rd Ave. N. and 14th St. N.; adv. E. N.-R. Mar. 13.

Illinois—Mar. 21, by Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, paving 161.35 mi. 18-ft. (incl. 12.81 mi. 9- and 18-ft. and 0.86 mi. 18- and 20-ft.) with portland cement concrete, alternate bids on bituminous concrete and brick; grading 3.31 mi. road, 50,700 cu.yd.; 8 bridges, involving 1,174 cu.yd. concrete. F. T. Sheets, supt. highways.

Ill., Mulkeytown—Mar. 20, by Tyron Twp. Bd., grading and concrete paving 3.5 mi. road, 18 ft. $109,000. C. B. Mautz, 1st Natl. Bank Bldg., Benton, engr.

Wis., White Fish Bay—Mar. 17, by W. Volkmann, village clk., concrete paving 25,000 sq.yd. various streets. $60,000. T. F. Buckley, Village Hall, engr. Noted Feb. 7.

Wis., Marshfield—Mar. 26 (extended date), by Bd. Pub. Wks., concrete paving, etc., 5 streets. Noted Feb. 21.

Kan., Troy—Apr. 8, by Clerk Doniphan Co., grading 8.012 mi. Federal Aid Project 169, Sect. A, 28 ft.; 7.292 mi. Sect. C, 28 ft.; grading and surfacing 1.004 mi. Sect. E, 18- to 60-ft. H. L. Parker, co. engr. Noted Feb. 28.

S. D., Canton—Apr. 3, 20,000 sq.yd. pavement. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Missouri—Mar. 21, by State Hy. Dept., Jefferson City, concrete paving 73,598 cu. yd. roads in Greene and Nodaway Counties, also 51,640 sq.yd. road in Nodaway Co.; paving 40,419 sq.yd. road in Gentry Co., penetration macadam; grading 30,402 cu.yd. graveling and 2,281 sq yd. concrete surfacing in Stoddard Co.; grading and graveling 15,589 cu.yd. road in Pulaski Co., also 174,314 sq.yd. roads in St. Genevieve, Jefferson, Miller, Maries, Stoddard, Sullivan, Lincoln and Scott Counties; grading 10.54 mi. roads, 30 ft. in Benton, Worth and Montgomery Counties, also 17.446 mi. roads, 26 ft. in McDonald, Wright and Pulaski Counties. B. H. Piepmeier, state highway engr. Noted Feb. 28.

Tex., Greenville—Mar. 25, by O. P. McWhirter, judge Hunt Co., placing gravel sub-base, waterbound macadam base and inverted penetration top on 5.3 mi. State Highway 39, State Aid Project 379, 15 ft., $101,375; constructing stone base on 12 mi. Wolfe City Rd., 15 ft., $50,000; surfacing with gravel and constructing 7,000 yd. rein.-con. overflow paving on 15 mi. Quinlan Rd., 15 ft., $65,000. G. R. Burtner, co. engr. Noted Feb. 7 and 14.

Tex., Liberty—Liberty Co. taking bids graveling 4.16 mi. road from Cleveland to San Jacinto Co. line, Federal Aid Project 426, 12 ft. $41,500. W. C. Youngs, Dayton, engr.

Calif., San Diego—Mar. 24, by A. H. Wright, city clk., improving 22nd St. incl. 212,811 sq.ft. 1½ in. asphaltic concrete on 2½ in bituminous, etc. F. A. Rhodes, city engr. Noted Feb. 7.

Ontario—Apr. 2, by S. L. Squire, deputy minister, Dept. Provincial Highways, Toronto, 0.34 mi. asphalt pavement Contr. 1083, 2.4 mi. washed gravel concrete pavement, Contr. 1085, 1 mi. bituminous penetration pavement, Contr. 1088, 5.21 mi. macadam roadway, Contr. 1089, 41.8 mi. surface treatment of macadam roads, Contracts 1096 to 1100 inclusive, 3.3 mi. grading Contr. 1102, approaches to Becketts Bridge, Contr. 1108, bridges and culverts, Contrs. 1110, 1113, and 1116.

Ont., London—Mar. 18, by W. A. Near, city engr., asphalt paving, road oil, crushed stone, sewer and land tile. $200,000.

BIDS RECEIVED

New Hampshire—State Hy. Comn., Concord, Mar. 7, highway improvement in Concord, 28560 sq.yd. modified asphalt, etc., from Amos D. Bridges Sons, Inc., Hazardville, Conn., $0.79 per sq.yd., etc., total $33,018. Noted Mar. 6.

N. Y., Buffalo—Dept. Pub. Wks., Mar. 4, paving with **(a)** asphalt **(b)** concrete **(1)** Shirley Ave. **(2)** Delaware Ave. from Virginia to Allen Sts. **(3)** Delaware Ave from Mohawk to Virginia Sts. **(4)** Ellicott St. **(5)** Franklin St. **(6)** Pearl St., from H. P. Burgard Co., Fillmore Ave. **(a1)** $54,000; Rock Asphalt & Constr. Co., Inc., Morgan Bldg., **(a2)** $20,019 **(b3)** $59,960 **(a4)** $78,164 **(a5)** $17,065 **(b5)** $20,991 **(a6)** $48,883 **(b6)** $25,482. Noted Feb. 28.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Mar. 10, repairing asphalt pavement in railroad area where directed, from Cleveland Trinidad Paving Co., Flushing, $66,800.

N. J., Freehold—Monmouth Co., Mar. 5, concrete paving 2.15 mi. Palmer Ave., Keansburg, from Jannarone Constr. Co., 245 Passaic Ave., Belleville, $115,217. Noted Feb. 21.

Pennsylvania—State Hy. Dept., Harrisburg, Mar. 6, (A. means Application and R. means Route) 22,416 ft. A. 2779, Mercer Co., from Meredith, McVaugh & Webb, 1409 West 10th St., Erie, $161,456; 10,756 ft. R. 50 and A. 2639, Somerset Co., from C. R. McIntyre, Fairchance, $100,206; 4,708 ft. R. 59, Elk Co., from G. Metzger, Jr., 12 4th St., Emporium, $54,787; 9,510 ft. R. 59, Clearfield Co., from Milliron Constr. Co., Inc., 224 Deposit Natl. Bank Bldg., DuBois, $98,897; 3,304 ft. R. 120, Westmoreland Co., from J. S. Rinehart, East Liverpool, O., $61,910; 2,328 ft. R. 223, Indiana Co., from Milligan & Ringler, Blairsville, $50,444; 29,461 ft. R. 102, Potter and Tioga Counties, from D. Schentag, Inc., 68 Ulster Ave., Saugerties, N. Y., $318,422; 17,079 ft. R. 268, Greene Co., from Fort Pitt Constr. Co., 207-208 Martin Bldg., Pittsburgh, $246,044; 5,396 ft. R. 116, Fayette Co., from Swaney & Gilmore, R. F. D. 5, Uniontown, $78,123; 29,877 ft. R. 231, A. 2708, Adams Co., from Souder Constr. Co., 349 Woolworth Bldg., Lancaster, $230,020; 28,212 ft. R. 212, Tioga Co., from J. C. Devine Co., Alliance, O., $314,799; 3,381 ft. A. 2712, Centre Co., from J. M. Hutchison, Altoona, $58,356; 9,731 ft. R. 181, A. 1058, Allegheny Co., from Donora Constr. Co., Donora, $104,899; 19,303 ft. R. 62, Cambria Co., from Lord Constr. Co., Hastings, $172,780; 17,164 ft. A. 2092, Venango Co., from R. V. Baldwin, 1361 4th Ave., Coraopolis, $151,496; 9,609 ft. R. 234, A. 2043, Clearfield Co., from Avery & Bailey, Philipsburg, $79,820; 31,237 ft. R. 223, Indiana Co., from Rood Constr. Co., Lyric Theater Bldg., Butler, $330,151; opened Mar. 7, 14,062 ft. R. 50 and A. 2731, Somerset Co., from M. F. McCabe & Co., 309 Deveny Bldg., Fairmount W. Va., $170,891; 12,925 ft. R. 163, Carbon Co., from Neely Bros., Oxford Ave. and Wakeling St., Phila., $121,299; 19,202 ft. R. 62, Cambria Co., from McClure & Bingner Co., Inc., 425 Swank Bldg., Johnstown, $196,921; 14,466 ft. R. 183 and A. 2118, Columbia Co., from A. Christiano, 301-303 Shamokin St., Shamokin, $135,564; 16,770 ft. R. 113, Fayette Co., from Colonial Constr. Co., Wabash Bldg., Pittsburgh, $169,288; 4,178 ft. R. 268, Washington Co., from Williamson Constr. Co., Inc., Turtle Creek, $58,105; 10,772 ft. R. 47, Blair Co., from A. R. Cooper, Idamar, $110,955; 13,885 ft. R. 271, Erie Co., from F. W. Knickenberg, 702 Michigan Ave., Buffalo, N. Y., $147,580; 27,751 ft. R. 314 and 223, Indiana Co., from L. H. Hileman Constr. Co., 217-218 First Natl. Bank Bldg., New Kensington, $357,436; 5,885 ft. R. 355, A. 1036, Lycoming Co., from G. I. Thompson Co., Clearfield, $58,100; 32,391 ft. R. 76, Beaver Co., from D. W. Challis & Sons, Inc., 420 Centennial Ave., Sewickley, $376,315; 1,525 ft. A. 1775, Clearfield Co., from M. S. McMahon, Brookville, $21,906; 12,375 ft. A. 1623, Lawrence Co., from B. Freshwater & Sons, Chester, W. Va., $116,274; 17,731 ft. A. 2734, Monroe Co., from W. A. Palmer, 431 East North St., Bethlehem, $137,154; 11,161 ft. R. 174, Susquehanna Co., from R. D. Richardson Constr. Co., 828 Connell Bldg., Scranton, $36,555; 38,903 ft. R. 192, Tioga Co., from D. Schoentag, Inc., 68 Ulster St., Saugerties, N. Y., $408,107; 5,781 ft. R. 231, A. 2707, Adams Co., from Frey Constr. Co., Inc., 50 West Phila., St., York, $42,029. Noted Feb. 21.

Streets and Roads (Continued)

Md., Towson—Comrs. Baltimore Co., Feb. 28, concrete or macadam paving 7,390 sq. yd. Group 2, 3rd Ave. to Hammonds Ferry Rd., from G. Long Constr. Co., 1st and 12th Sts., Baltimore, $19,992; 8,000 sq.yd. Group 3, Carroll Rd. to intersection of Sparks Rd., from Huse & Knight, 2800 Montebello St., Baltimore, $24,960.

Alabama—State Hy. Dept., Montgomery, grading and surfacing 5.399 mi. road. 26 ft., Project 119, Sects. A and C, Lawrence Co., 12,800 sq.yd. rock base, 50 692 sq.yd. bituminous macadam, from A McQuary, Albany, $114,592. Noted Feb. 14.

Louisiana — State Hy. Comn., Baton Rouge, 13 mi. highway, St. Landry Parish (1) 7 3 mi. Opelousas-Kinder Highway (2) 2.6 Eunice Highway (3) 3.1 mi. Opelousas-Kinder Highway, from Cody Constr. Co., Crowley (1) $30,347 (2) $12,369 (3) $17,724; Maggio & Attelo, Baton Rouge, (3) $15,980. Noted Feb. 14.

O., Cleveland—For (a) 150,000 sq.ft. stone and (b) 90,000 sq.ft. cement sidewalks in (1) Southerly Sidewalk Dist., (a) 136,000 sq.ft. stone and (b) 110,000 sq ft. cement sidewalks in (2) Northerly Sidewalk Dist., from Ohio Quarries Co., Union Trust Bldg., (a1) $40,904 (a2) $31,289; Stroman & Kidder, The Arcade (b1) $22,907; P. H. De Santis, 8019 Hough Ave. (b2) $31,035.

O., Cleveland—For **(a)** 150,000 sq.ft. stone **(b)** 130,000 sq.ft. cement walks in **(1)** Westerly Sidewalk Dist., also **(a)** 135,000 sq.ft. stone **(b)** 145,000 sq.ft. cement walks in **(2)** West Park Dist., from Ohio Quarries Co., Union Bldg., **(a1)** $39,993 **(a2)** $39,643; Rieley Bros., The Arcade, **(b1)** $36,013; M. P. Platten, Engineers Bldg., **(b2)** $40,143.

O., Cleveland Heights (Warrensville, P. O.)—From Spence Bros., 2078 Random Rd., Cleveland, improving Hampstead Rd., 29,700 sq.ft. concrete base, 3,306 sq.yd. asphalt, 700 ft. concrete curb and gutter, etc. $18.413, Washington Blvd., 43,200 sq.ft. concrete base, $4,800 sq.yd. asphalt, 1,750 ft. concrete curb and gutter $26,460, Marlindale Ave., 37,800 sq.ft. concrete base, 4,200 sq yd. asphalt, 3,100 ft. concrete curb and gutter, etc. $23,189 Rossmor Rd., 32,850 sq.ft. concrete base, 3,650 sq.yd. asphalt, 2,450 ft. concrete curb and gutter, etc., $20,559.; from Bentley Bros., 1836 Euclid Ave., Cleveland, improving Goodnor Rd., 44,100 sq.ft. concrete base, 3,050 sq yd. asphalt, 3,300 ft. concrete curb and gutter, etc. $37,024. Noted Feb. 21.

Illinois—Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, Feb. 29, grading **(3.56 mi. 3-35A, Warren, means 3.56 mi. Route 3, Sect. 35 A, Warren Co.),** from Cameron Joyce & Co., Keokuk, Ia., 3.56 mi. 3-35A Warren, 62,815 yd., $29,260, 22.92 mi. 5, Combination C, Jo Daviess, 473,490 yd., $363,750, 5.06 mi. 9-39A, Fulton, 332,662 yd., $141,733, 3.46 mi. 9-41A, Fulton, 29,920 yd., $18.454, 11.97 mi. 41, Combination I, Fulton, 138,750 yd., $85,681; from Tim Ryan Sons, Missouri Valley, Ia., 9.72 mi. 3-28A, Warren, 133,170 yd., $70,655, 1.07 mi. 3-33A, Warren, 14,680 yd., $7,282; from Powers Thompson Constr. Co., Joliet, 1.3 mi. 2-70A, La Salle, 52,285 yd., $31,532; from Byers Wilson Constr. Co., Des Moines, Ia., 4.83 mi. 9-25A, Hancock, 245,480 yd., $139,930; from McAndrews & Hannahs, Keokuk, Ia., 2.77 mi. 9-24A Hancock and McDonough, 75,780 yd., $37,987; from Jenner Bros., Davenport, Ia., 2.39 mi. 9-37A, Fulton, 40,925 yd., $18,996; from Tritt Bros., Belleville, 3.25 mi. 13-22A. St. Clair, 35,860 yd., $23,512; from H. G. Althoff, Teutopolis, 2.3 mi. 16-4A, Coles, 29,652 yd., $13,289, 4.52 mi. 16-5A, Coles, 93,159 yd., $39,484; from C. I. Jones, Omaha, Neb., 2.19 mi. 32, Combination G, Shelby and Moultrie, 39,635 yd., $19,369; from L. Rich Constr. Co. East St. Louis, 10.37 mi. 34, Combination H, Pope Co., 223,420 yd., $146,000; from A. O. McCoy, Rushville, 6.84 mi. 36-10A, Adams Co., 60,485 yd., $32,044. Noted Feb. 21.

Wis., Kenosha — Paving, etc., various streets (1) 97,000 sq.yd. pavement, (2) 65,000 lin.ft. concrete curb and gutter (3) 49,000 cu.yd. earth excav., from G. M. Gross Constr. Co., Appleton, (1) rein.-con. $2.34, (2) $0.78 (3) $0.68; from J. Cape & Sons, 468 Water St., Racine, (1) repressed brick $4.40 (2) $0.60 (3) $0.98; from White Constr. Co., 68 Wisconsin St., Milwaukee, (1) vertical fibre brick $3.65 (2) $0.69 (3) $0.90; from H. J. Glover & Son, Holland, Mich., (1) sheet asphalt $2.66 to $2.69, asphaltic concrete $2.37 to $2.39 (2) $0.74 (3) $0.82.

Minn., St. Paul — H. W. Austin, city purch. agt., Mar. 4, paving Mississippi River Blvd. from end of present paving at Cretin and Portland Aves. to point 304 ft. west of West 7th St., 17,850 cu.yd. excav., 23,260 cu.yd embankment, 72,827 sq.yd. asphaltic concrete, 972 sq.yd. reset asphaltic concrete, etc., from Fielding & Shepley, 216 University Ave., $272,949; Grand Ave. between Milton St. and Cretin Ave., 52,876 sq.yd. 3-in. vertical fibre brick, 315 sq.yd. creosoted wood blocks, etc., and George St. between Ohio and State Sts., 6,017 sq yd brick paving, 15,484 sq.yd. asphaltic concrete, curb, etc., from Thornton Bros. Co., 318 Endicott Bldg., $231,244 and $81,431 respectively; Grand Ave. between Oakland Ave. and Milton St., 16,247 sq.yd. 3-in. vertical fibre brick, from Feyen Constr. Co., 277 Burgess St., $67,200; Phalen Parkway-East Lake Shore Dr., between bath-house and Larpenteur Ave. and from East Lake Shore Dr. at southerly end of lake to Maryland St., 2,980 sq.yd 7-in. rein.-con., 16,598 sq.yd. Class A asphaltic concrete, 8,668 sq.yd. Class B asphaltic concrete, also Park Ave. between Wabasha St. and Como Ave., and Como Ave. between Park Ave. and Rice St., 11,288 sq.yd. 3-in. vertical fibre brick, curb, etc., from Hanlon & Okes, 338 Lumber Exch., Minneapolis, $98,831 and $50,442 respectively. Noted Feb. 28.

Missouri—State Hy. Dept., Jefferson City, Feb. 27, from Farrell & Dulrouillet, Linn, improving 3.314 mi. Paris-Shelbina Rd., Monroe Co., 22,210 cu.yd. earth excav. $0.40 per cu.yd., 31,111 sq.yd. gravel surfacing $0.70, etc., total $40,747; from Kiefner & Geile, Perryville, improving 2.09 mi. of above road, 10,623 sq.yd. earth excav. $0.40, 19,668 sq.yd. gravel surfacing $0.62, etc., total $20,671.

Tex., Beaumont—Jefferson Co. grading and surfacing with rein.-con. 7 35 mi. State Highway 40, Voth Rd., (Bates Sect.) Federal Aid Project 349, 598.7 cu.yd. concrete, 20,186 cu.yd. roadway, and 17,715 cu.yd. borrow excav., 69,336 sq.yd. concrete pavement, 46.884 lb. reinforcing, etc., from Smith Bros., Amer. Natl Exch. Bank Bldg., Dallas, $204,756. Noted Feb. 7.

Tex., Daingerfield—Morris Co. grading and gravel surfacing 5 08 mi. State Highway 35, Federal Aid Project 362, 359.5 cu.yd. concrete, 23,843 lb. reinforcing, 7,994 cu.yd. gravel from Womack Constr. Co., Sherman, $31,816. Engrs. est. $35,267. Noted Feb. 7.

Tex., McKinney — Collin Co. surfacing road already graded with 22 590 sq.yd. rein.-con. pavement, State Highway 1, from Tibbetts Constr. Co., Mineral Wells, $60,088. Noted Feb. 21.

Tex., Rio Grande City—Starr Co. grading and gravel surfacing 13.19 mi. State Highway 12, Federal Aid Project 337-B, 1,052.9 cu.yd. concrete, 97.222 lb. reinforcing, 20,928 cu.yd. gravel, from W. L. Pearson & Co., 827 First Natl. Bank Bldg, Houston, $78,439. Engrs. est. $109,312. Noted Feb. 7.

Calif., Los Angeles—Improving Baker Ave. between Flora and Compton-Jaberonia Rd., 7,800 cu.yd. excav., removing 3,509 cu.yd. old macadam, shaping 55,313 sq.yd. roadway, 34,107 sq.yd. subbase, from Griffith Co., Railway Bldg., $54,960. Noted Feb. 14.

Calif., Los Angeles—From Griffith Co. Ry. Bldg., improving Wilton St. between Wilshire and San Marino Sts., grading total $4,484, 110,323 sq.ft. asphalt $0.228. 1,034 sq.ft. bituminous $0.12. 2,241 sq.ft. gutter $0.25, storm drain $1 650, etc., Griffin Ave. between Montecito Park and Ave 35, grading $4,595, 81,810 sq.ft. asphalt $0.228, 51,768 sq.ft. concrete $0.22, 3 119 sq.ft. walks $0.21, 5.413 sq.ft. gutter, $0.25, etc.

CONTRACTS AWARDED

N. Y., Corning—Bd. Pub. Wks., for 6,386 sq.yd. pavement, etc., to Holleran Bros., 901 Linden Pl., Elmira, $30.441. Noted Feb. 28.

N. Y., New York—Dept. Plant & Structures, Municipal Bldg., westerly flooring on steel approaches of Manhattan Bridge, to Keppler Constr. Co., 343 Lewis Ave., Brooklyn, $24,653. Noted Mar. 6.

Pa., Phila. — Dept. Pub. Wks., Bureau Highways, asphalt pavement on Luzerne St. and repaving with asphalt on Wharton St., to Eastern Paving Co., 401 Colonial Trust Bldg, $14,163 and $46,651 respectively; repaving with asphalt on Chelten and Sprague Sts., also 54th St., to Barber Asphalt Paving Co., 239 North 30th St., $82,288 and $31.331 respectively; redressed granite block repaving on Callowhill St., to Union Paving Co., 30th and Locust Sts., $44.192, on Frankford and Front Sts., to F. Beckius, Jr., 4050 Kensington Ave, $64,140 and $25,459 respectively, on Germantown Ave., to J. F. Nolan & Sons, 64 Church Lane, $59,347, 7th Ave., to Acchione & Canuso, 804 South 12th St., $29.473 60th St. to M. J. McCrudden, 1134 Real Estate Trust Bldg., $47,408. Noted Feb. 28.

Md., Baltimore — To Amer. Paving & Contg. Co, Montebello Ave., P. Flanigan & Son, Hartford Rd. and 25th St., and Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., special work for city, sheet asphalt and concrete at following prices: binding and topping $1.85 per sq.yd., concrete $2.75 per sq.yd., extra ½-in. binder $0.21 per sq.yd., binder at plant $6 per ton, topping at plant $7 per ton. Total $1,000,000.

Md., Towson — Baltimore Co., concrete paving 1.5 mi. Graystone Rd., Group 1, and 2 mi. Middletown Rd. from end of concrete east, to Harry T. Campbell Sons Co., Inc., Towson, $96,617. This corrects report in Feb. 28 issue.

Fla., Crawfordville—Wakulla Co., constructing roads, to W. T. Taylor Constr. Co., Birmingham, Ala., Sopchoppy to Leon Co. line via Smith Creek, 26 mi., $104,000; Crawfordville to Ivan and Leon Co. Line, also Medart to Panacea, 12.1 mi., $55,000; Wakulla to Newport and Crawfordville to Arran, 6.4 mi., $26,000; Wakulla to St. Marks, 6 mi., $25,000; clearing, etc., $125 per acre excav., $0.35 cu.yd.; machine grading $7.50 per sta., clay or soil $0.60 cu.yd., mixing and shaping $0.03 sq.yd. Noted Jan. 24.

Fla., Lakeland — Improving various streets, curbing to Newell Contg. Co., 3828 Ave. A, Birmingham, Ala.; paving to Yeats & Headrick, Tampa, and Stidham & Hughes, Bartow. Total $900,000. Noted Dec. 6.

Alabama—State Hy. Dept., Montgomery, concrete and brick surfacing 1.856 mi. Northport-Warrior River Rd., 18- to 32-ft., from Finnell & Toothacker, Tuscaloosa, $86,096. Noted Feb. 7.

Ala., Birmingham—Paving with asphaltic concrete on concrete 5 blocks Cahaba Rd., 20 ft., with bitulithic on concrete 5 blocks 7th Ave., North, 30 ft., to Southern Roads Co., Amer. Trust Bldg., $12,584 and $21,098 respectively; with sheet asphalt on concrete 7 blocks 14th St. North, 30 ft., to Dunn Constr. Co., Lincoln Bldg., $28,964; paving between street car tracks on 7th Ave. N. to Birmingham Railway Light & Power Co., 1st Ave., $16,315.

Ala., Fairfield—Paving with tarvia 15 blocks Parkway, 30 ft., to Independent Paving Co., Amer. Trust Bldg., Birmingham, $30,000. Noted Feb. 28.

Miss., Bay St. Louis—Improving 11.931 mi. Federal Aid Project 159, 99,392 cu.yd. borrow and 3,363 cu.yd. common excav., 28,000 cu.yd. gravel 1 mi. haul, 166,080 units gravel ½ mi. overhaul, bridges over 20 ft. span include 11,200 lb. reinforcing, etc., to S. B. Boyd, Columbia, $96,380. Noted Feb. 14.

O., Akron — W. F. Peters, dir. Pub. Serv., to V. Olson, 501 Herberich Bldg., repaving South Arlington St., asphalt, $30,265; engrs. est. $35,000; to T. E. McShaffrey Constr. Co., 171 South Forge St., improving Chalker St., asphalt, $30,000, $35,000, Wildwood and Stadelman Aves., asphalt, $67,066, $75.000 Emmerling Ave. and Andrus St., asphalt, $44,300, $50,000; to Columbus Asphalt Paving Co., 304 Buckeye Bldg., improving Aqueduct St., $29,029, $35,000, Big Falls Ave., $36,085, $40,000. Noted Feb. 21.

O., Niles — Paving more than a mile stretch between car tracks on Robbins Ave., to J. De Jute, Niles, $75,000. Noted Mar. 29, 1923.

O., Steubenville—Jefferson Co. macadam resurfacing 7.7 mi. Rayland-Dillonvale Rd., also 8.3 mi. Richmond-Knoxville Rd., to H. F. Dougherty, Steubenville, $35,838 and $49,210 respectively. Noted Feb. 21.

Minn., New Prague—Paving, curbing and guttering on 22 blocks, to Larson Constr. Co., Albert Lea, $2.58 per sq.yd. Noted Feb. 21.

Kan., Marysville—Paving, etc., 5,600 ft. Hilcrest Court, 5th, 9th, 10th, 13th, 14th, 15th and Center Sts., 14,700 cu.yd. excav., 24,920 sq.yd. brick on concrete, 13,000 ft concrete curb and gutter, 19 manholes, 50 catchbasins, 7,800 lin.ft. 12- to 24-in. drainage pipe, to J. Stanton & Son, Independence, Kan., $113,789.

Neb., Chadron—Paving, curbing and guttering 30,000 sq.yd. various streets, to Roberts Constr. Co., 404-405 First Natl. Bank Bldg., Lincoln, $109,593. Noted Feb. 7.

Wyoming—State Hy. Comn., Cheyenne, Federal Aid Project 64, grading 32.8 mi. 24 ft., and 4 timber bridges on Casper-Rawlins Rd., Carbon Co., to Sharrock & Purcel, Casper, $54,745; Federal Aid Project 143, grading and surfacing 5.84 mi. Buffalo-Sheridan Rd., Johnson Co., to C. Waegele, Ucross. $50,494; Federal Aid Project 155, grading 7.47 mi. Moorcroft-Carlisle Rd., 24 ft., to Wickham Bros. & Schwieger, Billings, Mont., $58,601. Noted Feb. 28.

Wyo., Cheyenne—Improving 15 blocks, Dist. 5, Pershing Heights, grading, curbing, paving, asphalt on concrete base, to A. H Reed Co., Cheyenne, $94 372. Noted Feb. 21

Streets and Roads (Continued)

Mo., St. Louis—Bd. Pub. Wks., 208 City Hall, to Webb-Kunze Constr. Co., 5927 Fyler Ave., granite curbing, grading and paving 6,016 sq.yd. Garrison St. $36,934, engrs. est. $37,300, 9,195 sq.yd. Laclede St. $65,917, $69,300, 2,260 sq.yd. Maffitt St. $19,678, $18,800, 4,640 sq.yd. Sacramento St. $29,612, $29,800, 4,475 sq.yd. Stoddard St. $27,612, $27,700, all above asphalt on concrete base.; to Granite Bituminous Paving Co., Ry. Exch. Bldg., improving 11,550 sq.yd. Kossuth St. $59,487, $59,200, 1,550 sq.yd. Reber Pl. $9,657, $9,200, both warrenite on concrete 11,500 sq.yd. Loughborough St., bitulithic on concrete, $66,848, $68,500; to Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., improving 14,380 sq.yd. Meramec St., willite on concrete, $82,927, $86,800, resurfacing 8,770 sq.yd. Pendleton St., willite on old bitulithic, $23,436, $27,500; to Eyermann Constr. Co., 1216 South Grand Blvd., paving seven 15 ft. alleys, 7,305 sq.yd., $19,086, also to Skrainka Constr. Co., Security Bldg., 5 alleys, 7,430 sq.yd. $20,335. Noted Feb. 28.

Tex., Ballinger — Runnels Co., grading, etc., 9.36 mi. State Highway 30, Federal Aid Project 410, to Tibbetts Constr. Co., 209½ West 8th St., Ft. Worth, $54,501. Noted Mar. 6.

Tex., Dallas—Dallas Co., bituminous concrete paving 41,152 sq.yd. Prospect, Lamar, Greenville, McMillan, Allen, Gertrude and McKinney Sts., to Fuller Constr. Co., Southland Life Bldg., $163,321; paving with willite asphaltic concrete 24,102 sq.yd. Ballard, Garland, Forney and Terry Sts., to Smith Bros., Amer. Exch. Bank Bldg., $88,610.

Tex., Electra—Paving 50,900 sq.yd. various streets, 3 in. vitr. brick on 5 in. concrete, 24,200 cu.yd. excav., 32,000 ft. 8 in. curb and gutter, to Jordan Paving Co., Plainview, $225,374. Noted Feb. 14.

Tex., Laredo — Webb Co., improving roads, to F. P. McElwrath, Corsicana, widening present gravel from 15 to 18 ft. and constructing thereon 16 ft. x 2½ in. asphalt macadam wearing surfacing 8.75 mi. State Highway 2, Sect. C, Federal Aid Project 165, $67,031, engrs. est. $73,250, 9.88 mi. State Highway 2, Sect. D, Federal Aid Project 165, $75,390, engrs. est. $83,118; 6.5 mi. State Highway 2, Sect. A, Federal Aid Project 165, $51,463, engrs. est. $50,195, 8.14 mi. State Highway 2, Sect. B, Federal Aid Project 165, $62,740, engrs. est. $62,962. Noted Feb. 21.

Okla., Comanche—Grading and paving 4 blocks Oak St., 12,600 sq.yd. 7-in. concrete, 1,200 lin.ft. curbing, 4,200 cu.yd. earth and 60 cu.yd. rock excav., to S. O. Maxey & Co., 510 North 14th St., Durant, concrete $2.68 per sq.yd., earth excav. $0.55 per cu.yd., curbing $0.60 per lin.ft., total $42,850. Noted Feb. 28.

Okla., Oklahoma City—Grading and paving streets, 5,700 sq.yd. 1½ in. concrete, to Western Paving Co., Tradesmen Natl. Bank Bldg., $53,039. Noted Jan. 24.

Colorado—State Hy. Dept., Denver, concrete paving 1.8 mi. Federal Aid Project 256-B, Logan Co., to W. F. Pigg & Son, Engineers Bldg., Denver, $53,703; grading and gravel surfacing 6.5 mi. Federal Aid Project 253-A, Routt Co., to Northwestern Constr. Co., Craig, $126,375. Noted Feb. 21.

Oregon—State Hy. Dept., Salem, regrading and gravel surfacing 6.2 mi. Glasgow Sect. Roosevelt Highway, 18 ft., Coos Co., to J. Hakeson, Oakland, Calif., $72,198; broken stone surfacing 10.24 mi. Crater Lake Highway, 18 ft., Jackson Co., to Dunn & Baker, Hornbrook, Calif., $61,659 grading 6.74 mi. and broken stone surfacing 7 mi. Klamath Falls-Lake View Highway, Klamath Co., to Klamath Co. Constr. Co., Klamath Falls, $93,788; grading 2.64 mi. and broken stone surfacing 5.1 mi. Oregon-Washington Highway, Umatilla Co., to J. Crick, LaGrand, $36,383.

California—State Hy. Comn., Sacramento, improving highway between Half Moon Bay Rd. and Kings Mountain Rd., San Mateo Co., 6.4 mi. grading and surfacing with crushed gravel or broken stone, to J. P. Holland, 540 Brannon St., San Francisco, $181,386, engrs. est. $178,648. Noted Feb. 21.

Calif., Bakersfield — Kern Co., Rd. Dist. Impvt 25, resurfacing with 3 to 5 in. asphaltic concrete 38 mi. various highways and constructing 3 mi. 6 in. asphaltic concrete in 2 courses to California Constr. Co., 58 2nd St., San Francisco, $840,090. Noted Feb. 28.

Calif., Colusa — Colusa Co., Grimes-Colusa Rd., grading 5.65 mi., incl. subgrading, 11,800 cu.yd. unclassified excav., 7,600 lin.ft. subgrading, 9,243 cu.yd. willite plastic composition pavement, also Princeton-Colusa Rd., grading 12.36 mi., incl. subgrading, 26,600 cu.yd. unclassified excav., 3,900 lin.ft. subgrading, 17,078 cu.yd. willite plastic composition pavement, to V. R. Dennis Constr. Co., Bryte Bldg., San Francisco, $129,975 and $225,777 respectively; Grimes-Arbuckle Rd., grading 6.05 mi. incl. subgrading; 17,400 cu.yd. unclassified excav., subgrading, 7,887 cu.yd. asphaltic concrete, to J. E. Johnston, Savings Loan Bank Bldg., Stockton, $110,999. Noted Dec. 20.

Calif., Pittsburgh—Improving Railroad Ave., to Hutchinson Co., Hutchinson Bldg., Oakland, 93,565 sq.ft. of 6 in. concrete $0.21, 3,895 sq.ft. concrete curb $0.50, 3,555 cu.yd. grading $1.20. Noted Mar. 6.

Calif., Los Angeles—Improving Ave. 52 between Coringa St. and point 1,160 ft. north, to J. A. Mathews, 1230 North Olive Dr., 29,898 sq.ft. oil and roll $0.07, 2,300 lin.ft. light curb $0.55, 11,500 sq.ft. Walks $0.20, 4,600 sq.ft. gutter $0.30. Noted Jan. 31.

Calif., San Diego — Bd. Supervs. San Diego Co., paving 5 mi. Ramona Highway, 18 ft., 3 and 7 in. cement concrete, to E. P. Ford, East San Diego (Branch of San Diego), $131,375.

Calif., Tulare—Improving various streets, incl. 9,507 sq.ft. 6 in. concrete, 142,435 sq. ft. 5 in. concrete, 24,000 sq.ft. 4 in. concrete alley pavement, 74,390 sq.ft. 4 in. street pavement, 21,093 sq.ft. 4 in. cement walks, 6,916 lin.ft. cement concrete curb, etc., to Valley Paving & Constr. Co., 113 North Court St., Visalia, $66,283. Noted Feb. 21.

Que., Montreal—Will construct 2,625 ft. asphalt on St. Hubert St., 40 ft., $25,000, 900 ft. macadam, Palin St., 34 ft., $10,752, 1,153 ft. macadam, St. Augustine St., 30 ft., $12,369 and 700 ft. macadam, St. Emelie St., 27 ft., $7,119, by day labor. E. Gauthier, asst. city clk.

Que., Montreal — Will construct 19,567 ft. asphalt pavements on various streets and avenues $278,738, and 52,820 ft. concrete sidewalks, $85,898, by day labor. E. Gauthier, asst. city clk.

Ont., Plantagenet—Prescott and Russell Counties, 6 mi. gravel and macadam pavement to Clouthier & Grenon, Casselman, Maxwell & Mills, L'Original, and Denis & Mooney, Vankleek Hill. Total est. $55,000.

Industrial Works

PROPOSED WORK

Mass., Westboro — Factory — Westboro Weaving Co., Milk St., having plans prepared 1 story and basement, 50 x 215 ft., brick and steel, plain foundation, Milk St. $60,000. Architect's name withheld.

Conn., Georgetown—Wire Mill—Gilbert & Bennett Co., had plans prepared by Greenwood & Noerr, archts. and engrs., 847 Main St., Hartford, 3 story, 48 x 110 ft. rein.-con. mill, 2 story, 25 x 63 ft. rein.-con. wing, and 1 story, 30 x 33 ft. brick substation, $80,000.

N. Y., Syracuse — Lighting Plant — See "Unclassified."

Pa., Altoona—Gasoline Station—Gulf Refining Co., Hollidaysburg, plans 1 story and basement, 100 x 100 ft. rein.-con. and steel, Eldorado and 6th Aves., here. $150,000.

Pa., Erie—Factory—Erie Steam Shovel Co., M. Armstrong, mgr., had plans prepared by Osborne Eng. Co., 7016 Euclid Ave., Cleveland, O., 1 story, 200 x 300 ft., brick and steel. $100,000.

Pa., Harrisburg—Plant—Air Reduction Co. of America, 342 Madison Ave., New York City, soon takes bids rein.-con., brick and steel, plain foundation. $300,000. Private plans.

Pa., Phila.—Substations—Phila. Electric Co., 10th and Chestnut Sts., having plans prepared by J. T. Windrim, Commonwealth Bldg., 2 story and basement, 57 x 60 ft., Main and Green Sts., Manayunk, and 2 story and basement, 57 x 59 ft., 6th and Federal Sts., both brick and steel, plain foundations.

Pa., Sharon—Plant—Westinghouse Electric & Mfg. Co., East Pittsburgh, having plans prepared by B. H. Prack, Keystone Bldg., Pittsburgh, 1 and 4 story, 145 x 1,025 ft., 92 x 650 ft., and 80 x 352 ft. brick and steel additions to factory. $1,000,000.

Fla., West Palm Beach—Gas Plant—R. B. Wagner and associates, 1409 Florida Ave., plan to rebuild, extend and convert old plant into high pressure system. $75,000.

Ala., Birmingham—Acetylene Plant—Air Reduction Co. of America, 342 Madison Ave., New York City, soon takes bids rein.-con., brick and steel, plain foundation, here. $300,000. Private plans.

Ky., Henderson—Mill—T. Baskett Grain Co. plans flour mill addition, 2nd St. and Illinois Central R.R. tracks. To exceed $40,000. T. Baskett, pres.

Ky., Whitesburg—Mill—Coeburn Lumber Co. plans several mills east of here. $40,000. L. F. Jackson, c/o owner, engr.

O., Cleveland—Factory—W. M. Hardie Co., 2260 East 69th St., plans brick, East 19th St. near Payne Ave. $60,000. W. M. Hardie, pres. Engineer and architect not selected.

O., Dayton — Baking Plant — Green & Green Co., Cincinnati and Concord Sts., plans 5 story and basement, 100 x 124 ft., rein.-con., plain foundation, Concord St. $450,000. Private plans.

O., East Palestine—Plant—F. A. Hoiles, Alliance, takes bids in spring 2 story, Martin Farm, near Darlington, Pa. $75,000.

O., Lima—Plant—Air Reduction Co. of America, 342 Madison Ave., New York City, soon takes bids acetylene plant, rein.-con. brick and steel, plain foundation, here. $300,000. Private plans.

O., Osborn —Plant — Wabash Portland Cement Co., 1824 Ford St., plans three 10 x 175 ft. rotary cement kilns, also warehouse to store 150,000 bbl. cement and other buildings, here. $1,750,000.

O., Zanesville—Factory—Mosaic Tile Co., Westbourne Ave., having plans prepared by Lockwood, Greene & Co., Hanna Bldg., Cleveland, 3 story and basement, 80 x 150 ft., brick and rein.-con. $150,000.

Ind., Bloomington — Power Plant — Showers Bros. plan central steam power plant at factory. $400,000 incl. equipment.

Wis., Kewaunee — Factory — Leyse Aluminum Co. plans 2 story, brick addition, plain foundation. $40,000. Engineer and architect not selected.

Wis., Menomonie—Creamery—New Hudson Road Creamery Co., C. Oberle, secy., having plans prepared 2 story, 40 x 80 ft., rein.-con. and brick, plain foundation. Private plans.

Wis., Milwaukee—Plant—Dunning Heating Supply Co., 131 Reed St., plans 2 story, 98 x 200 ft., brick and concrete, plain foundation, 40th Ave. Engineer and architect not selected.

Wis., Oshkosh—Factory—Gould Mfg. Co. plans 2 story, 80 x 174 ft., brick, rein.-con. and steel, plain foundation. $100,000. Engineer and architect not selected.

Wis., Richland Center — Creamery — Farmers Co-operative Creamery, c/o O. Richards, plans 2 story, brick and tile, plain foundation. $50,000. Engineer and architect not selected.

Wis., Watertown—Shop—O. Biefield Co. 202 North Water St., plans 2 story, brick, rein.-con. and steel, plain foundation. $110,000. Engineer and architect not selected.

Wis., West Bend—Factory—Lockwood, Greene & Co., engrs., 38 South Dearborn St., Chicago, soon takes bids 2 story, 84 x 130 ft., brick and timber, plain foundation, for Amity Leather Products Co. $40,000-$50,000. Noted Feb. 28.

Minn., Winona—Plant, etc.—Wisconsin Light & Power Co., having plans prepared by Mead & Seastone, Journal Bldg., Madison, Wis., addition, brick and steel, to boiler plant. R. M. Howard, mgr.

Kan., Newton—Power Plant, etc.—City, having plans prepared by E. T. Archer & Co., engrs., 609 New England Bank Bldg., Kansas City, Mo., 1 story steam power plant, concrete smoke stack, 5 ton traveling crane, 49 ft. span, etc. $45,000.

N. D., Grand Forks—Plant—Apr. 1, to vote on $110,000 bonds for electric power and light plant. C. E. Evanson, city aud.

Mo., Springfield—Packing Plant—Banfield Bros. Meat Market, 1400 Clay Ave., having plans prepared by Heckenlively & Marks, 642 Landers Bldg., 2 story and basement, 105 x 156 ft., rein.-con. and brick. $300,000.

Tex., Akansas Pass—Refinery—See "Unclassified" under Texas.

Tex., Dallas—Factory—E. C. Palmer & Co., Lacy and Young Sts., had plans prepared and takes bids about Apr. 15, 4 story and basement, brick and concrete. $60,000. L. R. Whitson, Medical Arts Bldg., archt. Noted Jan. 3.

Tex., Leon Junction—Plant—Texas Calcium Arsenate & Lime Co., Amicable Bldg., Waco, making plans and will let contract in summer calcium arsenate and lime plant. Total cost $60,000 concrete foundations and excavation, let to E. E. Sandefer, Leon Junction. $20,000.

Tex., Lubbock — Power House — See "Buildings" under "Administration."

Tex., Port Neches — Ice Plant — Port Arthur Ice & Refrigeration Co., Port

Industrial Works (Continued)

Arthur, having plans prepared by York Eng. Co., engrs., Texas Ave. Houston, 20 ton ice plant. $45,000.

Okla., Altus—Light Plant—See "Waterworks."

Okla., Weleetka — Power Plant — Oklahoma Power Co., Okmulgee, having surveys made new 10,000 hp. steam turbine power plant here, with transmission lines to neighboring towns. $1,000,000. C. H. Kretz, Okmulgee, engr.

Wash., Longview—Plant—U. S. Hydro-Carbon Gas Co. plans plant on 40-acre site. $200,000. E. Munz, Longview, engr.

Calif., San Francisco—Laundry—Galland Laundry Co., Folsom and 8th Sts., having plans prepared by S. Heiman, 57 Post St., 2 story, rein.-con. addition to laundry. $42,000.

Calif., Santa Ana—Textile Plant—Cope Shaffer Co., 1240 South Main St., Los Angeles, plans textile plant, 10 units, on 10 acre site, here.

Ont., Riverside—Brewery—F. J. Kirsch, Riverside, plans 2 or 3 story, frame or brick, plain foundation. $150,000. Architect or engineer not selected.

Ont., Toronto—British Woolens, Ltd., 610 Canadian Pacific Ry. Bldg., having plans prepared by N. A. Armstrong, 7 King St. E., 3 story, concrete, brick and steel factory. $100,000 to $150,000.

BIDS DESIRED

N. J., Dunellen—Plant—Dunellen Ice Co. will build 2 story, 100 x 100 ft., rein.-con., brick and steel, plain foundation. Work will be done by separate contracts. Frank H. Quinby, 110 William St., New York City, archt. and engr.

N. J., Morris Plains—Boiler Plant—Apr. 2 (extended date) at office Commissioner Institutions & Agencies, West Hanover St., Trenton, new boiler plant complete at New Jersey State Hospital, here. A. B. Mills, State Bldg., Trenton, dir. div. architecture and construction. Noted Mar. 6.

Pa., Darlington—Plant—Darlington Clay Products Co., will build and award separate contracts four 1 story factory buildings, 40 x 76 ft., 36 x 76 ft., 38 x 80 ft. and 26 x 92 ft., brick and steel. $75,000. Private plans.

Pa., Phila.—Plant—D. Cini, 1507 South 13th St., will build 4 story and basement, 48 x 68 x 96 ft. brick and steel plant, plain foundation, 1126-1132 South 9th St. H. Cascia, archt., 1611 South 15th St., taking sub bids.

Pa., Pittsburgh—Mill—Dravo Contg. Co., Diamond Bldg., will build and award separate contracts 1 story, 40 ft. high, 80 x 277 ft. steel frame, Neville Island. $50,000. Private plans.

Pa., Pittsburgh — Warehouse — Jones & Laughlin Steel Corp., 3rd and Ross Sts., will build and award separate contracts 1 story, addition to warehouse, Mary St. $100,000. Steel erection to Pittsburgh Constr. Co., Diamond Bank Bldg.

Ky., Louisville—Factory—Mar. 31, by Nevin, Morgan & Wischmeyer, archts., Starks Bldg., 2 story, 39 x 108 ft., rein.-con. and brick, Frankfort and Bellaire Aves. for Kentucky Workshop for Adult Blind. $80,000. Noted Mar. 6.

Wis., Milwaukee — Plant — Kirchoff & Rose, archts., 210 Sycamore St., taking bids 5 story and basement, 92 x 140 ft., rein.-con. and brick, plain foundation, for Pittsburgh Plate Glass Co., 205 Lake St. Noted Jan. 10.

Kan., Salina—Mill—Robinson Milling Co. taking bids 6 concrete storage bins, 200,000 bu. capacity. $60,000. Contract for foundation piling work, to F. A. Whitney & Son, Kansas City, Mo.

CONTRACTS AWARDED

Conn., Waterbury — Publishing — Lockwood-Green & Co., 101 Park Ave., New York City, 4 story, 50 x 60 ft., rein.-con. and brick, plain foundation, here, for Waterbury American, Printers Court, to Clark Constr. Co., 168 Grand St. Archts. est. $165,000. Noted Dec. 6.

R. I., Providence—Factory—Foxon Co., Inc., 239 West Exchange St., 2 story, 65 x 100 ft., brick and steel, plain foundation, West Park St., to E. Turgeon, 86 Weybosset St. Archts. est. $40,000.

N. J., Mays Landing—Mill—Mays Landing Water Power Co., 3 story, 138 x 242 ft. cotton mill, rein.-con., to Morton C. Tuttle Co., 862 Park Sq. Bldg., Boston, Mass.

Pa., Phila.—Shop—J. T. Windrim, archt., Commonwealth Trust Bldg., 2 story, 60 x 101 ft. brick and steel, plain foundation, 26th and Christian Sts., to F. N. Harris & Co., 520 Parrish St., $100,000, for Phila. Electric Co., 10th and Chestnut Sts.

Md., Baltimore — Substation — Consolidated Gas, Electric Light & Power Co., Constitution and Front Sts., will build 2 story, 75 x 85 x 92 ft., brick, plain foundation, 409-19 Tyson St., by day labor. $175,000. Private plans. Noted Jan. 17.

Ga., Columbus—Warehouse—Central of Georgia Ry., 233 West Broad St., Savannah, warehouse on 13th St., here, to G. B. Swift Contg. Co., 189 West Madison Ave., Chicago. Engrs. est. $75,000.

Ala., Lanett—Mills—Lanett Cotton Mills, 1 story and basement, 80 x 296 ft., general contract to Gallivan Building Co., Arlington Ave., Greenville, S. C.

Tenn., Chattanooga—Factory—Hardwick Stove Co., 1 story, 80 x 200 ft. addition, to Austin Co., 16112 Euclid Ave., Cleveland, O. Est. cost $75,000.

Tenn., Cleveland — Mill — Cleveland Woolen Mills Co. will build 4 story, 65 x 150 ft., brick and steel addition, by own forces under supervision of W. H. Sears, archt., James Bldg., Chattanooga. Est. cost $150,000.

O., Cleveland—Factory—Cleveland Wire Cloth & Mfg. Co., 3573 East 78th St., 2 story (4 bays) 16 x 64 ft. each brick and timber additions, to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $50,000.

Ill., Mt. Vernon—Plant—Mt. Vernon Car Mfg. Co., 1 story, 200 x 260 ft. addition, to Hughes-Foulkrod Co., Oliver Bldg., Pittsburgh, Pa. Archts. est. $150,000. Noted Jan. 31.

Wis., Milwaukee — Laundry — Building Finance & Constr. Co., 756 12th St., will build 1 and 2 story and basement, 96 x 120 ft., brick and timber, plain foundation, by day labor. $60,000. Private plans.

Kan., Concordia—Plant—Metz Packing Co., 2 story and basement, 50 x 70 ft., general contract to W. T. Short & Son, Concordia. Private plans.

Kan., Gypsum—Mill—Teichgraeber Milling Co. 3 bin elevator and modern rein.-con., to Eberhardt Constr. Co., Salina. Est. cost $40,000.

Kan., Wichita—Factory—Coleman Lamp Co., North St. and Francis Ave., 2 story and basement, 60 x 90 ft., brick and stone addition, to J. M. Denny, 1451 North Lawrence St. Est. cost $65,000. Noted Feb. 28.

Kan., Wichita — Factory — Hays Equipment Co., will build 1 story and basement, 100 x 229 ft., brick, steel and concrete, East Gilbert St., by day labor.

Calif., San Francisco—Laundry—Standard Laundry Co., 3004 16th St., 2 story, 75 x 245 ft., brick, Harrison St., to J. S. Malloch, 180 Jessie St., $78,000.

Buildings

PROPOSED WORK

R. I., Olneyville—Church—Evangelistic Church having plans prepared by Woodbury & Stuart, 581 Boylston St., Boston, 2 story, brick and stone. $250,000. J. H. Slutz, pastor. G. W. Aminson, chn. building com. Noted Nov. 29.

R. I., Providence—Church—St. Adelberts Parish, P. Switala, pastor, Atwell Ave., had plans prepared by H. F. Ludorf, 122 Main St., New Britain, Conn., 1 story and tower, brick, terra cotta and artificial stone, plain foundation, Atwell Ave. $175,000. Noted Jan. 17.

R. I., Providence—Library—Providence Pub. Library Comn. having plans prepared by Clarke & Howe, 1208 Turks Head Bldg., 3 story and basement, 43 x 190 ft., brick and limestone addition, Washington St. $200,000-$300,000.

R. I., Warwick — High School — Special Building Comn. plans 3 story, fireproof. $200,000-$250,000. Engineer and architect not selected.

Conn., New Haven — Apartment and Garage—I. Alpert, 52 Elliot St., having plans prepared by J. Weinstein, Metropolitan Bldg., Chapel St., 3 story and basement, brick, plain foundation, St. Ronan St. $150,000.

N. Y., Akron—School—Bd. Educ. plans rein.-con. and brick. $375,000.

N. Y., College Point — School — Fidelis Roman Catholic Church, c/o F. J. Berhenbach, archt. and engr., 260 Graham Ave., Brooklyn, soon takes bids 3 story, brick, steel and stone, plain foundation, High St., here. $150,000. A. Schumack, pastor.

N. Y., Lowville—Temple—Building Com. Lowville Lodge F. & A. M., and Chapter R. A. M. plans new temple. $175,000-$200,000. Address S. B. Richardson, Dayan St. Engineer and architect not selected.

N. Y., New York — Apartment — A. Bricken, c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., having plans prepared 14 story, brick, steel and stone, plain foundation, 1115 Park Ave. $2,000,000.

N. Y., New York—Apartment—Goldner & Goldner, archts. and engrs., 46 West 42nd St., preparing plans 6 story, brick, steel and stone, plain foundation, 165th St. and Ft. Washington Ave. $300,000. Owner's name withheld.

N. Y., New York—Garage—Bloomingdale Bros., Lexington Ave. and 59th St., soon takes bids altering and building rein.-con. and brick addition, plain foundation, 410 East 54th St. $400,000. E. H. Janes, 70 East 45th St., archt. and engr.

N. Y., Troy—Dormitory—Emma Willard School having plans prepared by M. F. Cummings & Son, archts. and engrs., State Bank Bldg., 3 story, 60 x 300 ft., steel and stone addition, plain foundation, Pawling St. $450,000.

N. Y., Queens (branch of Jamaica)—School—Bd. Educ., 500 Park Ave., New York, had plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, 4 story, brick, steel and stone, plain foundation, Larrimore Ave., here. $650,000.

N. J., Jersey City—Normal School—State Bd. Educ., Trenton, plans normal school, here. $900,000. J. Enright, pres. Engineer and architect not selected.

Pa., Butler — Bank and Office — Butler Savings & Trust Co., had plans prepared by Mowbray & Uffinger, 221 West 57th St., New York City, 8 story and basement, 60 x 120 ft., brick, steel and concrete $350,000.

Pa., Phila.—Exchange—Bell Telephone Co., 17th St. and Parkway, having plans prepared by J. T. Windrim, Commonwealth Bldg., 3 story and basement, brick and steel, plain foundation, Ridge and Roxborough Aves.

Md., Baltimore—Bath and Field House—Bd. Park Comrs., Gay and Lexington Sts., rejected bids 1 story, 87 x 160 ft., brick, plain foundation, Druid Hill Park. Noted Mar. 6.

Md., Towson — Administration and Dormitory—Bd. Trustees Kelso Home, Charles St. and Mt. Vernon Pl., having plans prepared by O. E. Adams, Equitable Bldg., 2 story and attic, 45 x 122 ft., brick, plain foundation, Chesapeake Ave. $150,000.

N. C., Greensboro—Hotel—J. E. Latham having plans prepared by G. Lloyd Preacher & Co., Healey Bldg., Atlanta, Ga.; hotel containing 250 rooms. $1,000,000.

S. C., Columbia — Office—State Sinking Fund Comn., plans office building. $500,000. M. J. Miller, secy.

Fla., Hialeah—Hotel—G. A. McKnight, 414 Ferry Ave., Niagara Falls, plans 275 x 300 ft. hotel, Palm Ave., here. $300,000.

Miss., LeFlore—School—Bd. Educ. having plans prepared by E. J. Hull, Daniel Bldg., Jackson, school. $200,000.

Tenn., Memphis—Store and Office—P. G. Meborn, having plans prepared by Jones & Furbringer, Porter Bldg., 2 story and basement, 75 x 108 ft., brick, stone and terra cotta, South 3rd and Monroe Sts. $150,000.

Ky., Dayton—School—Bd. Educ. having plans prepared by C. C. and E. A. Weber, 1408 Ingalls Bldg., Cincinnati, O., and soon takes bids high school, 8th and Walnut Sts. $160,000. Noted Feb. 21.

Ky., Lebanon—Church—United Presbyterian Church having plans prepared by Nevin, Morgan & Wischmeyer, Starks Bldg., Louisville, stone church and 3 story wing for Sunday School. $150,000. Noted Oct. 18.

Ky., Louisville—Store and Office—C. J. Stinson, archt. and promoter, Inter-Southern Bldg., takes bids about Apr. 20, 8 story, 75 x 148 ft., 3rd and Chestnut Sts. $500,000. Noted Feb. 21.

O., Cleveland—Apartment—J. T. Fritsche, 552 Leader-News Bldg., had plans prepared 4 story and basement, 106 x 148 ft., brick, plain foundation, 11115 Lake Ave. $200,000. Private plans.

O., Cleveland—Apartment—N. Nudelman, 11113 Tuscora Ave., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story and basement, brick, Lakeview Rd. $150,000.

O., Cleveland — Clubhouse — Cleveland Columbian Building Co., c/o W. J. Birmingham, chn., 1119 Superior Ave., having plans prepared by M. C. Rosseau, Bulkley Bldg., 2 story and basement, brick and steel, 2612 Prospect Ave. $150,000.

O., Cleveland—Dance Hall—I. Margolin, 2496 Derbyshire Rd., Cleveland Heights, having plans prepared by M. Weis, archt., 617 Union Bldg., and I. J. Goldstone, consult. archt., Ohio Bldg., Akron, 1 story,

Buildings (Continued)

91 x 300 ft., brick and steel, 3629 Euclid Ave., here. $200,000.

O., Cleveland Heights (Warrensville, P. O.)—Commercial and Apartment—Heights Masonic Temple Building Co., c/o F. W. Striebinger, archt., 1900 Euclid Ave., Cleveland, having plans prepared 3 story and basement, 65 x 144 ft., brick and timber, Mayfield and Lee Rds., here. $150,000.

O., Dayton—Apartment—Howes Constr. Co., 1003 Amer. Bldg., plans 2 story and basement, 35 x 120 ft., brick and rein.-con., plain foundation, Cambridge Ave. $150,000. Private plans.

O., Dayton—Y. M. C. A. plans 6 story and basement, 100 x 220 ft., rein.-con. and brick addition, plain foundation, 3rd St. $850,000. H. C. Dickson, secy. Private plans.

O., Delaware—Chemistry—Ohio Wesleyan University, c/o B. E. Selly, chn. building comn., plans 2 or 3 story and basement, brick and steel. $200,000. H. K. Ferguson Co., 4900 Euclid Ave., Cleveland, archts.

O., East Cleveland (Cleveland P. O.)—Church—St. Philomenas Roman Catholic Church having plans prepared by F. C. Warner, 767 Hippodrome Bldg., Cleveland, 1 story, stone and steel, Euclid and Wellesley Aves. $200,000. J. F. Smith, pastor. Noted Jan. 31.

O., Hamilton—Church—Trustees First Methodist Episcopal Church plans rebuilding stone church, Ludlow St., recently destroyed by fire. $200,000. J. H. Dennye, St. Dayton St., pastor. Engineer and architect not selected.

O., Lima—Hotel—Amalgamated Realty Co. plans 6 story, 150 room hotel, North Main St. $500,000.

O., Parma (Cleveland P. O.)—Schools—Bd. Educ. having plans prepared by C. W. Bates, 77 12th St., Wheeling, W. Va., 1 story, 8 room, top additions to 3 buildings, brick, steel and concrete. $200,000.

Ind., Logansport—City Hall—Bd. Pub. Wks. plans 2 story. $175,000.

Mich., Detroit—Apartment—J. I. Weinberg, archt., 401 Congress Bldg., preparing plans 3 story and basement, 95 x 96 ft. brick and steel, plain foundation, 14th and Elmhurst Sts. $200,000. Owners name withheld.

Mich., Detroit—Apartment—J. W. Wilson, archt., 17 Campus Martius, preparing plans 7 story and basement, 200 x 240 ft. rein.-con., brick and stone, plain foundation, Woodward Ave. Owners name withheld.

Mich., Detroit—Church—Detroit Baptist Union, 325 Ford Bldg., having plans prepared by Lane, Davenport & Peterson, Charlevoix Bldg., 2 story, 100 x 150 ft. brick and steel, plain foundation, Western St. $150,000.

Mich., Detroit—Church, School and Parish Hall—Diocese of Michigan, M. J. Gallagher, bishop, Washington Blvd., plans 2 story and basement, rein.-con. and brick, plain foundation, Wyoming and Schoolcraft Aves. $300,000. Engineer and architect not selected.

Mich., Detroit—School—University of Detroit, East Jefferson Ave., having plans prepared by B. C. Wetzel & Co., 2317 Dime Bank Bldg., 2 story and basement, 174 x 220 ft. rein.-con., brick, steel and stone, plain foundation, University Center. $400,000.

Mich., Detroit—Theatre—Imperial Building Corp., 13311 Jefferson Ave., had plans prepared by C. W. Brandt, 1114 Kresge Bldg., 3 story and basement, 140 x 160 ft. rein.-con., brick and steel, plain foundation, Gratiot and May Aves.

Mich., Detroit—Theatre and Office—J. H. Kunsky, 501 Madison Theatre Bldg., having plans prepared by Crane & Kiehler, 542 Griswold St., 10 story and basement, 110 x 265 ft. rein.-con., brick, steel and terra cotta, plain foundation, Woodward and Elizabeth Sts. $2,000,000.

Mich., Detroit—Warehouse—Natl. Terminals Corp., 930 Penobscot Bldg., having plans prepared by Murphy & Burns, 3456 Cass Ave., 1 story, 30 x 600 ft. automobile loading shed, and 3 story 100 x 600 ft. and 100 x 500 ft. rein.-con. and brick warehouses, plain foundations, Lonyo Rd. $1,650,000.

Mich., Farmington—Dormitory, etc.—Ford Republic School for Boys, having plans prepared by Stratton & Snyder, 1103 Union Trust Bldg., Detroit, two 2 story, 62 x 110 ft. dormitories with detached powerhouse and laundry, also 50 x 93 ft. dining room and service building, rein.-con. brick and steel, plain foundation.

Mich., Menominee—Store—Wilson-Henes Co., 615 Main St., plans to rebuild store recently destroyed by fire. $150,000 to $200,000. Engineer or architect not selected.

Ill., Galesburg—Church—First Lutheran Church, c/o C. E. Bergster, pastor, 136 North Seminary St., soon takes bids 2 story and basement, 125 x 125 ft., brick and stone church and Sunday school, Seminary and Walter Sts. $150,000. W. C. Wright, 721 North Michigan St., Chicago, archt.

Wis., Fond du Lac—Hospital—St. Agnes Hospital, 390 East Division St., soon takes bids additional unit, 3 story and basement, brick and concrete, plain foundation. $150,000. R. E. Schmidt, Gardner & Martin, 104 South Michigan Ave., Chicago, archts.

Wis., Kimberly—High and Grade School—School Dist. 3, M. A. Kettenhaven, clk., soon takes bids 2 story and basement, 70 x 147 ft., brick, tile and concrete, plain foundation. $150,000. Oppenahmer & Obel, Nicollet Bldg., Green Bay, archts. Noted Dec. 6.

Wis., Madison—Garage—J. Peterson, 102 South Orchard St., having plans prepared 6 story, 66 x 122 ft., garage and repair shop, brick, rein.-con. and steel plain foundation, Fairchild St. $150,000. Noted Jan. 17.

Wis., Milwaukee—Bank and Office—North Ave. State Bank, 3506 North Ave., plans 3 or 4 story, brick, concrete and stone, plain foundation. $200,000. Engineer and architect not selected.

Wis., Milwaukee—Garage—Tobin-Sutton Co., 636 Lincoln Ave., having plans prepared by Thoringer & Bruecker, 496 Cramer St., 2 story and basement, 62 x 200 ft., brick, concrete and steel, plain foundation, Windlake Ave. $150,000.

Wis., Rhinelander—High School—School Bd. rejected bids 2 story and basement, brick and concrete, plain foundation, (1st unit). Will readvertise. Smith, Reynolds & Brandt, Dempsey Bldg., Manitowoc, archts. Noted Jan. 31.

Wis., Wisconsin Rapids—Shop—Nash Hardware Co., 2nd St. and Grand Ave., plans 2 story, 86 x 110 ft., brick, rein.-con. and steel, plain foundation. $80,000. Engineer and architect not selected.

Ia., Hamburg—School—Bd. Educ. having plans prepared by Dougher Rich & Woodburn, Des Moines, 2 story and basement, rein.-con., brick, tile and stone. $150,000 bonds voted.

Ia., Tipton—School—Voted $265,000 bonds for school. Thomas, McLennan & Thomas, 527 West 17th St., Des Moines, archts. Noted Feb. 14.

Minn., Plainview—School—Bd. Educ. having plans prepared 2 story and basement, rein.-con., brick and tile. $160,000. G. Pass & Son, Mankato, archts.

Kan., Fort Riley—Camp—Kansas National Guard, R. Neill Kahn, adj. gen., Topeka, making preliminary plans 1 and 2 story, sheet iron and timber, building, concrete foundations, on Pawnee Plats, near Camp Funston. Private plans.

Kan., Ft. Scott—Temple—Joabert Lodge of Perfection soon takes bids rein.-con. and brick. $150,000. W. T. Schmitt, 1634 West 10th St., Oklahoma City, archt. Noted Mar. 6.

Kan., Great Bend—High School—Bd. Educ. having plans prepared by T. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 114 x 116 ft., rein.-con. and brick. Election in April $200,000 bonds.

Kan., Kansas City—Court House—Wyandotte Co. having plans prepared by L. R. Steel, Sioux City, Ia., for court house. $1,000,000. Noted Jan. 24.

Kan., Lawrence—Hotel—W. E. Simmons, Eldridge Hotel, takes bids about Apr. 1, 6 story and basement, 42 x 117 ft., rein.-con., brick and stone. $200,000. W. E. Hulse & Co., Stamey Hotel Bldg., archt. Noted Dec. 2.

Kan., Lawrence—Hotel—W. C. Hutson had plans prepared by W. E. Hulse & Co., Hutchinson, and soon takes bids Eldridge Hotel, 6 story and basement, 100 x 117 ft., rein.-con. and brick. $180,000.

Kan., Topeka—Office—Natl. Life Insurance Co., N. E. Bldg., plans 12 story and basement, 75 x 100 ft., 10th and Grand Sts. $500,000. Architect not selected.

Kan., Topeka—Office—National Reserve Life Insurance Co., 811 Kansas St., making preliminary plans 12 story and basement, rein.-con., brick, steel and stone, concrete piling foundation, 10th St. Private plans.

Kan., Topeka—Theatre—G. D. Moore, 811 Kansas St., making preliminary plans 4 story and basement, rein.-con., brick, stone and terra cotta, 10th St. $200,000. Private plans.

Kan., Wichita—Church and Office—Interdenominational Church having plans prepared by J. F. Burlie, 207 Union Natl. Bank Bldg., rein.-con. and brick. $250,000.

Neb., Omaha—Church—First Presbyterian Church, D. McLeod, pastor, First Natl. Bank Bldg., having preliminary plans prepared by C. W. Steinbaugh, Keeline Bldg., 2 story and basement, brick and stone. $200,000.

N. D., Bismarck—Cathedral—Holy Ghost Cathedral, V. Wehrle, bishop, soon takes bids 2 story, 96 x 192 ft. concrete and stone, plain foundation. $500,000. A. Dohmen, 68 Wisconsin St., Milwaukee, Wis., archt. Noted Jan. 31.

Mo., Cameron—Hotel—C. O. Porter, Cameron House, plans 4 story and basement, fireproof. $170,000. Private plans.

Mo., St. Louis—Apartment—J. M. Sprague, International Life Bldg., soon takes bids 7 story and basement, 90 x 125 ft., rein.-con., brick and stone, Pershing St. $225,000. R. L. Coose, 507 Wainwright Bldg., archt.

Mo., St. Louis—Store and Hall—Carpenters Dist. Council, 3024 Olive St., having preliminary plans prepared 4 story and basement, rein.-con., brick and stone, Grand Blvd. $200,000. Private plans.

Tex., Bryan—Church—First Baptist Church, c/o H. Beauchamp, had plans prepared by T. J. Galbraith, Slaughter Bldg., Dallas, 2 story and basement, 98 x 145 ft., brick and tile. $150,000.

Tex., Dallas—Apartment-Hotel—Maple Terrace Apartment Co., Adolphus Hotel, c/o J. B. Rucker, having plans prepared by A. Bossom, 680 5th Ave., New York, and Thomson & Swaine, Southwestern Life Bldg., 8 story and basement, 375 x 800 ft., brick, steel and concrete, Maple and Wolfe Sts. $1,000,000.

Tex., Dallas—Church, etc.—First Methodist Church, Ross and Harwood Sts., had revised plans prepared and taking bids 3 story and basement, 160 x 240 ft. church and parish house, brick, stone and concrete. $700,000. R. H. Hunt & Co., Southwestern Life Bldg., engr. and archt. Noted Aug. 2.

Tex., Dallas—Hotel—Dallas Hotel Co., Akard and Commerce Sts., (Owners Adolphus Hotel), having plans prepared by A. Bossom, 680 5th Ave., New York, 22 story and basement, 50 x 100 ft., brick, concrete and steel, annex to Adolphus Hotel, also 2 story arcade entrance on Main St. leading to new structure. $1,000,000.

Tex., Dallas—Hotel—O. Herold and associates, Stonleigh Court, having preliminary plans prepared 34 story and basement, 1,000 rooms, Commerce and Akard Sts. $4,000,000. Engineer and architect not announced.

Tex., Ft. Worth—Library—Texas Christian University, E. M. Waite, pres., takes bids Apr. 10, 2 story and basement, brick, stone and concrete. $150,000. W. G. Clarkson, First Natl. Bank Bldg., archt. Noted Dec. 27.

Tex., Lubbock—Administration, etc.—Texas Technological College, A. Caeter, chn. Bd. Regents, Star Telegram Bldg., Ft. Worth, having plans prepared and takes bids Mar. 20, administration and chemical buildings, power house and presidents home. $850,000. Sanguinet, Staats & Hedrick, First Natl. Bank Bldg., Ft. Worth, archts.

Tex., San Antonio—Bank and Office—Commercial Loan & Trust Co., 303 North St. Marys St., plans bank and office, Travis and St. Marys Sts. $150,000. Engineer and architect not announced.

Tex., San Antonio—Home—Knights of Pythias plan 3 story, brick. $250,000. W. H. Herring, San Antonio, chn. building com.

Tex., San Antonio—Office—San Antonio Builders Exch., 206 Bedell Bldg., having plans prepared by G. Willis and E. Jackson, Chandler Bldg., 9 story and roof garden, rein.-con., brick and stone, St. Marys and Pecan Sts. $190,000. Noted Feb. 21.

Okla., Muskogee—Young Men's Christian Assn., c/o J. W. Stafford, genl. secy., 1606 Boston St., making preliminary plans rein.-con., brick and stone. Will mature in late fall or spring of 1925. Private plans.

Okla., Oklahoma City—Hotel—G. A. Nichols, Inc., 115 North Harvey St., making preliminary plans 6 story and basement, 50 x 70 ft. and 50 x 80 ft., rein.-con., brick and stone. $400,000. Private plans. Work will be done by day labor.

Okla., Tulsa—Church—Second Presbyterian Church, c/o W. H. Murphy, Jr., pastor, 2116 East Archer St., plans church, $150,000.

Buildings (Continued)

Okla., Tulsa—Garage and Sales Room—C. Z. Wiley, 1201 South Boston St., plans 3 story and basement, 100 x 140 ft., brick and stone, 12th and Boston Sts.

Ore., Portland—Theatre—E. A. Miller, archt., Henry Bldg., preparing plans and takes bids about Apr. 1, 3 story, 125 x 145 ft., rein.-con., plain foundation, Union Ave. and Russell St., for W. A. Graeper, Union Ave. and Russell St. $150,000.

Calif., Long Beach—Schools—City having preliminary plans prepared by W. H. and J. C. Austin, associates, Detwiler Bldg., Los Angeles, senior high school; by Davies & Baume, Farmers & Merchants Bldg., junior high school; by H. A. Anderson, Palace Theatre Bldg., Long Beach, and Allison & Allison, associated, Hibernian Bldg., Los Angeles, grammar school. Each to exceed $150,000.

Calif., Los Angeles—Schools—Election June 3, to vote on $34,640,000 bonds, elementary schools $19,360,000, high schools $15,280,000.

Calif., Los Angeles—School—University of Southern California, 3551 University Ave., having plans prepared by J. and D. Parkinson, Title Insurance Bldg., 3 story and basement, brick, science building. $175,000.

Calif., Los Angeles—Office and Store—J. Toplitsky, H. W. Hellman Bldg., representing owners, plans fireproof on 150 x 150 ft. site, Flower and 8th Sts. To exceed $150,000.

Calif., Los Angeles—Store and Loft—Morgan-Walls-Clements, archts., Van Nuys Bldg., preparing plans 12 story and basement, 50 x 90 ft., rein.-con. and brick, Bway. between 9th and 10th. Owner's name withheld.

Calif., Los Angeles—Store and Office—Sun Realty Co., 1116 Los Angeles St., having preliminary plans prepared by Curlett & Beelman, Union Bank Bldg., 10 or 12 story and basement, 100 x 150 ft., steel frame, Flower and 7th Sts.

Calif., Los Angeles—Warehouse—Tooker Storage Co. having plans prepared by W. J. Saunders, Laughlin Bldg., 4 story and basement, 150 x 165 ft., rein.-con., 11th and Lemon Sts. $300,000.

Calif., Oakland—Bank and Office—Central Natl. Bank, 14th and Bway., having preliminary plans prepared by G. W. Kelham, Sharon Bldg., San Francisco, Class A. $1,000,000. Noted Nov. 1.

Calif., San Francisco — Garage — California Garage Syndicate, c/o J. L. Stewart, archt., Claus Spreckels Bldg., having plans prepared, 10 story, basement and sub-basement, 155 x 300 ft. Class A, 4th St. near Jessie St. $2,500,000.

Calif., Santa Ana—School—Santa Ana School Dist. plans to vote on $250,000 bonds for fireproof school to replace Roosevelt School.

Calif., Santa Monica — Schools — Santa Monica City School Dist. having preliminary plans prepared by Allison & Allison, Hibernian Bldg., Los Angeles, addition to Adams Junior High School, $100,000, and addition to main high school, $150,000.

Calif., Watts (Branch of Los Angeles)—Schools—Watts School Dist. plans to vote on $650,000 bonds for high schools.

Ont., London — Collegiates — Bd. Educ. having plans prepared by L. E. Carrothers, c/o owner, 2 new brick collegiates, one in southern section of city and one other in eastern section. $750,000.

Ont., Ottawa — Home — St. Patricks Orphans Home, Laurier Ave. W., takes bids in early spring, rein.-con. and brick addition, plain foundation, Gloucester St. $150,000. Architect not selected.

Ont., Port Arthur—Courthouse—Provincial Government, Parliament Bldg., Toronto, voted $220,000 for 2 or 3 story and basement, rein.-con., brick and steel, plain foundation, here. F. R. Heakes, Parliament Bldg., Toronto, archt.

Ont., Port Colborne—School—Bd. Educ. having plans prepared by N. A. Kearns, Welland, 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation. $150,000.

Ont., Toronto — School—Bd. Educ. soon takes bids 2 story and basement, 8 room addition to Harbord Collegiate, rein.-con., brick and steel, plain foundation. $150,000. C. Dyson, 155 College St., archt.

Ont., Woodstock — Hospital — Provincial Government, Parliament Bldg., Toronto, voted $150,000 for 2 story and basement, rein.-con., brick and steel addition to Ontario Hospital, here. F. R. Heakes, Parliament Bldg., Toronto, archt.

BIDS DESIRED

R. I., Pawtucket—Church—W. F. Fontaine, archt., Woonsocket, taking bids 1 story and basement, 132 x 170 ft., for St. Jean de Baptiste Church. $350,000. A. Groton, pastor. Noted Jan. 17.

N. Y., Astoria (Long Island City, P. O.)—School—Apr. 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 126, Van Alst Ave. from Lincoln to Carmelia Sts. extending through to Ely Ave., here, for Bd. Educ., 500 Park Ave., New York.

N. Y., Brooklyn—School—Mar. 25, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 28, (2nd part), southerly side of Fulton St. 200 ft. westerly from Howard Ave., for Bd. Educ., 500 Park Ave., New York. Noted Aug. 16.

N. Y., Brooklyn — Schools — Apr. 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 216, Ave. X from East 1st to West Sts.; P. S. 217, Newkirk Ave. from Westminster Rd. to Coney Island Ave.; P. S. 220, 9th Ave. from 48th to 49th Sts., for Bd. Educ., 500 Park Ave., New York.

N. Y., New York—Schools—Apr. 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 82, West 176th St. from Macombs Rd. to Harrison Ave., also P. S. 83, Rhinelander Ave. from Radcliffe to Bogart Aves., Bronx Boro, here, for Bd. Educ., 500 Park Ave. Noted Feb. 21.

N. Y., Ozone Park (Howard Beach, P. O.)—School—Mar. 25, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 96, Lincoln Ave. and Rockaway Rd., here, for Bd. Educ., 500 Park Ave., New York.

N. J., Newark—School—Mar. 27, by Bd. Educ., City Hall, Broad St., school for crippled children, Bloomfield Ave. and Ridge St. $168,000. J. Fred Cook, 9 Clinton St., archt.

Pa., Bloomsburg—Church and Sunday School—Mar. 21, by Trustees St. Matthews Lutheran Church, N. S. Wolf, pastor, 1 story and basement, 44 x 85 ft. and 2 story and basement, 56 x 101 ft., brick and stone, plain foundation, North Market St. $175,000. Ritter & Shay, North Amer. Bldg., Phila., archts.

Pa., Juniata—Church—Mar. 17, by J. W. Lees, pres. building com. of Presbyterian Church, 412 7th Ave., 2 story and basement, 100 x 120 ft. brick and stone, 7th Ave. $150,000. Hersh & Schollar, Commerce Bldg., Altoona, archts.

Pa., Mahanoy City—Theatre, Store and Office—Mar. 26, by Chamberlain Amusement Enterprise Inc., Shamokin, 3 story and basement, 70 x 161 ft., brick and steel, plain foundation, Main and Market Sts. $300,000. W. H. Lee, 1505 Race St., Phila., archt.

Pa., Phila.—Exchange—Mar. 15, by J. T. Windrim, archt., Commonwealth Bldg., 3 story and basement, 90 x 170 ft. brick and steel, plain foundation, Oak Lane, Broad St. and 65th Ave., for Bell Telephone Co., 17th St. and Parkway.

Pa., Upper Darby—Apartment and Store—W. L. Charr, archt., 149 South 4th St., Phila., taking bids on sub-contracts for 3 story and basement, 85 x 180 ft. brick and steel, plain foundation. Owner c/o architect.

Md., Baltimore — Hotel — Mar. 15, by Emerson Hotel, W. H. Parker, mgr., Calvert and Baltimore Sts., 16 story, 40 x 104 ft., brick and steel, plain foundation, Baltimore and Calvert Sts. $600,000. W. G. Beecher, 12 East Pleasant St., archt. Noted Nov. 29.

N. C., Greensboro—College—Mar. 25, by H. Barton, archt., Greensboro, 3 story, brick and limestone, for North Carolina College for Women. $200,000.

N. C., Wilson—Court House—Mar. 31, by Comrs. Wilson Co., 4 story and basement, 126 x 135 ft., court house and jail, concrete, steel and stone, Nash St. $400,000. F. A. Bishop, Petersburg, Va., archt. Noted Jan. 31.

O., Akron—City Hall—Apr. 1, by Bd. Control, 8 story and basement, South High St. at Bowery. $900,000.

O., Cleveland — Apartment — Atwater & Kaplan, 13807 St. Clair Ave., taking bids and open same about Mar. 21, 3 story and basement, 37 x 145 ft., brick and timber, 10662 Helena Ave. $165,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland Heights (Warrensville P. O.)—Apartment — M. Wolk., 10718 Earle Ave., Cleveland, taking bids and opens same about Mar. 21, 3 story and basement, 100 x 150 ft., brick and timber, Mayfield and Coventry Rds., here. $250,000. M. Weis, 617 Union Bldg., Cleveland, archt.

O., Dayton—Hospital—Mar. 20, by Bd. Trustees Miami Valley Hospital, Apple St., 3 story and basement, rein.-con. and brick addition, plain foundation. $500,000. Pretzinger & Musselman, 1155 Reibold Bldg., archts.

O., Lakewood — Apartment — Urban Realty Co., c/o M. Levine, 817 Guardian Bldg., Cleveland, taking bids 3 story and basement, 90 x 140 ft., brick, Lake and Cook Aves., here. $275,000. Braverman & Havermaet, Ulmer Bldg., Cleveland, archts. Noted Jan. 17.

Mich., Detroit—Apartment—C. D. Lundblad, archt., 206 New Telegraph Bldg., taking bids and opens same about Mar. 15, 4 story and basement, 86 x 104 ft. brick and steel, plain foundation, Fairview Ave., for W. A. Montgomery, 1602 Penobscot Bldg. $175,000.

Mich., Detroit—Hotel—Mar. 18, by F. O. Varney, archt., 1422 Washington Blvd., 8 story and basement, 90 x 150 ft. rein.-con., brick and steel, plain foundation, Alexandrine St., for B. Braver, 271 Hendrie St. $400,000.

Mich., Mt. Clemens—School—Mar. 19, by F. Newberry, secy. Bd. Educ., Dist. 3, 2 story and basement, 12 rooms, rein.-con., brick and steel, plain foundation, Mack Ave. and Defer Rd. $160,000. B. E. Mills, 1305 Kresge Bldg., Detroit, archt.

Ill., Evanston—Apartment—R. F. France, archt., 155 North Clark St., Chicago, taking bids 3 story, fireproof, 1135 Oak Ave., here. $150,000. Owner c/o archt.

Wis., Kenosha—High School—Mar. 21, by H. Bothe, archt., 25 North Ridge St., 2 story and basement, brick and concrete, plain foundation, for Evangelical Friedens Lutheran Congregation, C. Buenger, 65 Ridge St., pastor. $150,000. Noted Mar. 6.

Wis., La Crosse—Church—Mar. 26, by Merman & Skogstad, archts., 20 Linker Bldg., superstructure 2 story, 50 x 116 ft., brick and tile, for Trinity Evangelical Lutheran Congregation, S. Roth, pastor, 1122 Ferry St. $150,000. Foundation in. Noted Jan. 24.

Wis., Oshkosh—Temple—Apr. 1, by Masonic Executive Com., c/o F. A. Fuller, 50 West Polk St., 4 story and basement, 90 x 100 ft., brick, tile and concrete, plain foundation. $250,000. Auler & Jensen, F. R. A. Bldg., archts. Noted Feb. 21.

Wis., Whitewater—School—Apr. 7, by Bd. Normal Regents, W. Kettle, secy., Madison, 4 story and basement, 90 x 120 ft., brick, rein.-con. and steel addition, plain foundation, here. $250,000. A. Peabody, State Capitol, Madison, archt. Noted Jan. 24.

Minn., St. Paul—High School—Mar. 25, by H. W. Austin, city purch. agt., 3 story and basement, 150 x 250 ft. with 2 story wing, rein.-con., brick and tile, Albert St. and Pascal Ave. $350,000. F. X. Tewes, City Hall, city archt. Noted Feb. 28.

Minn., St. Paul—School—Mar. 18, by H. W. Austin, city purch. agt., 2 story and basement, rein.-con., brick and tile, North St. Anthony Park, for Dept. Educ. $150,000. F. X. Tewes, City Hall, city archt.

Kan., Emporia—High School—Mar. 25, by Bd. Educ., junior high school, to exceed $150,000. N. Woods, clk. J. H. Felt & Co., Emporia, and 802 Grand Ave. Temple, Kansas City, Mo., archts. Noted Jan. 3.

Neb., Gordon—High and Grade School—Mar. 18, by Bd. Educ., 3 story and basement, 63 x 96 ft. $150,000. E. B. Watson, Norfolk, archt.

Neb., Lincoln — Asylum — Mar. 18, by State Bd. Control, 3 story and basement, 34 x 112 ft. concrete, brick and stone. Fiske & Meginnis, 533 Bankers Life Bldg., archts. Noted Jan. 24.

Tex., Abilene—Business—J. M. Alexander, Radford Bldg., taking bids 7 story and basement, 75 x 100 ft., brick and concrete, Pine St. $250,000. D. S. Castle & Co., Radford Bldg., archts.

BIDS RECEIVED

R. I., Slocum—Administration and Service—State Pub. Welfare Comn., Providence, 3 story, 70 x 200 ft., brick, plain foundation, at Exeter School, from C. B. Maguire Co., Grosvenor Bldg., Providence, $186,024. Archts. est. $200,000. Noted Feb. 28.

N. Y., Brooklyn—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Mar. 7, general contract P. S. 214, Pitkin Ave., from Hayson Constr. Co., Arverne, $781,000, A deduct $18,000, B add $8,000. Noted Feb. 14.

N. Y., New York—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Mar. 7, general contract P. S. 77, Ward Ave., here, from P. J. Brennan & Son, 624 Madison Ave. $803,000, A deduct $19,500, B add $15,000. Noted Feb. 14.

N. J., Morris Plains—Dining Hall and Kitchen—B. G. Lewis, comr. Charities & Corrections, Trenton, Feb. 29, general co-

Buildings (Continued)

tract 5 story, 60 x 170 ft., for New Jersey State Hospital, here, from C. J. Smith Constr. Co., 202 Acadamy St., Trenton, $240,000. Noted Feb. 14.

D. C., Wash. — Library — Dist. Comrs., constructing public library from Schneider-Spleidt Co., Kellogg Bldg., $176,900.

O., Garfield Heights (near Cleveland)—School—Bd. Educ., Feb. 25, 2 story, 60 x 150 ft., brick, steel and concrete addition, from J. Grant & Son, 4500 Euclid Ave., Cleveland, $137,459. Noted Feb. 21.

Wis., Waupun—Refectory and Ward — State Bd. Control, Madison, 2 story and basement, brick and concrete, here, from J. P. Cullen & Son, 109 South Main St., Janesville, $135,321. Archts. est. $170,000. Noted Feb. 14.

Minn., Minneapolis—Dance Hall—Madrid Amusement Co., c/o Larson & McLaren, archts., 816 2nd Ave. S., 1 story and part basement, 170 x 200 ft., brick and terra cotta, Marquette Ave. between 11th and 12th Sts., general contract from R. S. Billingsley Co., 747 Plymouth Bldg. Total cost $150,000.

Calif., San Francisco—Hospital—Chinese Six Companies, 843 Stockton St., 4 story, rein.-con., Jackson and Trenton Sts., from Barrett & Hilp, 918 Harrison St., $144,701. Noted Feb. 7.

CONTRACTS AWARDED

Me., Portland—Apartment—C. W. Whitehead, Noyes St., 3 story, 80 x 80 ft., brick and steel, plain foundation, Noyes and Deering Sts., to F. A. Rumery Co., 21 Portland St. Archts. est. $250,000. Mar. 6.

R. I., Pawtucket—High School—School Com., 3 story and basement, 95 x 200 ft., brick and stone, Hancock St., to Rowley Constr. Co., 260 Central Ave. Archts. est. $600,000.

Conn., Hartford—Church—Central Baptist Church, 3 story and basement, brick, stone and steel, plain foundation, Main St., to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $600,000. Noted Jan. 10.

N. Y., Brooklyn—Apartment—Machada Realty Corp., c/o McCarthy & Kelly, archts. and engrs., 159 Remsen St., will build 4 story, brick, steel and stone, plain foundation, Ocean Parkway, by day labor. $250,000.

N. Y., Brooklyn — Apartment — Trieb Building Co., c/o M. A. Cantor, archt. and engr., 371 Fulton St., will build 6 story, brick, steel and stone, plain foundation, Ocean Parkway and Ave. T, by day labor. $350,000.

N. Y., New York—Apartments—Harding Constr. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build two 6 story, brick, steel and stone, plain foundations, 181st St. between Ft. Washington and Pinehurst Aves., by day labor. $300,000 each.

N. Y., New York—Apartments—Kaess & Doar, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build two 5 story, brick, steel and stone, plain foundations, Nelson Ave., by day labor. $200,000 each.

N. Y., New York—Apartment—F. Starkman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 9 story, brick, steel and stone, plain foundation, West 11th St., by day labor. $600,000.

N. J., Paterson—Hotel—Guilbert & Betteile, archts. and engrs., 2 Lombardy St., Newark, brick, steel and stone, plain foundation, here, to John W. Ferguson, Union Bank Bldg., for Alexander Hamilton Hotel. Archts. est. $1,000,000. Noted Nov. 15.

N. J., Pleasantville—Bank and Office—Pleasantville Natl. Bank, 3 story and basement, 42 x 106 ft., steel and brick, plain foundation, to W. Sharrock, Somers Points.

Pa., Coraopolis—High School—Bd. Educ., 2 story and basement, 80 x 156 ft., to Gilpatrick-Dawson Co., Empire Bldg., Pittsburgh, $171,350.

Pa., Phila.—Apartment—Hoffman-Henon Co., archts., Finance Bldg., will build 8 story and basement, 50 x 60 ft. brick and steel, plain foundation, 19th and Delancey Sts. $300,000. Work will be done by separate contracts. Owner's name withheld. Noted Jan. 3.

Pa., Phila.—Art Museum—Comrs. Fairmount Park, Room 217, City Hall, constructing certain portions of Phila. Museum of Art in Fairmount Park, with Ohio sandstone, to G. A. Fuller Co., Morris Bldg., $1,892,000. Noted Mar. 6.

Pa., Phila.—University Hall—Stewardson & Page, archts., 315 South 15th St., 4 story and basement, brick and steel, plain foundation, 34th and Walnut Sts., known as Bennett Hall, to W. R. Dougherty, 1608 Sansom St., for University of Pennsylvania, 34th and Spruce Sts., to exceed $600,000. Noted Jan. 17.

D. C., Brightwood (Wash. P. O.)—Church, Auditorium and School—Church of Nativity, church, auditorium and school, Georgia Ave. N. W., to C. J. Cassidy Co., 700 10th St. N.W., $176,900. Noted Feb. 28.

ROAD WORK—NEW YORK

Bids were opened by State Dept. Pub. Wks., Bureau of Highways, Albany, Feb. 5, for constructing Woodville-Bristol Springs Rd. and Bristol Springs-Cheshire Rd., Part 1, State Highways No. 8156, Ontario Co., from (A) Valerio Constr. Co., New Milford, Conn.; (awarded contract) (B) G. B. Dickinson, Syracuse; (C) F. Hanratty, 335 St. Anns Ave., New York. The unit bids were as follows:

	A	B	C
Clearing and grubbing (lump sum)	$3,500.00	$3,500.00	$2,500.00
190,000 cu.yd. unclassified excavation	.80	.83	1.00
30,000 sta. yd. overhaul	.01	.01	.01
20 lin.ft. 10 in. vitrified clay pipe	1.00	1.00	1.00
6,000 lin.ft. 6 in. porous tile underdrain	.30	.30	.25
600 lin.ft. relaying old pipe	.20	.20	.10
1,150 lin.ft. 16 in. cast iron pipe	4.20	4.30	4.73
1,300 lin.ft. 20 in. cast iron pipe	5.80	6.00	6.60
100 cu.yd. riprap	3.00	3.00	3.00
6 M. ft. b.m. timber and lumber	75.00	60.00	100.00
4,000 bbl. portland cement	3.50	3.50	4.00
1,770 cu.yd. first-class concrete	9.80	10.00	10.00
860 cu.yd. second-class concrete	7.90	8.00	8.80
6,700 sq.yd. cobble gutter (sand joints)	1.00	1.00	.85
37,000 lb. metal reinforcing for structures	.10	.08	.05
2,300 lb. miscellaneous iron and steel	.10	.10	.05
19,020 lin.ft. cable guide railing	1.15	1.00	.50
50 guide signs (detour)	6.00	6.00	1.00
16,200 cu.yd. bottom course (run of bank gravel)	2.35	2.20	1.00
46,450 lin.ft. trimming road shoulders	.10	.10	.10
500 cu.yd. screened gravel loose measure	3.45	3.00	2.45
500 cu.yd. run of bank gravel (L.N.)	2.00	2.00	1.00
Extended totals	$287,243	$287,420	$289,764

W. Va., Bluefield—Municipal—City, 3 story and basement, 120 x 140 ft., fireproof, general contract to H. V. Lucas, Bluefield, $186,000. Noted Feb. 7.

W. Va., Huntington—Apartment—A. S. Emmons, Emmons Apts., will build 3 story, 67 x 150 ft. addition, 3rd Ave. and 12th St., by day labor. $200,000. Meanor & Handloser, Professional Bldg., archts.

W. Va., Huntington — Court House — Cabell Co., 3 story and basement addition, to King Lumber Co., Charlottesville, Va. Est. cost $150,000. Noted Jan. 24.

N. C., Burlington — Hotel — Burlington Hotel Co., 6 story, rein.-con., brick and tile, to J. E. Beaman Constr. Co., Commercial Bank Bldg., Raleigh, $250,000. Noted Jan. 24.

Fla., Miami—C. W. Conderman, Delphos, O., 3 story, rein.-con. and hollow tile, Pennsylvania and 16th Sts., to G. Jahn, Miami, cost plus basis. Est. $160,000.

Tenn., Memphis—Arcade—Avenue Realty Co. 2 story and basement, brick and steel, Union and 2nd Sts., to F. J. Ozanne & Co., 1667 Glenview St. Noted Jan. 3.

Tenn., Nashville—Apartment—Washington Court Realty Co., 3 story and basement, 58 apartments of 3 and 4 rooms each, brick and hollow tile, Hillsboro St., foundation to J. Oman & Co., Chamber of Commerce Bldg.; cut stone to Tanksley Drumright Stone Co., 1111 North 1st St., brick work to W. S. Crandal, Nashville; carpentry to M. M. Graham & Co., 617 Commercial St.; plumbing and heating to W. H. Grewar Co., 144 8th Ave. Est. cost $325,000. Noted Jan. 10.

O., Cleveland—Apartment—A. H. Oyer and J. Blachman, Bangor Bldg., 3 story and basement, 44 x 206 ft., brick, 1932 East 97th St., to J. Miller, 10819 Drexel Ave. Archts. est. $700,000. Noted Feb. 14.

O., Columbus—Bank and Office—F. L. Packard, archt., 16 East Broad St., 4 story and basement (ultimately 12 story), 91 x 187½ ft., rein.-con. and brick, Gay and Pearl Sts., to R. H. Evans & Co., 8 East Long St., for Columbian Building & Loan Co., 22 East Gay St. $425,000. Noted Feb. 21.

O., Dayton—Apartment—Homes Constr. Co., Amer. Bldg., 4 story and basement, 150 x 150 ft., brick, concrete and terra cotta, plain foundation, Cambridge Ave., by day labor. $250,000.

O., Toledo--Museum—Toledo Museum of Art, Monroe St., wing addition, to A. Bentley & Sons Co., 201 Belmont Ave., $850,000.

Mich., Highland Park (Detroit, P. O.)—School—Bd. Educ., 2 story and basement, 110 x 140 ft. rein.-con., brick and steel, plain foundation, Cortland St. and 2nd Blvd., to Martin & Krausman Co., 606 Woodward Ave., Detroit. Archts. est. $200,000. Noted Feb. 14.

Ill., Belleville—Academy—School Sisters of Notre Dame, 3rd and Race Sts., 3 story and basement, 68 x 175 ft., 35 x 70 ft. and 45 x 75 ft., rein.-con., brick and stone, Rock Rd. and 62nd St., to V. J. Kluth, Syndicate Trust Bldg., St. Louis, Mo., $300,000. Noted June 7.

Ill., Chicago—Apartment—W. A. Conron, 77 West Washington St., 3 story, 100 x 261 ft., fireproof, 4721-29 Ellis St., to A. Lindstrom, 77 West Washington St. Archts. est. $175,000.

Ill., Chicago—Apartment—C. F. Henry, 7455 Greenview St., will build 3 story and basement, 145 x 250 ft., fireproof, Sunnyside and Malden Sts., by day labor. Archts. est. $700,000. R. F. France, 155 North Clark St., archt. Noted Dec. 27.

Ill., Chicago—Apartment—Sellen & Johnson, 4840 West Madison St., 3 story and basement, 100 x 155 ft., fireproof, 5000-08 West End Ave., to Anderson and Winblad, 6255 South Michigan St. Archts. est. $250,000.

Ill., Chicago—Apartment—J. Turnquist, 6207 Champlain St., 3 story, 120 x 180 ft., fireproof, 6849-59 Clyde St., to A. T. Herlin, 6117 Evans Ave. Archts. est. $150,000.

Ill., Chicago — Storage — Boston Store, State and Madison Sts., 8 story, 27 x 118 ft., fireproof, 1511 South State St., to Krahl Constr. Co., 350 North Clark St. Archts. est. $175,000.

Ia., Council Bluffs—Office—Park Building Corp., c/o Anderson & Spooner, archts., 27 South Main St., Omaha, Neb., 5 story and basement, 50 x 102 ft. rein.-con., brick and stone, here, general contract to J. E. Wakefield Co., 454 Brandeis Theater Bldg., Omaha, Neb., $137,400, total cost $175,000. Noted Nov. 22.

Ia., Sioux City—Hospital—St. Josephs Mercy Hospital, 5 story and basement, rein.-con., brick, tile and stone, 21st and Court Sts., general contract to J. H. Keefe Constr. Co., 406 United Bank Bldg., $194,980. Noted Mar. 6.

Neb. Beatrice — Dormitory — State Bd. Control, Lincoln, 2 story and basement, 94 x 133 ft. rein.-con., brick and stone, to E. S. Clarke, 303 East 6th St., York. Archts. est. $150,000.

S. D., Vermilion—Administration—Bd. Regents University of South Dakota, 4 story and basement, 74 x 105 ft., rein.-con., brick, tile and terra cotta, to Gray Constr. Co., Watertown, $202,367. Noted Feb. 7.

Mo., St. Louis—Theatre, Store and Office—W. Goldman, c/o Kings Theatre, 6 story, 146 x 188 ft., rein.-con., brick, stone, steel and terra cotta, Grand Blvd., general contract to Selden-Breck Constr. Co., Fullerton Bldg. Archts. est. $750,000. Noted Aug. 2.

Mo., University (St. Louis P. O.) — Church—First Church Christ Scientist, 2 story and basement, 80 x 120 ft., brick and stone, Delmar Blvd., to Humes-Deal Constr. Co., Century Bldg., St. Louis. Archts. est. $150,000.

Tex., Amarillo—Temple—Masonic Temple Assn., general contract 3 story and basement, 80 x 140 ft., concrete and brick, to Fred Bone Constr. Co., Amarillo. $200,000. Noted Feb. 7.

Ore., Klamath Falls — Apartment and Store—G. A. McCarthy, 3 story, 100 x 100 ft., 7th and Pine Sts., to W. A. Stevens, Klamath Falls, $150,000.

Ore., Marshfield—Store and Office—Coos Bay Building Corp., 5 story, 100 x 100 ft., to L. W. Metzger, Portland, $150,000. All sub contracts let.

Calif., Sacramento — College — Christian Brothers College, Martinez, two 2 story, brick and hollow tile, to W. Keating, Capitol Natl. Bank Bldg., $168,000. Noted Feb. 7.

Ont., Kingston — Womens Residence — Queens University, constructing womens residence, to Dickie Constr. Co., Ltd., Ryrie Bldg., Toronto, $175,000.

Japan, Tokio—Bank and Office—Mitsui & Co., Tokio, rein.-con. steel and stone, here, to J. Stewart & Co., 30 Church St., New York City, $7,500,000.

Buildings (Continued)

Okla., Tulsa—Garage and Sales Room—C. Z. Wiley, 1201 South Boston St., plans 3 story and basement, 100 x 140 ft., brick and stone, 12th and Boston Sts.

Ore., Portland—Theatre—E. A. Miller, archt., Henry Bldg., preparing plans and takes bids about Apr. 1, 3 story, 125 x 145 ft., rein.-con., plain foundation, Union Ave. and Russell St., for W. A. Graeper, Union Ave. and Russell St. $150,000.

Calif., Long Beach—Schools—City having preliminary plans prepared by W. H. and J. C. Austin, associates, Detwiler Bldg., Los Angeles, senior high school; by Davies & Baume, Farmers & Merchants Bldg., junior high school; by H. A. Anderson, Palace Theatre Bldg., Long Beach, and Allison & Allison, associated, Hibernian Bldg., Los Angeles, grammar school. Each to exceed $150,000.

Calif., Los Angeles—Schools—Election June 3, to vote on $34,640,000 bonds, elementary schools $19,360,000, high schools $15,280,000.

Calif., Los Angeles—School—University of Southern California, 3551 University Ave., having plans prepared by J. and D. Parkinson, Title Insurance Bldg., 3 story and basement, brick, science building. $175,000.

Calif., Los Angeles—Office and Store—J. Toplitsky, H. W. Hellman Bldg., representing owners, plans fireproof on 150 x 150 ft. site, Flower and 8th Sts. To exceed $150,000.

Calif., Los Angeles—Store and Loft—Morgan-Walls-Clements, archts., Van Nuys Bldg., preparing plans 12 story and basement, 50 x 90 ft., rein.-con. and brick, Bway. between 9th and 10th. Owner's name withheld.

Calif., Los Angeles—Store and Office—Sun Realty Co., 1116 Los Angeles St., having preliminary plans prepared by Curlett & Beelman, Union Bank Bldg., 10 or 12 story and basement, 100 x 150 ft., steel frame, Flower and 7th Sts.

Calif., Los Angeles—Warehouse—Tooker Storage Co. having plans prepared by W. J. Saunders, Laughlin Bldg., 4 story and basement, 150 x 165 ft., rein.-con., 11th and Lemon Sts. $300,000.

Calif., Oakland—Bank and Office—Central Natl. Bank, 14th and Bway., having preliminary plans prepared by G. W. Kelham, Sharon Bldg., San Francisco, Class A. $1,000,000. Noted Nov. 1.

Calif., San Francisco — Garage — California Garage Syndicate, c/o J. L. Stewart, archt., Claus Spreckels Bldg., having plans prepared, 10 story, basement and sub-basement, 155 x 300 ft. Class A, 4th St. near Jessie St. $2,500,000.

Calif., Santa Ana—School—Santa Ana School Dist. plans to vote on $250,000 bonds for fireproof school to replace Roosevelt School.

Calif., Santa Monica — Schools — Santa Monica City School Dist. having preliminary plans prepared by Allison & Allison, Hibernian Bldg., Los Angeles, addition to Adams Junior High School, $100,000, and addition to main high school, $150,000.

Calif., Watts (Branch of Los Angeles)—Schools—Watts School Dist. plans to vote on $650,000 bonds for high schools.

Ont., London — Collegiates — Bd. Educ. having plans prepared by L. E. Carrothers, c/o owner, 2 new brick collegiates, one in southern section of city and one other in eastern section. $750,000.

Ont., Ottawa — Home — St. Patricks Orphans Home, Laurier Ave. W., takes bids in early spring, rein.-con. and brick addition, plain foundation, Gloucester St. $150,000. Architect not selected.

Ont., Port Arthur—Courthouse—Provincial Government, Parliament Bldg., Toronto, voted $220,000 for 2 or 3 story and basement, rein.-con., brick and steel, plain foundation, here. F. R. Heakes, Parliament Bldg., Toronto, archt.

Ont., Port Colborne—School—Bd. Educ. having plans prepared by N. A. Kearns, Welland, 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation. $150,000.

Ont., Toronto — School—Bd. Educ. soon takes bids 2 story and basement, 8 room addition to Harbord Collegiate, rein.-con., brick and steel, plain foundation. $150,000. C. Dyson, 155 College St., archt.

Ont., Woodstock — Hospital — Provincial Government, Parliament Bldg., Toronto, voted $150,000 for 2 story and basement, rein.-con., brick and steel addition to Ontario Hospital, here. F. R. Heakes, Parliament Bldg., Toronto, archt.

BIDS DESIRED

R. I., Pawtucket—Church—W. F. Fontaine, archt., Woonsocket, taking bids 1 story and basement, 132 x 170 ft., for St. Jean de Baptiste Church. $350,000. A. Groton, pastor. Noted Jan. 17.

N. Y., Astoria (Long Island City, P. O.)—School—Apr. 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 126, Van Alst Ave. from Lincoln to Carmelia Sts. extending through to Ely Ave., here, for Bd. Educ., 500 Park Ave., New York.

N. Y., Brooklyn—School—Mar. 25, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 28, (2nd part), southerly side of Fulton St. 200 ft. westerly from Howard Ave., for Bd. Educ., 500 Park Ave., New York. Noted Aug. 16.

N. Y., Brooklyn — Schools — Apr. 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., P. S. 216, Ave. X from East 1st to West Sts.; P. S. 217, Newkirk Ave. from Westminster Rd. to Coney Island Ave.; P. S. 220, 9th Ave. from 48th to 49th Sts., for Bd. Educ., 500 Park Ave., New York.

N. Y., New York—Schools—Apr. 8, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 82, West 176th St. from Macombs Rd. to Harrison Ave., also P. S. 83, Rhinelander Ave. from Radcliffe to Bogart Aves., Bronx Boro, here, for Bd. Educ., 500 Park Ave. Noted Feb. 21.

N. Y., Ozone Park (Howard Beach, P. O.)—School—Mar. 25, by W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 96, Lincoln Ave. and Rockaway Rd., here, for Bd. Educ., 500 Park Ave., New York.

N. J., Newark—School—Mar. 27, by Bd. Educ., City Hall, Broad St., school for crippled children, Bloomfield Ave. and Ridge St. $168,000. J. Fred Cook, 9 Clinton St., archt.

Pa., Bloomsburg—Church and Sunday School—Mar. 21, by Trustees St. Matthews Lutheran Church, N. S. Wolf, pastor, 1 story and basement, 44 x 85 ft. and 2 story and basement, 56 x 101 ft., brick and stone, plain foundation, North Market St. $175,000. Ritter & Shay, North Amer. Bldg., Phila., archts.

Pa., Juniata—Church—Mar. 17, by J. W. Lees, pres. building com. of Presbyterian Church, 412 7th Ave., 2 story and basement, 100 x 120 ft. brick and stone, 7th Ave. $150,000. Hersh & Schollar, Commerce Bldg., Altoona, archts.

Pa., Mahanoy City—Theatre, Store and Office—Mar. 26, by Chamberlain Amusement Enterprise Inc., Shamokin, 3 story and basement, 70 x 161 ft., brick and steel, plain foundation, Main and Market Sts. $300,000. W. H. Lee, 1505 Race St., Phila., archt.

Pa., Phila.—Exchange—Mar. 15, by J. T. Windrim, archt., Commonwealth Bldg., 3 story and basement, 90 x 170 ft. brick and steel, plain foundation, Oak Lane, Broad St. and 65th Ave., for Bell Telephone Co., 17th St. and Parkway.

Pa., Upper Darby—Apartment and Store—W. L. Charr, archt., 149 South 4th St., Phila., taking bids on sub-contracts for 3 story and basement, 85 x 180 ft. brick and steel, plain foundation. Owner c/o architect.

Md., Baltimore — Hotel — Mar. 15, by Emerson Hotel, W. H. Parker, mgr., Calvert and Baltimore Sts., 16 story, 40 x 104 ft., brick and steel, plain foundation, Baltimore and Calvert Sts. $600,000. W. G. Beecher, 12 East Pleasant St., archt. Noted Nov. 29.

N. C., Greensboro—College—Mar. 25, by H. Barton, archt., Greensboro, 3 story, brick and limestone, for North Carolina College for Women. $200,000.

N. C., Wilson—Court House—Mar. 31, by Comrs. Wilson Co., 4 story and basement, 126 x 135 ft., court house and jail, concrete, steel and stone, Nash St. $400,000. F. A. Bishop, Petersburg, Va., archt. Noted Jan. 31.

O., Akron—City Hall—Apr. 1, by Bd. Control, 8 story and basement, South High St. at Bowery. $900,000.

O., Cleveland — Apartment — Atwater & Kaplan, 13807 St. Clair Ave., taking bids and open same about Mar. 21, 3 story and basement, 37 x 145 ft., brick and timber, 10662 Helena Ave. $165,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland Heights (Warrensville P. O.)—Apartment — M. Wolk., 10718 Earle Ave., Cleveland, taking bids and opens same about Mar. 21, 3 story and basement, 100 x 150 ft., brick and timber, Mayfield and Coventry Rds., here. $250,000. M. Weis, 617 Union Bldg., Cleveland, archt.

O., Dayton—Hospital—Mar. 20, by Bd. Trustees Miami Valley Hospital, Apple St., 3 story and basement, rein.-con. and brick addition, plain foundation. $500,000. Pretzinger & Musselman, 1155 Reibold Bldg., archts.

O., Lakewood — Apartment — Urban Realty Co., c/o M. Levine, 817 Guardian Bldg., Cleveland, taking bids 3 story and basement, 90 x 140 ft., brick, Lake and Cook Aves., here. $275,000. Braverman & Havermaet, Ulmer Bldg., Cleveland, archts. Noted Jan. 17.

Mich., Detroit—Apartment—C. D. Lundblad, archt., 206 New Telegraph Bldg., taking bids and opens same about Mar. 15, 4 story and basement, 86 x 104 ft. brick and steel, plain foundation, Fairview Ave., for W. A. Montgomery, 1612 Penobscot Bldg. $175,000.

Mich., Detroit—Hotel—Mar. 18, by F. O. Varney, archt., 1422 Washington Blvd., 8 story and basement, 90 x 150 ft. rein.-con., brick and steel, plain foundation, Alexandrine St., for B. Braver, 271 Hendrie St. $400,000.

Mich., Mt. Clemens—School—Mar. 19, by F. Newberry, secy. Bd. Educ., Dist. 3, 2 story and basement, 12 rooms, rein.-con., brick and steel, plain foundation, Mack Ave. and Defer Rd. $160,000. B. E. Mills, 1305 Kresge Bldg., Detroit, archt.

Ill., Evanston—Apartment—R. F. France, archt., 155 North Clark St., Chicago, taking bids 3 story, fireproof, 1135 Oak Ave., here. $150,000. Owner c/o archt.

Wis., Kenosha—High School—Mar. 21, by H. Bothe, archt., 25 North Ridge St., 2 story and basement, brick and concrete, plain foundation, for Evangelical Friedens Lutheran Congregation, C. Buenger, 65 Ridge St., pastor. $150,000. Noted Mar. 6.

Wis., La Crosse—Church—Mar 26, by Merman & Skogstad, archts., 20 Linker Bldg., superstructure 2 story, 50 x 116 ft., brick and tile, for Trinity Evangelical Lutheran Congregation, S. Roth, pastor, 1122 Ferry St. $150,000. Foundation in. Noted Jan. 24.

Wis., Oshkosh—Temple—Apr. 1, by Masonic Executive Com., c/o F. A. Fuller, 50 West Polk St., 4 story and basement, 90 x 100 ft., brick, tile and concrete, plain foundation. $250,000. Auler & Jensen, F. R. A. Bldg., archts. Noted Feb. 21.

Wis., Whitewater—School—Apr. 7, by Bd. Normal Regents, W. Kettle, secy., Madison, 4 story and basement, 90 x 120 ft., brick, rein.-con. and steel addition, plain foundation, here. $250,000. A. Peabody, State Capitol, Madison, archt. Noted Jan. 24.

Minn., St. Paul—High School—Mar. 25, by H. W. Austin, city purch. agt., 3 story and basement, 150 x 250 ft. with 2 story wing, rein.-con., brick and tile, Albert St. and Pascal Ave. $350,000. F. X. Tewes, City Hall, city archt. Noted Feb. 28.

Minn., St. Paul—School—Mar. 18, by H. W. Austin, city purch. agt., 2 story and basement, rein.-con., brick and tile, North St. Anthony Park, for Dept. Educ. $150,000. F. X. Tewes, City Hall, city archt.

Kan., Emporia—High School—Mar. 25, by Bd. Educ., junior high school, to exceed $150,000. N. Woods, clk. J. H. Felt & Co., Emporia, and 802 Grand Ave. Temple, Kansas City, Mo., archts. Noted Jan. 3.

Neb., Gordon—High and Grade School—Mar. 18, by Bd. Educ., 3 story and basement, 63 x 96 ft. $150,000. E. B. Watson, Norfolk, archt.

Neb., Lincoln — Asylum — Mar. 18, by State Bd. Control, 3 story and basement, 34 x 112 ft. concrete, brick and stone. Fiske & Meginnis, 533 Bankers Life Bldg., archts. Noted Jan. 24.

Tex., Abilene—Business—J. M. Alexander, Radford Bldg., taking bids 7 story and basement, 75 x 100 ft., brick and concrete, Pine St. $250,000. D. S. Castle & Co., Radford Bldg., archts.

BIDS RECEIVED

R. I., Slocum—Administration and Service—State Pub. Welfare Comn., Providence, 3 story, 70 x 200 ft., brick, plain foundation, at Exeter School, from C. B. Maguire Co., Grosvenor Bldg., Providence, $186,024. Archts. est. $200,000. Noted Feb. 28.

N. Y., Brooklyn—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Mar. 7, general contract P. S. 214, Pitkin Ave., from Hayson Constr. Co., Arverne, $781,000, A deduct $18,000, B add $8,000. Noted Feb. 14.

N. Y., New York—School—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, Mar. 7, general contract P. S. 77, Ward Ave., here, from P. J. Brennan & Son, 624 Madison Ave., $803,000, A deduct $19,500, B add $15,000. Noted Feb. 14.

N. J., Morris Plains—Dining Hall and Kitchen—B. G. Lewis, comr. Charities & Corrections, Trenton, Feb. 29, general con-

ROAD WORK—NEW YORK

Bids were opened by State Dept. Pub. Wks., Bureau of Highways, Albany, Feb. 5, for constructing Woodville-Bristol Springs Rd. and Bristol Springs-Cheshire Rd., Part 1, State Highways No. 8156, Ontario Co., from (A) Valerio Constr. Co., New Milford, Conn.; (awarded contract) (B) G. B. Dickinson, Syracuse; (C) F. Hanratty, 335 St. Anns Ave., New York. The unit bids were as follows:

	A	B	C
Clearing and grubbing (lump sum)	$3,500.00	$3,500.00	$2,500.00
190,000 cu.yd. unclassified excavation	80	83	1.00
30,000 sta. yd. overhaul	01	01	01
20 lin.ft. 10 in. vitrified clay pipe	1.00	1.00	1.00
6,000 lin.ft. 6 in. porous tile underdrain	30	30	25
600 lin.ft. relaying old pipe	20	20	10
1,150 lin.ft. 16 in. cast iron pipe	4.20	4.30	4.73
1,300 lin.ft. 20 in. cast iron pipe	5.80	6.00	6.60
100 cu.yd. riprap	3.00	3.00	3.00
6 M. ft. b.m. timber and lumber	75.00	60.00	100.00
4,000 bbl. portland cement	3.50	3.50	4.00
1,770 cu.yd. first-class concrete	9.80	10.00	10.00
860 cu.yd. second-class concrete	7.90	8.00	8.80
6,700 sq.yd. cobble gutter (sand joints)	1.00	1.00	85
37,000 lb. metal reinforcing for structures	10	08	05
2,300 lb. miscellaneous iron and steel	10	10	05
19,020 lin.ft. cable guide railing	1.15	1.00	50
50 guide signs (detour)	6.00	6.00	1.00
16,200 cu.yd. bottom course (run of bank gravel)	2.35	2.20	1.00
46,450 lin.ft. trimming road shoulders	10	10	10
500 cu.yd. screened gravel loose measure	3.45	3.00	2.45
500 cu.yd. run of bank gravel (L.N.)	2.00	2.00	1.00
Extended totals	$287,243	$287,420	$289,764

Buildings (Continued)

tract 5 story, 60 x 170 ft., for New Jersey State Hospital, here, from C. J. Smith Constr. Co., 202 Acadamy St., Trenton, $240,000. Noted Feb. 14.

D. C., Wash.—Library—Dist. Comrs., constructing public library from Schneider-Spleidt Co., Kellogg Bldg., $176,900.

O., Garfield Heights (near Cleveland)—School—Bd. Educ., Feb. 25, 2 story, 60 x 150 ft., brick, steel and concrete addition, from J. Grant & Son, 4500 Euclid Ave., Cleveland, $137,459. Noted Feb. 21.

Wis., Waupun—Refectory and Ward—State Bd. Control, Madison, 2 story and basement, brick and concrete, here, from J. P. Cullen & Son, 109 South Main St., Janesville, $135,321. Archts. est. $170,000. Noted Feb. 14.

Minn., Minneapolis—Dance Hall—Madrid Amusement Co., c/o Larson & McLaren, archts., 816 2nd Ave. S., 1 story and part basement, 170 x 200 ft., brick and terra cotta, Marquette Ave. between 11th and 12th Sts., general contract from R. S. Billingsley Co., 747 Plymouth Bldg. Total cost $150,000.

Calif., San Francisco—Hospital—Chinese Six Companies, 843 Stockton St., 4 story, rein.-con., Jackson and Trenton Sts., from Barrett & Hilp, 918 Harrison St., $144,701. Noted Feb. 7.

CONTRACTS AWARDED

Me., Portland—Apartment—C. W. Whitehead, Noyes St., 3 story, 80 x 80 ft., brick and steel, plain foundation, Noyes and Deering Sts., to F. A. Rumery Co., 21 Portland St. Archts. est. $250,000. Mar. 6.

R. I., Pawtucket—High School—School Com., 3 story and basement, 95 x 200 ft., brick and stone, Hancock St., to Rowley Constr. Co., 260 Central Ave. Archts. est. $600,000.

Conn., Hartford—Church—Central Baptist Church, 3 story and basement, brick, stone and steel, plain foundation, Main St., to H. Wales Lines Co., 134 State St., Meriden. Archts. est. $600,000. Noted Jan. 10.

N. Y., Brooklyn—Apartment—Machada Realty Corp., c/o McCarthy & Kelly, archts. and engrs., 159 Remsen St., will build 4 story, brick, steel and stone, plain foundation, Ocean Parkway, by day labor. $250,000.

N. Y., Brooklyn—Apartment—Trieb Building Co., c/o M. A. Cantor, archt. and engr., 371 Fulton St., will build 6 story, brick, steel and stone, plain foundation, Ocean Parkway and Ave. T, by day labor. $350,000.

N. Y., New York—Apartments—Harding Constr. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build two 6 story, brick, steel and stone, plain foundations, 181st St. between Ft. Washington and Pinehurst Aves., by day labor. $300,000 each.

N. Y., New York—Apartments—Kaess & Doar, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build two 5 story, brick, steel and stone, plain foundations, Nelson Ave., by day labor. $200,000 each.

N. Y., New York—Apartment—F. Starkman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 9 story, brick, steel and stone, plain foundation, West 11th St., by day labor. $600,000.

N. J., Paterson—Hotel—Guilbert & Bettelle, archts. and engrs., 2 Lombardy St., Newark, brick, steel and stone, plain foundation, here, to John W. Ferguson, Union Bank Bldg., for Alexander Hamilton Hotel. Archts. est. $1,000,000. Noted Nov. 15.

N. J., Pleasantville—Bank and Office—Pleasantville Natl. Bank, 3 story and basement, 42 x 106 ft., steel and brick, plain foundation, to W. Sharrock, Somers Points.

Pa., Coraopolis—High School—Bd. Educ., 2 story and basement, 80 x 156 ft., to Gilpatrick-Dawson Co., Empire Bldg., Pittsburgh, $171,350.

Pa., Phila.—Apartment—Hoffman-Henon Co., archts., Finance Bldg., will build 8 story and basement, 50 x 60 ft. brick and steel, plain foundation, 19th and Delancey Sts. $300,000. Work will be done by separate contracts. Owner's name withheld. Noted Jan. 3.

Pa., Phila.—Art Museum—Comrs. Fairmount Park, Room 217, City Hall, constructing certain portions of Phila. Museum of Art, in Fairmount Park, with Ohio sandstone, to G. A. Fuller Co., Morris Bldg., $1,892,000. Noted Mar. 6.

Pa., Phila.—University Hall—Stewardson & Page, archts., 315 South 15th St., 4 story and basement, brick and steel, plain foundation, 34th and Walnut Sts., known as Bennett Hall, to W. R. Dougherty, 1608 Sansom St., for University of Pennsylvania, 34th and Spruce Sts., to exceed $600,000. Noted Jan. 17.

D. C., Brightwood (Wash. P. O.)—Church, Auditorium and School—Church of Nativity, church, auditorium and school, Georgia Ave. N. W., to C. J. Cassidy Co., 700 10th St. N.W., $176,900. Noted Feb. 28.

W. Va., Bluefield—Municipal—City, 3 story and basement, 120 x 140 ft., fireproof, general contract to H. V. Lucas, Bluefield, $186,000. Noted Feb. 7.

W. Va., Huntington—Apartment—A. S. Emmons, Emmons Apts., will build 3 story, 67 x 150 ft. addition, 3rd Ave. and 12th St., by day labor. $200,000. Meanor & Handloser, Professional Bldg., archts.

W. Va., Huntington—Court House—Cabell Co., 3 story and basement addition, to King Lumber Co., Charlottesville, Va. Est. cost $150,000. Noted Jan. 24.

N. C., Burlington—Hotel—Burlington Hotel Co., 6 story, rein.-con., brick and tile, to J. E. Beaman Constr. Co., Commercial Bank Bldg., Raleigh, $250,000. Noted Jan. 24.

Fla., Miami—C. W. Conderman, Delphos, O., 3 story, rein.-con. and hollow tile, Pennsylvania and 16th Sts., to G. Jahn, Miami, cost plus basis. Est. $160,000.

Tenn., Memphis—Arcade—Avenue Realty Co. 2 story and basement, brick and steel, Union and 2nd Sts., to F. J. Ozanne & Co., 1667 Glenview St. Noted Jan. 3.

Tenn., Nashville—Apartment—Washington Court Realty Co., 3 story and basement, 58 apartments of 3 and 4 rooms each, brick and hollow tile, Hillsboro St., foundation to J. Oman & Co., Chamber of Commerce Bldg.; cut stone to Tanksley Drumright Stone Co., 1111 North 1st St., brick work to W. S. Crandal, Nashville; carpentry to M. M. Graham & Co., 617 Commercial St.; plumbing and heating to W. H. Grewar Co., 144 8th Ave. Est. cost $325,000. Noted Jan. 10.

O., Cleveland—Apartment—A. H. Oyer and J. Blachman, Bangor Bldg., 3 story and basement, 44 x 206 ft., brick, 1932 East 97th St., to J. Miller, 10819 Drexel Ave. Archts. est. $700,000. Noted Feb. 14.

O., Columbus—Bank and Office—F. L. Packard, archt., 16 East Broad St., 4 story and basement (ultimately 12 story), 91 x 187½ ft., rein.-con. and brick, Gay and Pearl Sts., to R. H. Evans & Co., 8 East Long St., for Columbian Building & Loan Co., 22 East Gay St. $425,000. Noted Feb. 21.

O., Dayton—Apartment—Homes Constr. Co., Amer. Bldg., 4 story and basement, 150 x 150 ft., brick, concrete and terra cotta, plain foundation, Cambridge Ave., by day labor. $250,000.

O., Toledo—Museum—Toledo Museum of Art, Monroe St., wing addition, to A. Bentley & Sons Co., 201 Belmont Ave., $850,000.

Mich., Highland Park (Detroit, P. O.)—School—Bd. Educ., 2 story and basement, 110 x 140 ft. rein.-con., brick and steel, plain foundation, Cortland St. and 2nd Blvd., to Martin & Krausman Co., 606 Woodward Ave., Detroit. Archts. est. $200,000. Noted Feb. 14.

Ill., Belleville—Academy—School Sisters of Notre Dame, 3rd and Race Sts., 3 story and basement, 68 x 175 ft., 35 x 70 ft. and 45 x 75 ft., rein.-con., brick and stone, Rock Rd. and 62nd St., to V. J. Kluth, Syndicate Trust Bldg., St. Louis, Mo., $300,000. Noted June 7.

Ill., Chicago—Apartment—W. A. Conron, 77 West Washington St., 3 story, 100 x 261 ft., fireproof, 4721-29 Ellis St., to A. Lindstrom, 77 West Washington St. Archts. est. $175,000.

Ill., Chicago—Apartment—C. F. Henry, 7455 Greenview St., will build 3 story and basement, 145 x 250 ft., fireproof, Sunnyside and Malden Sts., by day labor. Archts. est. $700,000. R. F. France, 155 North Clark St., archt. Noted Dec. 27.

Ill., Chicago—Apartment—Sellen & Johnson, 4840 West Madison St., 3 story and basement, 100 x 155 ft., fireproof, 5000-08 West End Ave., to Anderson and Winblad, 6255 South Michigan St. Archts. est. $250,000.

Ill., Chicago—Apartment—J. Turnquist, 6207 Champlain St., 3 story, 120 x 180 ft., fireproof, 6849-59 Clyde St., to A. T. Herlin, 6117 Evans Ave. Archts. est. $150,000.

Ill., Chicago—Storage—Boston Store, State and Madison Sts., 8 story, 27 x 118 ft., fireproof, 1511 South State St., to Krahl Constr. Co., 350 North Clark St. Archts. est. $175,000.

Ia., Council Bluffs—Office—Park Building Corp., c/o Anderson & Spooner, archts., 27 South Main St., Omaha, Neb., 5 story and basement, 50 x 102 ft. rein.-con., brick and stone, here, general contract to J. E. Wakefield Co., 454 Brandeis Theater Bldg., Omaha, Neb., $137,400, total cost $175,000. Noted Nov. 22.

Ia., Sioux City—Hospital—St. Josephs Mercy Hospital, 5 story and basement, rein.-con., brick, tile and stone, 21st and Court Sts., general contract to J. H. Keefe Constr. Co., 406 United Bank Bldg., $194,980. Noted Mar. 6.

Neb. Beatrice—Dormitory—State Bd. Control, Lincoln, 2 story and basement, 94 x 133 ft. rein.-con., brick and stone, to E. S. Clarke, 303 East 6th St., York. Archts. est. $150,000.

S. D., Vermilion—Administration—Bd. Regents University of South Dakota, 4 story and basement, 74 x 105 ft., rein.-con., brick, tile and terra cotta, to Gray Constr. Co., Watertown, $202,367. Noted Feb. 7.

Mo., St. Louis—Theatre, Store and Office—W. Goldman, c/o Kings Theatre, 6 story, 146 x 188 ft., rein.-con., brick, stone, steel and terra cotta, Grand Blvd., general contract to Selden-Breck Constr. Co., Fullerton Bldg. Archts. est. $750,000. Noted Aug. 2.

Mo., University (St. Louis P. O.)—Church—First Church Christ Scientist, 2 story and basement, 80 x 120 ft., brick and stone, Delmar Blvd., to Humes-Deal Constr. Co., Century Bldg., St. Louis. Archts. est. $150,000.

Tex., Amarillo—Temple—Masonic Temple Assn., general contract 3 story and basement, 80 x 140 ft., concrete and brick, to Fred Bone Constr. Co., Amarillo. $200,000. Noted Feb. 7.

Ore., Klamath Falls—Apartment and Store—G. A. McCarthy, 3 story, 100 x 100 ft., 7th and Pine Sts., to W. A. Stevens, Klamath Falls, $150,000.

Ore., Marshfield—Store and Office—Coos Bay Building Corp., 5 story, 100 x 100 ft., to L. W. Metzger, Portland, $150,000. All sub contracts let.

Calif., Sacramento—College—Christian Brothers College, Martinez, two 2 story, brick and hollow tile, to W. Keating, Capitol Natl. Bank Bldg., $168,000. Noted Feb. 7.

Ont., Kingston—Womens Residence—Queens University, constructing womens residence, to Dickie Constr. Co., Ltd., Ryrie Bldg., Toronto, $175,000.

Japan, Tokio—Bank and Office—Mitsui & Co., Tokio, rein.-con. steel and stone, here, to J. Stewart & Co., 30 Church St., New York City, $7,500,000.

Federal Government Work

PROPOSED WORK

Ky., Addison—Lumber—U. S. Engineer, P. O. Box 72, Louisville, takes bids about Mar. 18, 820 pieces or 190,000 ft. 12 x 12 in. x 18 ft. yellow pine for Dam 45.

Ky., Louisville—Steel Boat Hulls—U. S. Engineer, P. O. Box 72, takes bids about Apr. 10, 5 steel maneuver boat hulls, one for Louisville, one for Fernbank, and three for Marietta, O.

BIDS DESIRED

R. I., Providence—Dredging—Apr. 12, at U. S. Engineer office, Providence, dredging in Providence River and Harbor; adv. E. N.-R. Mar. 13.

N. Y., New York—Dredging—Apr. 4, by U. S. Engineer, Army Bldg., dredging 200,000 sq.yd. soft materials, and 2,000 cu.yd. rock removal in Hackensack River, N. J.

D. C., Wash.—Mar. 28, by Treasury Dept., Supervising Architects Office, change and repairs to plumbing system in Treasury Building.

Ala., Florence—Steel Gates—Apr. 22, by U. S. Engineer, Florence, furnishing and erecting 58 structural steel regulating gates for Wilson Dam, Tennessee River, near here; adv. E. N.-R. Mar. 13.

Ky., Louisville—Apr. 8, by U. S. Engineer, P. O. Box 72, 75,000 bbl. cement for Dams 44, 45 and 46, Ohio River; adv. E. N.-R. Mar. 13.

O., Cincinnati — Cement — Mar. 20, by U. S. Engineer, furnishing 6,200 bbl. cement.

Mich., Midland—Post Office—Mar. 26, by Treas. Dept. at office Supervising Architects, Wash., D. C., 1 story, 62 x 64 ft. brick and tile, here.

Ia., Knoxville — Laundry Equipment — Mar. 25, at office Constructing Quartermaster, Knoxville, removing laundry equipment from old building, reconditioning and installing in new building.

Tex., Orange—Post Office—Apr. 4, by Treas. Dept. at office Supervising Architect, Wash., D. C., 1 story, 54 x 82 ft. brick, here.

Ore., Portland—Roads—Mar. 19, by C. H. Purcell, dist. engr., Bureau Pub. Rds., U. S. Dept. Agriculture, 316 New Post Office Bldg., Portland, constructing 24.8 mi. Austin-Unity National Forest Rd. in Grant and Baker Counties.

BIDS RECEIVED

Minn., Duluth—Dump Scow—U. S. Engineer, one steel dump scow, from Marine Iron & Shipbuilding Corp., 11th Ave. W., $45,948. Noted Jan. 31.

CONTRACTS AWARDED

N. C., Huntington — Steel Snagboat — U. S. Engineer Office, War Dept., Wash., D. C., 90 ft. steel, steam snagboat, to Charleston Dry Dock & Machine Co., 106 Concord St., Charleston, S. C., $75,930.

Miss., Gulfport—Breakwater—U. S. Engineer, Mobile, Ala., pile and stone breakwater here, to L. F. Alexander, Inc., 830 Audubon Rd., New Orleans, $53,472. Noted Jan. 24.

Ky., Louisville—Crib Timbers—U. S. Engineer, P. O. Box 72, furnishing 411 pieces 10 x 12 in. x 20 ft. and 120 pieces 10 x 12 in. x 30 ft. crib timbers, to Green Bros., Falls-of-Rough, $46.50 per M. Noted Feb. 28.

Ky., Owensboro—Lumber—U. S. Engineer, P. O. Box 72, Louisville, furnishing 7,920 pieces or 350,000 ft. 2 x 12 in. yellow pine, in 16, 18, 20 and 24 lengths, to Marsh & Truman Lumber Co., 332 South Michigan Ave., Chicago, $35.45 per M. Noted Mar. 6.

Ky., Owensboro—Soft Steel Bars—U. S. Engineer, P. O. Box 72, Louisville, furnishing 3,200 soft steel round bars, ⅜ in. diam., 22 ft. long, for Dam 46, Ohio River, to Bourne-Fuller Co., 1105 Union Trust Bldg., Cincinnati, O., $2.81 per 100 lb. Noted Feb. 28.

O., Middletown — Mailing Vestibule — Treas. Dept., Wash., D. C., new mailing vestibule, here, to W. MacDonald Constr. Co., St. Louis, Mo., $7,914.

Wis., Milwaukee—Cement—U. S. Engineer, Milwaukee, furnishing 13,500 bbl. portland cement to W. H. Pipkorn Co., 1211 Humboldt St., $36,720. Noted Feb. 28.

Wis., Milwaukee—Steel—U. S. Engineer, 672,400 lb. reinforcing steel to Calumet Steel Co., 208 South LaSalle St., Chicago, $15,655. Noted Feb. 28.

Wash., American Lake—Laundry—U. S. Veterans' Bureau, Room 791, Arlington Bldg., Wash., D. C., laundry building at Veterans' Hospital 94, to E. A. Francis Constr. Co., Seattle, $16,527. Noted Jan. 24.

Ore., Portland—Stone—U. S. Engineer, War Dept., Wash., D. C., furnishing stone for jetties to Hauser Constr. Co., Henry Bldg., $859,420.

Unclassified

PROPOSED WORK

Transmission Line—New York—Power Corp. of New York, Northern New York Trust Co. Bldg., Watertown, had surveys and plans prepared for double 3-phase high tension transmission line on steel towers from Boonville to Rome, approximately 24 mi. W. Creager, c/o owner, ch. engr.

Wharves, etc.—Sacket Harbor, N. Y.—Standard Oil Co. of New York, 26 Bway., New York City, purchased site here, incl. railroad and lake frontage, and plans wharves, breakwater, rail facilities, storage tanks, etc., for complete storage system. To exceed $200,000.

Electric Facilities, etc.—Syracuse, N. Y.—Pub. Serv. Comn. gave approval to merger of Syracuse Lighting Co., 421 South Warren St., and Onondaga Utilities Co., will expend $1,546,455 for improvements to existing electric facilities and $3,409,278 for gas service. Involved in new program is new electric plant for this city and new gas plant to meet needs of increased service. J. C. DeLong, pres. Syracuse Lighting Co.

Pier—Point Marion, Pa.—McClain Sand Co. plans timber and stone pier, 225 ft. long, 25 ft. wide, here. J. Cubbage, c/o owner, engr.

Sea Wall — Waveland, Miss. — Election Mar. 20, $50,000 bonds for sea wall along entire length of town. Bd. Supervs. Hancock Co. voted to assist.

Canal — Louisiana — Louisiana Gravity Canal, c/o W. Bradford, pres. Alexandria, having preliminary plans prepared for 255 mi. canal connecting Red and Calcasieu Rivers, 138 mi. through old beds of Red River, and 117 mi. through open table lands, excav. 9 ft. average, embankments 9-11 ft. high, 50 ft. wide at bottom, and five 110,020 hp. hydro-electric power plants, and 5 reservoirs to hold 1,866,040 acre ft. of water. $8,700,000. Private plans.

Asphalt Plant — Detroit, Mich. — Dept. Pub. Wks., City Hall, having plans prepared enlarging city asphalt plant to 6,000 sq.yd. daily capacity, Leib St. $150,000. G. Jerome, city engr.

Playgrounds—Kenosha, Wis.—Park Bd. F. A. Carlson, dir., plans dredging lagoons, building concrete walks, etc., on Washington Island for playgrounds. $25,000.

Street Lighting—Platteville, Wis.—City plans ornamental street lighting in main sections. $25,000. J. J. Stephenson, clk. Engineer not selected.

Hydro-Electric Development — Cannon Falls, Minn.—Cannon River Hydro-Electric Co. plans development in Cannon River, 3 mi. below here. Project will include dam and turbine. $250,000. J. H. A. Brahtz, 409 Metropolitan Opera House Bldg., St. Paul, engr.

Grain Elevator—Kansas City, Mo.—Washburn-Crosby Co., 1010 New York Life Bldg., plans rein.-con. grain elevator, 750,000 bu. capacity, 18 storage tanks, adjoining present plant. W. H. Bovey, Chamber of Commerce Bldg., Minneapolis, Minn., dir.

Lighting System—St. Joseph, Mo.—Election soon $500,000 bonds street lighting system. W. K. Seitz, city engr.

Flood Protection—Newport, Ark.—Cache River D. D. making plans flood protection and drainage of 100,000 acres, Jackson and Poinsett Counties. Bowman Eng. Co., Newport, engr. Morgan Eng. Co., Goodwyn Institute, Memphis, Tenn., consult. engrs.

Pipeline — Texas — McCorkle Pipe Line Co., W. T. Waggoner Bldg., Ft. Worth, plans interstate pipe line from Aransas Pass to Duncan Okla., financed and plans made for north Texas and Oklahoma main line and laterals, plans in progress lines south of Ft. Worth, Aransas Pass to San Antonio, double 10 in. main line with 8 in. line north of San Antonio, 6 in. to Luling and 8 in. to Laredo fields. Large refinery also planned for Aransas Pass. $1,500,000 plus. J. Prince, c/o owner, engr.

Transmission Lines—Weleetka, Okla.—See "Industrial Works."

Transmission Line—Tacoma, Wash.—See "Material and Equipment," under "Bids Desired."

Speedway—Los Angeles, Calif.—Los Angeles Speedway Assn., Chapman Bldg., plans board bowl type speedway. To exceed $350,000.

Transmission Line — Ontario — Great Northern Power Co., New Liskeard, plans branch electric power transmission line from their Porcupine power line to Elk Lake, 15 mi. long. $25,000. Sutcliffe & Neelands, New Liskeard, engrs.

Transmission Line — Ontario — Light & Power Comn., Orillia, having plans prepared transmission line from Orillia to power house at Swift Rapids. $40,000. R. H. Starr, c/o owner, engr.

Drilling Wells—Dutton, Ont.—Callaghan & Browett, Wallacetown, plan to drill wells near here. $35,000. Prices wanted on all equipment.

Drilling Wells—Inglewood, Ont.—Sparks & Anderson, Oil Springs, plan to drill for oil and gas near here. $30,000. Prices wanted on all equipment.

Ornamental Lighting System—Kitchener, Ont.—City Council plans ornamental lighting system on King St. $35,000. S. Shupe, city engr.

Dock—Midland, Ont.—Dept. Pub. Wks., Parliament Bldg., Ottawa, plans dock and dredging work in Midland Harbor. $500,000. K. M. Cameron, ch. engr.

Car Barns—Ottawa, Ont.—J. A. Ewart, archt., Jackson Bldg., soon takes bids rein.-con., brick and steel car barns, plain foundation, Cobourg St., for Ottawa Electric Ry. Co., Bank St., $100,000.

Harbor Improvements—Toronto, Ont.—Harbor Comn., Harbor Bldg., plans to expend $500,000 improving harbor, concrete retaining walls, dredging and hydraulic filling. E. L. Cousins, Harbor Bldg., constr. engr.

BIDS DESIRED

Subway Entrance—New York, N. Y.—Mar. 14, by Transit Comn., 49 Lafayette Ave., additional entrance to Mott Haven Station of 7th Ave.-Lexington Ave. Rapid Transit R.R., Mott Ave. and 138th St., Bronx Boro, Agreement "CB." G. McAneny, chn.

Jetty—Belmar, N. J.—Mar. 25, by Boro Council, 600 ft. stone jetty with 100 ft. running shore line, 15,000 tons stone boulders piled on one side. $100,000. C. W. Staniford, 50 Church St., New York City, engr.; adv. E. N.-R., Mar. 13.

Swimming Pool—Two Rivers, Wis.—Bd. Educ. taking bids swimming pool, swimming pool room and bleachers, shower rooms, lockers, etc. $25,000. J. D. Chubb, 109 North Dearborn St., Chicago, engr.

Tanks—Cementville (San Antonio P. O.) Tex.—San Antonio Portland Cement Co. taking bids 10 rein.-con. tanks, 20 x 50 ft. high. $100,000. W. E. Simpson, N. B. C. Bldg., San Antonio, engrs.

Electrolier System—Fresno, Calif.—City Council receiving bids 258 electroliers on portion Ventura, Mono, Inyo, C Sts., etc. W. Stranahan, city engr. Noted Feb. 28.

Transit Sheds—Los Angeles, Calif.—Mar. 21, by Los Angeles City Harbor Comn., Byrne Bldg., sheds, steel frame, creosoted pile foundations, Mormon Channel. $200,000. J. W. Ludlow, Byrne Bldg., engr. Noted Mar. 6.

CONTRACTS AWARDED

Transmission Line, etc. — New York — Twin State Gas & Electric Co., Hoosick Falls Div., will build 3 mi. high tension transmission line from power plant at Hoosick Junction to Eagle Bridge with distribution lines in Eagle Bridge, by force account under supervision of L. C. White, mgr. $35,000-$40,000. Noted Feb. 28.

Grain Elevator — Minneapolis, Minn. — Spencer Kellogg & Sons, 1221 Flour Exch. Bldg., grain elevator, 450,000 bu. capacity, storage tanks, 80 ft. high, 25th Ave. S. E. and 4th St., to Fegles Constr. Co., 706 1st Ave. N.

Stadium—Minneapolis, Minn.—University of Minnesota, 520 x 550 ft. rein.-con. masonry exterior, 50,000 seating capacity, to J. Leck, 211 South 11th St., $537,762. Noted Feb. 14.

Amusement Park—Dallas, Tex.—Fairyland Amusement Co. will build amusement park, by day labor; 2,000,000 ft. lumber, to Davis-Johnson Lumber Co., Magnolia Bldg., $100,000. Noted Dec. 13.

Foundation—Leon Junction, Tex.—See "Industrial Works' under Proposed Work.

Material and Equipment

PROPOSED WORK

Asphalt Binder Mixture, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., rejected bids Feb. 25, 400 cu.yd. asphalt binder mixture and 600 cu. yd. asphalt wearing surface mixture. Noted Feb. 28.

Traveling Crane—Newton, Kan.—See "Industrial Works."

Drag Line Shovel — Clarksburg, Calif.—Holland Land Co. plans to purchase drag line shovel for ditch work. I. H. Smith, Clarksburg, engr.

Concrete Pipe—Delhi, Calif.—Delhi Land Settlement Colony plans to purchase 8, 10 and 12-in. concrete pipe. $25,000. C. M. Wooster, Phelan Bldg., San Francisco, engr.

Pipe—Glendale, Calif.—City plans to purchase 18,000 ft. 4 in., 18,000 ft. 6 in., 12,000 ft. 8 in. and 7,000 ft. 12 in. Class B c.i. pipe, also 60 tons Class B c.i. fittings. A. J. Vanwye, clk.

Road Machinery—Los Angeles, Calif.—City plans to purchase 8 ton gas road roller and trailer.

Transformer — Essex, Ont. — Provincial Government, Toronto, voted $200,000 to install transformer in substation here, for Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, $200,000.

BIDS DESIRED

Road Scraper, etc.—Castleton, Vt.—Town in market for 1 road scraper, 1 steam or compressed air rock drill. C. A. Beach, comr.

Steam Roller—Gardner, Mass.—Highway Dept. in market for steam roller for road building. C. P. Pearson, mayor.

Paving Blocks—New York, N. Y.—Mar. 18, by E. W. Buckley, comr. Purchase, Municipal Bldg., creosoted wood paving blocks to Dept. Plant & Structures.

Steam Boiler Ashes—New York, N. Y.—Mar. 18, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., 4,000 cu.yd. hard coal clean steam boiler ashes.

Track Materials — New York, N. Y. — Mar. 21, by Transit Comn., 48 Lafayette St., supply of track materials (Order 6) for use in construction of Rapid Transit Railroads. G. McAneny, chn.

Asphalt Cold Mix—Evansville, Ind.—Mar. 26, by Bd. Pub. Wks., 200 bbl. asphalt cold mix for street repairs.

Lumber—Milwaukee, Wis.—Mar. 17, by Central Bd. Purchases, 5,500 ft. creosoted yellow pine fencing, 23,500 ft. yellow pine lumber, 1,233 pieces yellow pine plank and 53,700 ft. oak plank. $8,000-$9,000.

Road Oil, Pipe, Crushed Rock, etc.—Minneapolis, Minn.—Mar. 24, by A. P. Erickson, aud. Hennepin Co., 200,000 gal. road oil; 800 lin.ft. 12- to 72-in. concrete culvert pipe and 2,500 lin.ft. 12- to 42-in. corrugated metal culvert pipe; crushed rock, sand and gravel, seasons supply, amounts not specified.

Street Signs, Asphalt Filler, etc.—St. Paul, Minn.—Mar. 25, by H. W. Austin, city purch. agt., 1,600 arterial street signs; 40 tons asphalt filler, 300 sq.yd. paving brick. G. M. Shepard, city engr.

Frogs, etc.—Houston, Tex.—Mar. 20, by H. L. Washburn, aud. Harris Co. Navigation Dist., frogs, switches, c.i. pipe, fittings, etc. $25,000-$30,000. E. A. Tucker, Court House, engr.

Power House Equipment—Tacoma, Wash.—Apr. 16, by I. S. Davisson, comr. light and water, manufacture and delivery machinery and equipment for Cushman Power Project; adv. E. N.-R. Mar. 13.

Bituminous Material, etc.—Ottawa, Ont.—Mar. 18, by Ottawa Suburban Rd. Comn., 279 Carling Ave., furnishing bituminous material, portland cement and culvert pipe. A. K. Hay, 279 Carling Ave., engr.

BIDS RECEIVED

Cement, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, Mar. 5, 10,000 bbl. Portland cement, from E. E. Buhler Co., 103 Park Ave., New York, $27,686; 7,000 cu.yd. steam ashes, from High-grade Builders Supply Co., 6th St. and 2nd Ave., $8,680. Noted Feb. 28.

Broken Stone, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Mar. 19, 5,000 cu. yd. broken stone and 11,000 cu.yd. sand, from E. B. Simpson, Hempstead Turnpike, Hollis, $2.65 and $1.69 respectively; 11,000 cu.yd. sand, from Tuohey & Upton, Inc., 129 Bway., Flushing, $1.69; 14,000 tons steam ashes and 21,000 cu.yd. broken stone, from McGirr Bros., Inc., 461 8th Ave., New York, $1.22 and $2.11 respectively; 864 ft. 12 in. c.i. pipe, from J. Fox & Co., 233 Bway., New York, $2.77; 400 granite blocks from J. Prowse, 528 Flushing Ave., Astoria, $3,084; 550 net tons lime, from Superior Lime Corp., 171 Morgan Ave., Brooklyn, $11,138. Noted Mar. 6.

Binder, etc.—Freehold, N. J.—Monmouth Co. Mar. 5, 300,000 gal. lignin binder from M. R. Young, 34 Fisher Pl., Trenton, $0.14 per gal.; 100,000 gal. bituminous dressing for macadam roads, from W. G. Harrington, 50 Church St., New York City, $0.4525 per gal. Noted Feb. 21.

Paving Mixer and Tractors—St. Paul, Minn.—H. W. Austin, city purch. agt., Mar. 4, gasoline power paving mixer, non-tilting type, from Austin Mchy. Corp., 375 Cedar St., $5,500; two 10-ton truck tractors, from D. A. Odell Motor Car Co., 131 South 10th St., Minneapolis, $3,828 each. Noted Feb. 28.

CONTRACTS AWARDED

Granite Paving Blocks, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro. Municipal Bldg., 50,000 granite paving blocks, to St. George Granite Co., 90 West St., $7,425; 500 tons asphalt filler and 30,000 gal. gasoline, to Standard Oil Co., 26 Bway., $9,450 and $6,000 respectively; 4,000 cu.yd. coarse aggregate, to Seaboard Sand & Gravel Corp., 26 Cortlandt St., $9,200; 3,000 tons inorganic dust, to New York Trap Rock Corp., 101 Park Ave., $18,720; 3,000 cu.yd. concrete sand, to Gallagher-Shand, Inc., 420 East 105th St., $4,950; 6,000 cu.yd. binder stone, to Calvin Tompkins & Co., 30 Church St., $11,580; one tandem steam roller, to Buffalo Springfield Roller Co., 150 Nassau St., $2,813. Noted Feb. 21.

Cement—Madison, Wis.—For 10,000 bbl. cement, divided into 3 lots and let to Conklin & Sons Co., Conklin Bldg., Castle & Doyle, State St., and Struck & Irwin Co., Mifflin St., all bid $2.79. Noted Feb. 21.

Pipe—Dallas, Tex.—For 50 tons c.i. pipe, to Natl. Cast Pipe Co., Kirby Bldg., $1.378 per ft.

Steel Rails—Montreal, Que.—Canadian Pacific Ry., Windsor St. Sta., Montreal, 50,000 tons 100 lb. steel rails to Algoma Steel Corp., Saulte Ste. Marie, Ont. Rails will be laid by day labor. J. M. R. Fairbairn, ch. engr.

OFFICIAL PROPOSALS

Bids: March 19.

Delaware River Bridge

CONTRACT NO. 13

CABLE BANDS, SUSPENDERS, AND HAND ROPES

Philadelphia, Pa.

Sealed proposals for the construction of the cable bands, suspenders, and hand ropes of the bridge over the Delaware River connecting the cities of Philadelphia and Camden, will be received by the Delaware River Bridge Joint Commission at Room 806 Widener Building, Philadelphia, Pa., until 2:30 P. M., March 19, 1924, at which place and time they will be publicly opened and read. The contract will be awarded, all bids rejected, within fourteen days after bids are opened. The right is reserved to reject any or all bids.

The cable bands, suspenders, and hand ropes are to be erected upon the main cables of the bridge, between the two anchorages. The work includes furnishing of materials, and their erection, ready for the attachment of the suspended structure.

Bids must be made upon the blank proposal form which, together with specifications, bond and contract form, and contract drawings, may be obtained at the office of the Joint Commission upon deposit of $15.00, which deposit will be refunded upon the receipt of bid or return of the copies.

Each proposal must be accompanied by a certified check for Fifteen Thousand Dollars, drawn upon a national or state bank or trust company having an office either in Philadelphia or Camden, and payable to the Delaware River Bridge Joint Commission, and surety's consent must be shown. The bidder or bidders to whom the contract is awarded will be required to give bond in the sum of fifty per cent. of the amount of the contract.

DELAWARE RIVER BRIDGE JOINT COMMISSION
GIFFORD PINCHOT,
Chairman.
JOSEPH K. COSTELLO,
Secretary.

Bids: March 27.

Water Works and Sewerage

Dunn, N. C.

Sealed proposals will be received by the Mayor and Board of Town Commissioners of the Town of Dunn, N. C., at the Town Hall in Dunn, N. C., until 2:00 p.m., March 27, 1924 for Water Works and Sewerage Improvements.

The work will consist of:

Brick and Concrete Pumping Station and complete Filter Plant.

Steel Wash Water Tank and Tower.

Eleven miles of Cast Iron Pipe Line (16-inch to 4-inch).

One and one-half miles of 2,200 volt transmission line.

Motor-driven Centrifugal Pumps, and accessories.

Sewer extensions, about one mile.

Sewage Disposal Plant.

Proposals must be marked "Proposal for Water Works Improvements."

All bids must be upon blank forms provided in the Proposal, Specifications, and Contract.

Each bid must be accompanied by a certified check for not less than five per cent of the amount of the bid, as evidence of good faith.

Plans and specifications will be on file at the Clerk's office in Dunn, and at the office of the Engineer in Durham, N. C.; and copies of the specifications, form of proposal, etc., will be mailed upon application to the Engineer at Durham, N. C., accompanied by payment of Ten Dollars $10,000) for each set of plans and specifications, which will be refunded to those who submit bona-fide bids.

The right is reserved to reject any or all bids.

J. L. WADE, Mayor,
H. A. PARKER, Clerk.

Engineer:
GILBERT C. WHITE CO.,
Durham, N. C.

Bids: March 27.

Water Supply System

Newberry, S. C.

Sealed proposals for furnishing material and constructing a Water Supply System for the City of Newberry, S. C., will be received by the Commissioners of Public Works at the City Hall, until three (3) p.m., Thursday, March 27th, 1924.

The Water Supply System will consist of an intake and pumping station, a one million gallon service reservoir, coagulating basin, two 500,000 gallon concrete filters and approximately 14,000 feet of 12 inch supply main.

Each proposal must be accompanied by a certified check, payable to the City of Newberry, S. C., to an amount equal to five (5) per cent of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100) of the contract price will be required. Payments will be made on monthly estimates.

Plans and specifications are on file in the office of the City Clerk, at Newberry, S. C., and with Paul H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Georgia.

Bidders may obtain copies from the Engineer, by enclosing certified check for twenty-five ($25.00) dollars, payable to the City of Newberry, S. C. If blue prints are desired, they may be had at the cost of printing. If the plans, specifications and blue prints are returned within thirty days after opening bids, the check for twenty-five dollars will be returned.

Commissioners of Public Works.
M. L. SPEARMAN,
Chairman.

PAUL H. NORCROSS,
Consulting Engineer,
1404 Candler Building,
Atlanta, Georgia.

(Continued on following page)

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

(Continued from preceding page.)

OFFICIAL PROPOSALS

Bids: March 31.

Water Delivery System

Barberton, Ohio.

Sealed proposals will be received at the office of the Director of Public Service, Barberton, Ohio, until 12 o'clock noon, Eastern Standard time of the 31st day of March, 1924, and then publicly opened and read for constructing a complete delivery system from the Water Purification Plant to the present mains in the City of Barberton, Ohio, comprising the following approximate quantities:

32 valves ranging in size from 4 inch to 24 inch.

2,350 tons of cast iron bell and spigot pipe 6", 8", 12", 16" and 24".

20 tons of special castings.

The furnishing of all labor and material necessary for the laying of the pipe called for above including the setting of valves and special castings, the construction of valve chambers, crossings and all work incidental thereto.

The furnishing and installing complete of a 1,150,000 gallon steel storage tank.

Payment for the performance of the above work will be made as stipulated in the form of contract which is on file in the office of the Director of Public Service. Copies of the plans, proposal forms, specifications and forms of bonds can be seen at the office of the Director of Public Service and can be obtained from that office or from the office of Wm. G. Clark, Consulting Engineer, 1046 Spitzer Building, Toledo, Ohio, upon deposit of Twenty-Five ($25.00) Dollars for each set, which will be refunded provided they are returned in good order on or before April 15th, 1924.

Each proposal or bid must contain the full name of every person or company interested in same and shall be accompanied by a bond executed by the bidder and a Surety Company satisfactory to the Director of Public Service on the form marked "A" and attached to the form of proposal in the sum of 10% of the proposal or bid; or in lieu of such bond the bidder may deposit with the Director of Public Service a certified check on a solvent bank in the City of Barberton, Ohio, or the City of Akron, Ohio, payable to the order of the Treasurer of the City equal in amount to such bond.

Said bond or certified check is required as a guarantee that if the bid is accepted, a contract will be entered into and the performance of it properly secured.

The contract bond will be fifty (50%) per cent of the amount of the contract.

Labor and material bid for must be separately stated, with the price of each.

Bidders must furnish satisfactory evidence of their experience and ability to construct work of the character required.

Bidders must use the printed forms provided for the purpose as none other will be received.

The Director of Public Service reserves the right to reject any or all bids or to accept any bid which he may deem advantageous to the City of Barberton.

J. F. MENTZER,
Director of Public Service.

Bids: April 1.

Superstructure

Nashville, Tenn.

Bids will be received until April 1st for erection of superstructure for three span steel bridge of 516 tons, over Cumberland River at Clarksville, Tenn. Erection to begin immediately. Further information on application to the

NASHVILLE BRIDGE COMPANY,
Nashville, Tenn.

OFFICIAL PROPOSALS

Bids: March 31.

Paving

THIRD AVENUE NORTH FROM THE EAST LINE OF STEPHENSON AVENUE TO THE EAST LINE OF 14th STREET NORTH AND 14th STREET NORTH FROM THE NORTH LINE OF LUDINGTON STREET TO THE SOUTH LINE OF THIRD AVENUE NORTH

Escanaba, Mich.

The City of Escanaba hereby gives notice that proposals will be received until two o'clock in the afternoon on the 31st day of March, 1924, at the office of the City Clerk, City Hall, Escanaba, Michigan, for the furnishing of all material and doing of all work of grading and paving Third Avenue North from the East line of Stephenson Avenue to the East line of 14th Street North, and 14th Street North from the North line of Ludington Street to the South line of Third Avenue North; said work to consist of preparing the present water bound macadam base and the laying of an asphaltic concrete, sheet asphalt, or Warrenite bitulithic top course, the bids to be opened at the office of the City Manager, Escanaba, Michigan, on the 31st day of March, 1924, at two o'clock in the afternoon.

Bidders will state in their bids the several kinds of paving, plans and specifications of which have been filed in the office of the City Clerk, and all work to be done according to specifications, plans and diagrams on file in the office of the City Clerk, and in accordance with all requirements in the City Charter.

A certified check for at least 10% of the largest amount bid by each bidder must accompany the bid, the same to be forfeited if the bid be accepted and the bidder refuse or neglect to enter into contract. The City reserves the right to reject any and all bids.

Surety company bonds in a company satisfactory to the City, and bonds in an amount satisfactory to the City, for the performance of the contract and for labor and material, are required.

The City is granted the right to accept any bid so filed on or before the 16th day of April, 1924.

CARL E. ANDERSON, City Clerk.

Dated March 8, 1924.

Bids: March 18.

Paving

Charlotte, N. C.

Sealed proposals for the paving of certain streets in the City of Charlotte will be received by the Board of Commissioners up to 11 o'clock a.m. of the 18th day of March, 1924.

The work to be done consists of approximately 45,000 sq.yd. walk and 211,000 sq.yd. of paving.

Bids will be received on various types.

A certified check equal to five per cent of the amount of the bid, and made payable to the Treasurer of the City of Charlotte, will be required to accompany each bid.

Plans may be seen, and specifications may be obtained, at the office of the City Engineer.

The right is reserved to reject any or all bids or any part of a bid.

By Order of the Board of Commissioners.

W. S. STANCILL,
Commissioner of
Public Works.

JOSEPH FIRTH,
City Engineer.

OFFICIAL PROPOSALS

Bids: March 26.

Highway Work

Baltimore, Md.

Sealed proposals for building one section of State Highway, as follows:

Anne Arundel County—Contract AB-10-D. One section of State highway over the Severn River Bridge and Approaches for a distance of 0.67 mile. (Sheet Asphalt).

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on Wednesday, the 26th day of March, 1924, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 8th day of March, 1924.

JOHN N. MACKALL,
Chairman.

L. H. STEUART,
Secretary.

Bids: April 16.

Machinery and Equipment

CUSHMAN POWER PROJECT

Tacoma, Wash.

Sealed proposals will be received at the office of the Commission of Light and Water, Tacoma, Washington, between the hours of 12:00 M. and 2:00 P.M., April Sixteenth, 1924, for the Manufacture and Delivery of Machinery and Equipment consisting of 2 27,500 h.p. Hydraulic Turbines, 2 20,000 kva. Generators, 7 6,667 kva., and 4 14,100 kva., and 6 150 kva., and 3 3,333 kva. Transformers and one 15,000 kva. Synchronous Condenser, and auxiliaries, in accordance with the Specifications, therefor, copies of which may be obtained at this office by intending Bidders upon deposit of Twenty-five ($25.00) Dollars.

IRA S. DAVISSON,
Commissioner of Light & Water,
Tacoma, Washington.

Bids: March 25.

Breakwater Jetty

Belmar, N. J.

Sealed bids for the construction of a rock breakwater Jetty with wooden core, approximately 600 feet long, and the furnishing of all material and labor, etc., in connection therewith, will be received by the Mayor and Council of the Borough of Belmar at a Council Meeting to be held in Council Chambers, Borough Hall, on Tuesday evening, March 25, 1924, at 8:00 o'clock p.m.

The Council reserves the right to reject any and all bids.

Detailed specifications may be obtained upon application to the Borough Clerk, Belmar, New Jersey, upon deposit of $25, which will be refunded upon return of said plans and specifications.

FRED V. THOMPSON, M. D.,
Borough Clerk.

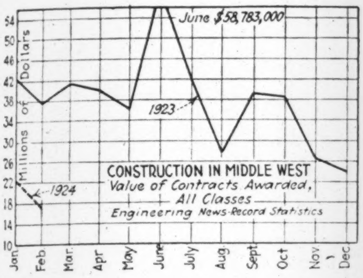
CONSTRUCTION NEWS

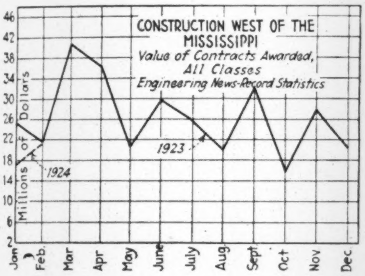
Engineering News-Record, March 20, 1924

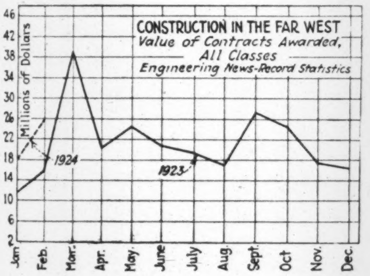
The Construction Barometer

February Contracts Exceeded January for First Time Since 1921—Heavy March Construction Volume Indicated

FEBRUARY contracts for engineering construction published in *Engineering News-Record*, exceeded the January value, except in New England and the Middle West. This February rise has not occurred since 1921. Record February permits point to heavy building lettings in March. This is the more likely, since lumber and steel prices are easier and prices of other basic materials are steady.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Feb. 28	$18,333,000	$30,839,000	$49,172,000
Mar. 6	18,660,000	15,917,000	34,577,000
Mar. 13	18,513,000	13,398,000	31,911,000
3 weeks	$55,506,000	$60,154,000	$115,660,000

LARGE BUILDING CONTRACTS NUMBER AND VALUE

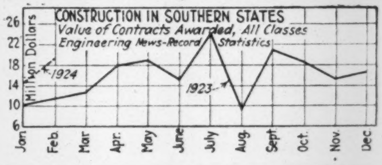
Week Ended	No.	Public Work	No.	Private Work
Feb. 28	22	$5,556,000	47	$14,061,000
Mar. 6	12	5,300,000	36	9,438,000
Mar. 13	10	4,251,000	35	11,575,000
3 weeks	44	$16,107,000	118	$35,074,000

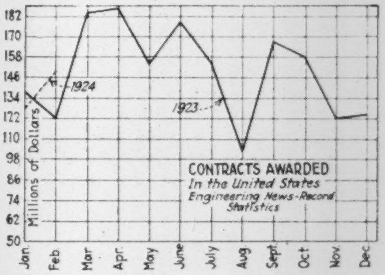
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

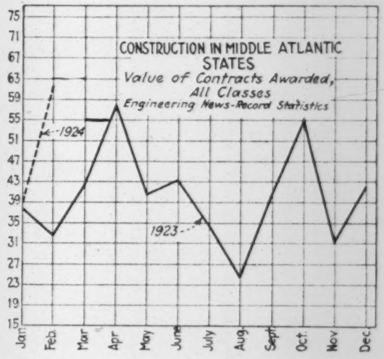
			Public		
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
Feb. 28	41	60	61	33	188
Mar. 6	45	70	80	35	229
Mar. 13	41	64	71	40	227

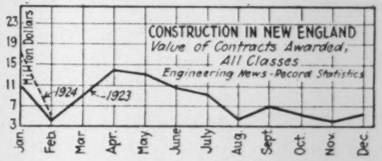
PINE AND STEEL PRICES EASIER—OTHER BASIC PRICES STEADY

	Quoted on Mar. 20 at	Price was	On
Structurals, Pittsburgh, 100 lb......	$2.30 @2.50	$2.40 @2.50	Mar. 13
Cement, Chi. net bbl.	2 20	2.10	Jan. 24
Pine, N. Y. m. ft....	61.00	65.00	Mar. 13
Fir, San Fran., m. ft.	36.00	38.00	Jan. 24
Common labor, hr...	.55	.54	Feb. 28









PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Mar. 21	Trenton, N. J.	Mar. 13
Mar. 24	Park Ridge, N. J.	Mar. 6
Mar. 24	Michigan City, Ind.	Mar. 20
Mar. 24	Herkimer, N. Y.	Mar. 20
Mar. 25	Long Island City, N. Y.	Mar. 20
Mar. 25	Phila., Pa.	Mar. 20
Mar. 25	Ferriday, La.	Mar. 13
Mar. 25	Minneapolis, Minn.	Mar. 20
Mar. 26	Litchfield, Ill.	Feb. 21
Mar. 26	Long Island City, N. Y.	Mar. 20
Mar. 26	St. George, N. Y.	Mar. 20
Mar. 27	Dunn, N. C.	Mar. 6
Mar. 27	Newberry, S. C.	Mar. 6
Mar. 27	Long Island City, N. Y.	Mar. 20
Mar. 27	Brooklyn, N. Y.	Mar. 20
Mar. 28	New York, N. Y.	Mar. 20
Mar. 31	Barberton, O.	Mar. 13
Mar. 31	Chatham, Va.	Mar. 20
Mar. 31	Port Colborne, Ont.	Mar. 20
Apr. 2	Sanitorium, N. C.	Mar. 20
Apr. 2	Dunkirk, N. Y. Adv. Mar. 20.	Mar 20
Apr. 4	Patton, Pa. Adv. Mar. 20.	Mar. 20

SEWERS

Bids Close		See Eng. News-Record
Mar. 21	Wash., D. C.	Mar. 13
Mar. 24	West Allis, Wis.	Mar. 20
Mar. 25	Trenton, N. J.	Mar. 13
Mar. 25	Oilton, Okla.	Mar. 13
Mar. 25	LaPorte, Ind.	Mar. 20
Mar. 25	Long Island City, N. Y.	Mar. 20
Mar. 28	Sharon, Pa.	Mar. 20
Mar. 28	Cameron, Mo.	Mar. 20
Apr. 1	Toledo, O. Adv. Mar. 6 to 20.	Mar. 6
Apr. 1	Erie, Pa. Adv. Mar. 13 and 20.	Mar. 20
Apr. 2	Sayreville, N. J.	Mar. 20
Apr. 2	Butte, Mont.	Mar. 20
Apr. 5	Pottstown, Pa. Adv. Mar. 13 and 20.	Mar. 13
Apr. 8	Springfield, Mass.	Mar. 13
Apr. 15	Elizabethtown, Pa. Adv. Mar. 20.	Mar. 20

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Mar. 24	Michigan City, Ind.	Mar. 20
Mar. 25	Indianapolis, Ind.	Mar. 20
Mar. 25	Maspeth (Independent Sta. Flushing), N. Y.	Mar. 20
Mar. 28	Detroit, Mich.	Mar. 20
Apr. 9	East Chester (Grey Court P. O.), N. Y. Adv. Mar. 20.	Mar. 20

BRIDGES

Bids Close		See Eng. News-Record
Mar. 24	Aurora, Ill.	Mar. 20
Mar. 25	Springfield, Mass.	Mar. 6
Mar. 25	North Carolina	Mar. 13
Mar. 25	Primghar, Ia.	Mar. 20

Bids Close		See Eng. News-Record
Mar. 25	Reedsburg, Wis.	Mar. 20
Mar. 27	Buffalo, N. Y.	Mar. 6
Mar. 27	Youngstown, O.	Mar. 13
	Adv. Mar. 13 and 20.	
Mar. 27	South Dakota	Mar. 20
Mar. 27	Louisiana	Mar. 20
Mar. 31	Houston, Tex.	Mar. 6
Mar. 31	Alabama	Mar. 6
Mar. 31	Vancouver, B. C.	Mar. 13
Mar. 31	Rochelle Park, N. J.	Mar. 13
	Adv. Mar. 13 and 20.	
Mar. 31	Pine Bluff, Ark.	Mar. 20
Apr. 1	Portland, Ore.	Mar. 6
Apr. 1	Clarksville, Tenn.	Mar. 13
Apr. 1	Pennsylvania	Mar. 13
Apr. 1	Kansas City, Kan.	Mar. 20
Apr. 3	Iola, Kan.	Mar. 20
Apr. 7	Alabama	Mar. 13
Apr. 7	Sacramento, Calif.	Mar. 13
Apr. 7	California	Mar. 20
Apr. 7	Chehalis, Wash.	Mar. 20
Apr. 8	West Virginia	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 14	Eufaula, Ala.	Mar. 20
Apr. 15	Chamberlain, S. D.	Mar. 13
May 1	Tientsen, North China	Oct. 11

DAMS

Bids Close		See Eng. News-Record
Mar. 27	Tacoma, Wash.	Mar. 6

RAILWAYS

Bids Close		See Eng. News-Record
Mar. 26	Florida	Mar. 20
Mar. 28	New York	Mar. 20
Apr. 1	Indiana	Jan. 24
Apr. 15	New York	Mar. 20
	Adv. Mar. 20.	

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Mar. 25	Newport, Ark.	Mar. 20
Mar. 25	Audubon, Ill.	Mar. 20
Mar. 27	Pine Bluff, Ark.	Mar. 20
Mar. 31	Olivia, Minn.	Mar. 20
Mar. 31	Emmetsburg, Ia.	Mar. 20
Mar. 31	Terra Bella, Calif.	Mar. 20
Apr. 2	Oroville, Calif.	Mar. 20
Apr. 3	Buffalo, N. Y.	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 15	Rochester, N. Y.	Mar. 20
	Adv. Mar. 20.	
Apr. 15	New York	Mar. 20
	Adv. Mar. 20.	
May 6	Minneapolis, Minn.	Mar. 20

STREETS AND ROADS

Bids Close		See Eng. News-Record
Mar. 21	Cresson, Pa.	Mar. 6
Mar. 24	Moorhead, Minn.	Mar. 6
Mar. 24	Michigan	Mar. 13
Mar. 24	Black Mountain, N. C.	Mar. 20
Mar. 25	Minnesota	Mar. 6
Mar. 25	Greenville, Tex.	Mar. 13
Mar. 25	Michigan	Mar. 13
Mar. 25	North Carolina	Mar. 13
Mar. 25	New York, N. Y.	Mar. 20
Mar. 25	Mt. Clemens, Mich.	Mar. 20
Mar. 25	Austin, Tex.	Mar. 20
Mar. 25	East Cleveland (Cleveland P. O.), O.	Mar. 20
Mar. 25	Kitchener, Ont.	Mar. 20
Mar. 25	Steubenville, O.	Mar. 20
Mar. 25	Long Island City, N. Y.	Mar. 20
Mar. 26	New London, Conn.	Mar. 6
Mar. 26	Delaware	Mar. 6
Mar. 26	Providence, R. I.	Mar. 6
Mar. 26	New Jersey	Mar. 13
Mar. 26	Marshfield, Wis.	Mar. 13
Mar. 26	Fairmount, W. Va.	Mar. 13
Mar. 26	Harrisburg, Pa.	Mar. 13
	Adv. Mar. 13 and 20.	
Mar. 26	Jacksonville, Fla.	Mar. 13
Mar. 26	Maryland	Mar. 13
	Adv. Mar. 13 and 20.	
Mar. 26	Nevada	Mar. 20
Mar. 26	Brooklyn, N. Y.	Mar. 20
Mar. 27	Michigan	Mar. 13
Mar. 27	Belzoni, Miss.	Mar. 13
	Adv. Mar. 13 and 20.	
Mar. 27	Oakhurst, N. J.	Mar. 20
	Adv. Mar. 20.	
Mar. 27	Newark, N. J.	Mar. 20
Mar. 27	Towson, Md.	Mar. 20
Mar. 27	South Dakota	Mar. 20
Mar. 28	New Hampshire	Mar. 20
Mar. 31	Pennsylvania	Mar. 13
	Adv. Mar. 13 and 20.	
Mar. 31	Escanaba, Mich.	Mar. 13
Mar. 31	Wisconsin	Mar. 20
Mar. 31	St. Paul, Minn	Mar. 20
Mar. 31	Los Angeles, Calif.	Mar. 20
Apr. 1	St. Louis, Mo.	Mar. 6
Apr. 1	Lewisburg, W. Va.	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 1	Pennsylvania	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 1	Kentucky	Mar. 20
Apr. 2	Abbeville, La.	Mar. 13
Apr. 2	Ontario	Mar. 13
Apr. 2	Benson, N. C.	Mar. 13
Apr. 2	Mankato, Minn.	Mar. 20
Apr. 2	Michigan	Mar. 20
Apr. 3	Canton, S. D.	Mar. 13
Apr. 3	Iola, Kan.	Mar. 20
Apr. 4	Atchinson, Kan.	Mar. 20
Apr. 4	Mantorville, Minn.	Mar. 20
Apr. 4	Cherryville, N. C.	Mar. 20
Apr. 4	Tennessee	Mar. 20
Apr. 4	New York	Mar. 20
	Adv. Mar. 20.	
Apr. 4	Winchester, Ind.	Mar. 20
Apr. 7	Alabama	Mar. 13
Apr. 7	Pennsylvania	Mar. 20
	Adv. Mar. 20.	
Apr. 7	Elbow Lake, Minn.	Mar. 20
Apr. 7	White Plains, N. Y.	Mar. 20
	Adv. Mar. 20.	
Apr. 7	Michigan	Mar. 20
Apr. 7	Princeton, N. J.	Mar. 20
Apr. 7	California	Mar. 20
Apr. 8	Summersville, Va.	Mar. 6
Apr. 8	Paterson, N. J.	Mar. 20
	Adv. Mar. 20.	
Apr. 8	Milton, Fla.	Mar. 20
Apr. 8	Wabash, Ind.	Mar. 20
Apr. 8	Salem, N. J.	Mar. 20
	Adv. Mar. 20.	
Apr. 8	Pennsylvania	Mar. 20
	Adv. Mar. 20.	
Apr. 9	Delaware	Mar. 20
	Adv. Mar. 20.	
Apr. 9	Freehold, N. J.	Mar. 20
	Adv. Mar. 20.	
Apr. 10	Port Gibson, Miss.	Mar. 13
	Adv. Mar. 20.	
Apr. 14	St. Albans, W. Va.	Mar. 20
Apr. 15	Tonawanda, N. Y.	Mar. 20
	Adv. Mar. 20.	
May 1	Duluth, Minn.	Mar. 20
May 1	Duluth, Minn.	Mar. 20

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Mar. 31	Louisville, Ky.	Mar. 13
Apr. 2	Morris Plains, N. J.	Mar. 13
Apr. 17	Buffalo, N. Y.	Mar. 20
	Adv. Mar. 20.	
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Bids Close		See Eng. News-Record
Mar. 21	Lockport, N. Y.	Feb. 21
Mar. 21	Troy, N. Y.	Mar. 6
Mar. 21	Bloomsburg, Pa.	Mar. 13
Mar. 24	Easton, Pa.	Feb. 28
Mar. 24	St. Louis, Mo.	Mar. 6
Mar. 24	Phila., Pa.	Mar. 6
Mar. 24	Providence, R. I.	Mar. 20
Mar. 24	Mt. Carmel, Pa.	Mar. 20
Mar. 25	Stony Creek Mills, Pa.	Mar. 6
Mar. 25	Greensboro, N. C.	Mar. 13
Mar. 25	Brooklyn, N. Y	Mar. 13
Mar. 25	Ozone Park (Jamaica P. O.), N. Y.	Mar. 13
Mar. 25	St. Paul, Minn.	Mar. 13
Mar. 25	Dallas, Tex.	Mar. 20
Mar. 26	Greenville, Tex.	Mar. 13
Mar. 26	La Crosse, Wis.	Mar. 13
Mar. 26	Somerville, N. J.	Feb. 21
Mar. 26	Buffalo, N. Y.	Mar. 6
Mar. 26	Mahanoy City, Pa.	Mar. 13
Mar. 26	Toledo, O.	Mar. 20
Mar. 26	Jenkinstown, Pa.	Mar. 20
Mar. 26	Beverley Hills, Calif.	Mar. 20
Mar. 27	Newark, N. J	Mar. 13
Mar. 27	Kimberly, Wis.	Mar. 20
Mar. 28	Pueblo, Colo.	Mar. 6
Mar. 28	North Plainfield (Watchung P. O.), N. J.	Mar. 20
Mar. 28	Greenville, Ky.	Mar. 20
Mar. 31	Wilson, N. C.	Mar. 13
Mar. 31	Columbus, O.	Mar. 20
Mar. 31	Hopkins, Minn.	Mar. 20
Mar. 31	Los Angeles, Calif.	Mar. 20
Apr. 1	Duluth, Minn.	Feb. 7
Apr. 1	Atlantic City, N. J.	Feb. 7
Apr. 1	Brainerd, Minn.	Feb. 28
Apr. 1	San Bernardino, Calif.	Mar. 6
Apr. 1	Oshkosh, Wis.	Mar. 13
Apr. 1	Akron, O.	Mar. 13
Apr. 1	Emporia, Kan.	Mar. 20
Apr. 1	Memphis, Tenn.	Mar. 20
Apr. 3	Paso Robles, Calif.	Mar. 20
Apr. 3	Marshall, Tex.	Mar. 20
Apr. 5	Lebanon, Ky.	Mar. 20
Apr. 7	Whitewater, Wis.	Mar. 13
Apr. 8	New York, N. Y.	Mar. 13
Apr. 8	Brooklyn, N. Y.	Mar. 13
Apr. 8	Astoria (Long Island City P. O.), N. Y.	Mar. 13
Apr. 8	Brooklyn, N. Y.	Mar. 20
Apr. 9	Beatrice, Neb.	Mar. 20
Apr. 9	Buffalo, N. Y.	Mar. 20
Apr. 15	Somerset, Pa.	Mar. 20
May 1	Youngstown, O.	Feb. 7

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Mar. 21	Reservoirs—Wash., D. C.	Feb. 21
	Adv. Mar. 13 and 20.	
Mar. 25	Road Work, etc.—Fort Wright, (Fishers Island P. O.), N. Y.	Mar. 6
Mar. 25	Laundry Equipment—Knoxville, Ia.	Mar. 13
Mar. 26	Post Office—Midland, Mich.	Mar. 13
Mar. 28	Ice and Refrigerating Plant—Livermore, Calif.	Feb. 14
Mar. 28	Dredging — Providence, R. I.	Feb. 28
	Adv. Feb. 28 to Mar. 20.	
Mar. 28	Plumbing System—Wash., D. C.	Mar. 13
Mar. 31	Fuel Oil Pump, etc.—Memphis, Tenn.	Mar. 20
	Adv. Mar. 20.	
Apr. 1	Pumps, etc.—Tobyhanna, Pa.	Mar. 20
Apr. 2	Roads—Phoenix, Ariz.	Mar. 6
Apr. 2	Surface—San Diego, Calif.	Mar. 20
Apr. 4	Post Office—Orange, Tex.	Mar. 13
Apr. 4	Dredging—New York, N. Y.	Mar. 13
Apr. 7	Power Houses—Cincinnati, O.	Mar. 20
	Adv. Mar. 20.	
Apr. 8	Cement—Louisville, Ky.	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 12	Dredging — Providence, R. I.	Mar. 13
	Adv. Mar. 13 and 20.	
Apr. 15	Post Office — Hastings, Mich.	Mar. 20
	Adv. Mar. 20.	
Apr. 18	Riprap—Detroit, Mich.	Mar. 20
	Adv. Mar. 20.	
Apr. 19	Excavating—Wilmington, Del.	Mar. 20
	Adv. Mar. 20.	
Apr. 22	Steel Gates — Florence, Ala.	Mar. 13
	Adv. Mar. 13 and 20.	

UNCLASSIFIED

Bids Close		See Eng. News-Record
Mar. 22	Steel Shed—Charleston, S. C.	Mar. 6
Mar. 24	Heating and Ventilating Apparatus — Richmond Hill (Branch of Jamaica), N. W.	Mar. 20
Mar. 24	Heating and Ventilating Apparatus—Flushing, N. Y.	Mar. 20
Mar. 24	Heating and Ventilating Apparatus—New York, N. Y.	Mar. 20
Mar. 25	Grade Separation—Detroit, Mich.	Mar. 20
Mar. 25	Lock—Marked Tree, Ark.	Mar. 20
Mar. 25	Jetty—Belmar, N. J.	Mar. 13
	Adv. Mar. 13 and 20.	
Mar. 26	Chimney—Rocky Mount, N. C.	Mar. 6
Mar. 31	Hopper Dredge — Brisbane, Queensland, Australia	Nov. 1
Apr. 1	Electric Light Line—North Carolina	Mar. 20
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13

MATERIAL AND EQUIPMENT

Bids Close		See Eng. News-Record
Mar. 21	Track Material—New York, N. Y.	Mar. 13
Mar. 24	Road Oil, etc.—Minneapolis, Minn.	Mar. 13
Mar. 24	Cement—Milwaukee, Wis.	Mar. 20
Mar. 25	Street Signs, Asphalt Filler, etc.—St. Paul, Minn.	Mar. 13
Mar. 25	Paving Materials — St. Paul, Minn.	Mar. 20
Mar. 25	Asphalt, etc. — Holyoke, Mass.	Mar. 20
Mar. 25	Dump Trucks—Long Island City, N. Y.	Mar. 20
Mar. 26	Asphalt Cold Mix—Evansville, Ind.	Mar. 13
Mar. 26	Refined Tar—Clayton, Mo.	Mar. 20
Mar. 28	Cement—Alabama	Mar. 6
Mar. 28	Bituminous Material—Albany, N. Y.	Mar. 20
	Adv. Mar. 20.	
Mar. 31	Tractors—San Antonio, Tex.	Mar. 20
Mar. 31	Cast Steel Castings, etc.—St. Louis, Mo.	Mar. 20
Apr. 2	Road Machines—Grand Forks, N. D.	Mar. 20
Apr. 3	Stone Crusher—Platteville, Wis.	Mar. 20
Apr. 7	Reinforcing Bars and Spirals—Minnesota	Mar. 20
Apr. 16	Power House Equipment—Tacoma, Wash.	Mar. 13
	Adv. Mar. 13 and 20.	

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Chicopee—Making plans reservoir, 5 m.g. capacity. F. P. Cobb, City Hall, engr.

Mass., Greenfield — Plans laying 3 mi pipe line through Green River Dist. $175,000. H. L. Field, 243 Federal St., engr.

N. Y., Binghamton—Takes bids in April mains in various streets. To exceed $85,000. Address B. Winsor, comr. Pub. Wks.

Waterworks (Continued)

Pa., Somerset—Plans concrete and stone reservoir and new wells. $30,000. F. B. Fluck, boro engr.

N. C., Raleigh—City authorized issue of $150,000 bonds, enlarging water supply system. W. C. Olsen, Raleigh engr.

N. C., Rocky Mount—City plans to expend $75,000, improving water supply. W. C. Olsen, Raleigh, engr.

La., Lafayette—Mar. 27, to vote on $200,000 bonds, improving and extending waterworks and addition to electric light plant.

O., Columbus—See "Streets and Roads."

Mich., Detroit—Bd. Fire Comrs., made plans additional water main equipment, incl. 300 six in. double Detroit standard fire hydrants, 300 six in. Detroit standard gate valves and 300 Morgan gate boxes, etc.

Ill., Jonesboro—Voted bonds and soon takes bids waterworks plant, tank on tower and 4- and 6-in. distribution mains. $42,000. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs. Noted Feb. 21.

Ill., Marengo—Making plans municipal water supply. Randolph-Perkins Co., First Natl. Bank Bldg., Chicago, consult. engrs.

Wis., Menomonee Falls—Having plans prepared water and sewerage systems, incl. 1 mi. 6- to 12-in. c.i. pipe and approximately 1 mi. 8- to 15-in. sewer pipe, elevated steel water tank and sewage disposal plant. W. F. Reichardt, Watertown, engr. Noted Feb. 7.

Wis., Milwaukee — Making plans 6,300 lin.ft. 54 in. c.i. mains in Humboldt Ave. from Riverside Pumping Station to Hadley St., in Hadley St. to Booth St. and in Booth St. to North Ave. $300,000. J. Schwada, city clk.

Wis., Mukwonago—E. A. Austin plans to improve waterworks, mains, sewage disposal plant, etc. $15,000. Engineer not selected.

N. D., Carrington—Election in April to vote on $15,000 bonds for new unit of well, etc. C. A. Carnahan, city aud.

Mo., St. Joseph — St. Joseph Water Co. soon takes bids ten 1 m.g. filter units, 5 m.g. settling basin, mains, 2 centrifugal pumps, etc. $600,000. W. K. Seitz, city engr. Noted Feb. 7.

Tex., Port Arthur — Having plans prepared main extensions. Will sell $119,500 bonds. J. O. Herpin, Port Arthur, engr. Noted Jan. 31.

Okla., Bartlesville—Making preliminary plans dam 50 ft. high, 1,000 ft. long, earth with concrete core wall 20 in. c.i. pipe line to pumping plant of 5 m.g. capacity four 1 m.g. filter units, 2 m.g. rein.-con. storage reservoir, 34 mi. c.i. distributing mains. $1,000,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted Aug. 30.

Okla., Tipton—Plans new waterworks, incl. well, triplex pumps, tank, tower, hydrants, fire hose and fire trench, 8,000 ft. 4- and 6-in. c.i. pipe. $46,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Mar. 6.

Calif., Culver City—Having plans prepared complete waterworks. To exceed $200,000. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, engrs.

Calif., San Bernardino — Bear Valley Utility Co. will take bids in April 6 mi. of 4- to 12-in. riveted steel pipe, 2 wells, 2 pumps and concrete reservoir. $115,000. R. H. Nicholson, 1350 Orange St., Los Angeles, engr. in charge. C. H. Loveland, Merchants Exch. Bldg., San Francisco, engr.

Calif., San Luis Obispo—Had plans prepared water supply system: concrete dam 55 ft. high, 440 ft. long on top, 150 ft. long on bottom, 1:3:5 mix concrete storage dam, 65 ft. high, 350 ft. long on top, 150 ft. long on bottom, 117,000 lin.ft. 18 in. wood stave pipe line. From $500,000 to $600,000. W. L. Huber, 1st Natl. Bank Bldg., San Francisco, consult. engr.

Ont., Chippawa—Election in April to vote on $50,000 bonds, water and sewer system. A. W. Connor, 34 Victoria St., Niagara Falls, engr.

BIDS DESIRED

N. Y., Brooklyn — Mar. 27, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Fillmore, Island, Narrows and Williams Aves., Aves. N, P and Y, Delamere, Elmore and Kenmore Places, Banker, Dauglass, Hendrickson, Herzl, Percival, Smith, 54th, 56th, 63rd, 73rd, 77th, 94th, East 12th, East 27th, East 31st, East 93rd, West 6th, West 11th and West 12th Sts., here.

N. Y., Dunkirk — Apr. 2, by Bd. City Water Comrs., 8 m.g. additional pump in pump house, Robin and Front Sts. J. Mehan, P. M. King, and F. Rosing, com.; adv. E. N.-R. Mar. 20.

N. Y., Herkimer—Mar. 24, 320 tons 10 in., 4 tons 6 in. and 2 tons 8 in. Class B, bell and spigot pipe, 8 tons specials, fourteen 6 in., five 8 in., twenty-six 10 in., and one 16 in. valves. A. T. Clark, supt. Municipal Comn. of Herkimer. Noted Dec. 27.

N. Y., Long Island City—Mar. 25, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ava Pl., Putney Rd., 6th, 13th, 33rd, 35th, and 72nd Aves., Gardiner, 4th, 6th, 16th, 19th, 160th, 161st, 202nd and 203rd Sts., here.

N. Y., Long Island City—Mar. 26, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Beach 32nd St., Dickens, Dix, Mott and Redfern Aves., Amstel, Far Rockaway and Regina Blvds., here.

N. Y., Long Island City—Mar. 27, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Washington, Wilson, 4th, 6th, 7th and 9th Aves., Chauncey, Front, 4th, Hancock, Kindred, Marion and Sherman Sts., here.

N. Y., New York—Mar. 28, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in East 177th St., Banyer Pl., Pelham Parkway S., Blair, Crosby, Ferris, Lawton, Logan, Mahan, Pennyfield, Prentiss, Randall, Reynolds, Wissman, Britton, Bronxwood, Duncomb, Fetley, Haight, Lurting, Lydig, Olinville, Patterson, Paulding and St. Lawrence Aves., Bronx Boro.

N. Y., St. George—Mar. 26, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Tompkins Pl., Manor and School Rds., Lookout, Pelton, Rockland and Van Name Aves., here.

Pa., Patton—Apr. 4, by Boro., 1,500,000 gal. per day rapid sand filtration plant, pumping station, pumps, etc. J. N. Chester, Engineers, Union Bank Bldg., Pittsburgh, engrs.; adv. E. N.-R. Mar. 20.

Pa., Phila.—Mar. 25, by Dept. Pub. Wks., Room 216, City Hall, 9,700 lin.ft. 36 and 48 in. c.i. and steel mains in Hunting Park Ave., Contr. 664; 930 tons 12 in. c.i. mains in Castor, Rahn and Cotman Sts., Contr. 665; 550 tons 24 in. c.i. mains in 12th St., Contr. 666; condenser shells, piping, fittings, valves, etc., at Lardner Pumping Sta., Contr. 667.

Va., Chatham—Mar. 31, by Mayor and Town Council, filtration and pumping plant for waterworks, force main, steel tanks, oil storage, with gravity feed, etc., work includes small dam and intake crib on Cherrystone Creek, with raw water line, concrete pump well, combined concrete and brick filter and pump station, 10,000 gal. steel wash tank, 4,100 ft. 6 in. c.i. force main, classes B, C and D, with all necessary piping about plant, one low and one high service centrifugal pumps, direct connected to motor, one low and one high service centrifugal pumps, for belt drive, one semi-Diesel fuel oil engine, with air starter outfit, all filter equipment for 360,000 g.p.d. unit, 150,000 gal. hemispherical bottom steel tank, with tower, 10,000 gal oil tank with about 1,500 ft. 2 in. gravity feed. Ambler Eng. Co., Old Dom. Trust Bldg., Richmond, engrs.

Ind., Michigan City—Mar. 24, by Comn. of City at office of E. J. Heise, city clk., furnishing 100 tons Class B, 6-in. c.i. pipe, tees, plugs, hydrants, gate and valve boxes, and 3 tons pig lead, for Water Dept.

Ill., McLeansboro — City Clerk taking bids and opens same about Apr. 1, one 250 kw. uniflow engine. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Ill., Metropolis—R. Finney, city clk., City Hall, taking bids and opens same about Apr. 1, power and waterworks plant, incl. 500 kw. turbine and uniflow engines, 158-ft. smokestack, 20,000 ft. 4- to 10-in. c.i. pipe, 100,000 gal. tank on tower, 100,000 gal. concrete storage reservoir, two 700 g.p.m. centrifugal pumps, and 1,000 g.p.m. pump, also 45 x 90 ft. building, brick and concrete. $170,000. Send all inquiries to W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Minn., Minneapolis—Mar. 25, by F. S. Gram, city purch. agt., 40 tons structural material and special castings for new filter plant. N. W. Elsberg, city engr.

Neb., Republican — Mar. 20, improving waterworks system, $20,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs. Noted Jan. 3.

Wash., Kalama—Taking bids new water system. Will enlarge reservoir to 500,000 gal. capacity. Voted $75,000 bonds. Noted Jan. 17.

Ont., Grimsby—Taking bids 5,566 ft. 6 in c.i. mains, 6,332 ft. 3 in. w.i. mains, valves, boxes, hydrants, etc. $30,000. F. N. Rutherford, St. Catharines, engr.

Ont., Port Colborne—Mar. 31, by I. H. White, town clk., 55 x 60 ft. pumping building, two 750 gal. motor driven service pumps, one 1,500 gal. gasoline driven fire pump with piping, 3 pressure filter units. $55,000. E. H. Darling, 47 Home Bank Bldg., Hamilton, engrs. Noted Nov. 1.

BIDS RECEIVED

O., Cleveland — Cuyahoga Co. Mar. 5, 24,000 ft. 6, 8 and 10 in. c.i. mains in Impvt. 48, from Salem & George Bros., Erie Bldg., $110,412.

Ill., Villa Grove—City Council, Mar. 5, 629 ft. well, from Ohio Drilling Co., Massillon, O., $6,720 and $3.50 per hr. for finishing work and testings; motor driven deep well pump, from Rumsey Pump Co., Ltd., 53 West Jackson St., Chicago, $3,350. Will soon let contract for pump house. Noted Feb. 28.

Wis., Milwaukee — Power piping for Riverside Pumping Station, from Industrial Heating & Eng. Co., 143 Oneida St., $29,800.

Mo., Kansas City—M. H. Raming, purch. agt., City Hall, Mar. 11, additional water supply Missouri Valley tunnel, Contr. 1, from Tibbets & Pleasant, 229 North Nogales St., Tulsa, Okla., total $1,395,412, guaranteed time 747 days, credit time 653 days, deduction $163,250, total for comparison of bids $1,232,162. Noted Feb. 21.

Mo., Kansas City—M. H. Raming, city purch. agt., City Hall, Mar. 13, additional water supply East Bottoms and Turkey Creek Tunnels, Contr. 2, from Byrne Bros. Constr. Co., 358 East 115th St., Chicago, total $1,873,295, guaranteed time 700 days, credit time 100 days, deduction $30,000, total for comparison of bids $1,843,295. Noted Feb. 21.

Calif., Santa Monica—Trenching, furnishing, backfilling and laying pipe for waterworks, from C. Fisher, Wright-Callendar Bldg., Los Angeles, $662,495; Schultz Constr. Co, 46 Kearny St, San Francisco, $725,190. Noted Jan. 31.

Calif., Vernon (Watts P. O.)—Constructing 3 m.g. reservoir, from Kinne & Westerhouse, H. W. Hellman Bldg., Los Angeles, $20,500. Noted Feb. 28.

CONTRACTS AWARDED

N. Y., Brooklyn—Bd. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ave. L, 2nd Ave., 37th, 42nd, Bridge, Sands and Clinton Sts., to Wattaga Contg. Co., $129,756. Noted Mar. 6.

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Stillwell and Warehouse Aves., West 5th and 6th Sts., etc., to Paladino Contg. Co., 437 East 120th St., New York, $32,225. Noted Feb. 14.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Riverside Terrace, Bennett and 12th Aves., West 12th, West 40th, 46th and 186th Sts., also fire hydrants on existing mains in Ave. A, Bway., East Bway., Riverside Dr., Bayard, James, Madison, Oak, Water and West 153rd Sts., to W. J. Drummond, $41,781. Noted Mar. 6.

N. C., Greensboro—Laying 46- to 50-mi. water and sewer mains, to C. P. Howard, Raleigh, $260,792. Former contract rescinded. Noted Mar. 6.

O., Cleveland—Cuyahoga Co., 12,000 ft. 6 and 8 in. c.i. mains, Impvt. 45, to Langahan Constr. Co., Marshall Bldg., $48,920. Noted Feb. 21.

Ind., Bloomington—Bloomington Water Co., waterworks improvements, incl. dam, pumping station and pipe lines, to A. Phelps & Sons, Knoxville, Ia., $274,894. Noted Jan. 24.

Ill., East St. Louis—East St. Louis and Interurban Water Co. soon lets contract increasing capacity of pumping plant to make room for additional 2,500,000 gal. pumping unit, raising roof, rearranging boilers and extending building 50 feet. $60,000. Contract for 2,500,000 gal. pump let to Allis Chalmers Co., 50 Church St., New York City.

Ill., East St. Louis—See Proposed Work.

Ill., Trenton—City, steel tank on tower to Chicago Bridge & Iron Co., 608 South Dearborn St., Chicago, $5,000; 400 g.p.m.

Waterworks (Continued)

pump and 25 hp. G. E. engine to Farrar Pumps & Mchy. Co., Granite Bldg., St. Louis, Mo., $720; foundation for pumps, etc., to J. M. Colligan, Trenton, $547. Will let contract later for 1.5 mi. 4- and 6-in. c.i. pipe laid. Noted Nov. 15.

Wis., Genoa Junction—Pumping station brick and steel, and storage reservoir, rein.-con., to W. E. Stone, Whitewater. Engrs. est. $15,000. Noted Jan. 10.

Minn., Red Wing—Reservoir, 1 m.g. capacity: excav. for reservoir to C. W. Johnson, Red Wing, $4,975; reservoir proper to A. C. Rhodes Co., Guthrie Center, Ia., $18,638; centrifugal pump to F. T. Hildred & Co., 108 East 3rd St., St. Paul, $3,097; air-lift pump to Worthington Pump & Mchy. Corp., 1017 Commerce Bldg., St. Paul, $4,194. Noted Feb. 28.

Wash., Tacoma — Furnishing materials for gravity pipe line, creosoted wood staves, to Amer. Wood Pipe Co., South 32nd and Cedar Sts., $52,521. Noted Nov. 15.

Calif., Gilroy—Extensions to water system, incl. 4, 6, 10 and 14 in. c.i. pipe, to M. Murphy, 1321 Milvia St., Berkeley, $63,421. Noted Sept. 6.

Calif., Los Angeles—For 18,600 ft. 20 in. c.i. pipe, 4 metre lengths, to Grinnell Co. of the Pacific, 439 East 3rd St. $4.39 ft.

Calif., San Francisco — City and San Francisco Co., flexible joint c.i. pipe for submarine portion Hetch Hetchy aqueduct bay crossing division, to United States Cast Iron Pipe & Fdry. Co., Monadnock Bldg., San Francisco, $196,802. Noted Mar. 6.

Calif., San Francisco — City and San Francisco Co., two 42 in., one 36 in. and four 20 in. gate valves for Hetch Hetchy project, to Union Machine Co., 934 Brannan St., $18,335. Noted Mar. 6.

Sewers

PROPOSED WORK

Conn., New Britain—Plans 5,000 ft. 18-in. concrete sewer. $25,000. Address City Engineer.

Pa., Johnstown—Plans sanitary sewers in Moxham and Woodvale Dists. $500,000 bonds to be voted on in April. H. L. Wilson, 184 Worth St., engr.

Fla., Palm Beach — Election Mar. 31, $75,000 bonds extending sewerage system.

Ala., Florence—Takes bids about Apr. 1, 3,500 lin.ft. 7 ft. storm sewer. W. M. Paxton, City Hall, engr.

O., Columbus—See "Streets and Roads."

O., Columbus—Making plans 9,100 ft. 6- to 10-in. sanitary sewer in alleys north of 5th Ave., $16.122; 10,579 ft. 6- to 10-in. sanitary sewer in 3rd Ave, $18,805. R. H. Simpson, city engr.

Mich., Detroit—Dept. Pub. Wks. had plans prepared 1,475 ft. 3 ft. 6 in. cylinder and 320 ft. 24 in. crock sewers in Oakman Blvd. G. Jerome, city engr.

Mich., Detroit—Dept. Pub. Wks., having plans prepared vitr. crock and brick sewers, 3,030 ft. in Lateral 3977, 2,625 ft. Lateral 4080, 1,126 ft. Lateral 4084, 1,368 ft. Storm Sewer 4090, 1,348 ft. Storm Sewer 4091, 1,331 ft. Storm Sewer 4092. G. Jerome, city engr.

Mich., Flint—Plans to complete interceptor system $174,000, construct sewage pumping station $144,000, sewage force main $455,400, disposal plant and filtration tanks $1,204,800. G. M. Osborne, city engr.

Mich., Royal Oak—Had plans prepared 6,034 ft. 8 in. vitr. pipe Lateral 24, 10,430 ft. 8 in. Lateral 25, 9,989 ft. 8 and 10 in. Lateral 23, 2,455 ft. 8 and 10 in. Lateral 26, 4,070 ft. 8 in. Lateral 27. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Ill., Hinsdale—Plans sewer and sewage disposal system. Randolph-Perkins Co., First Natl. Bank Bldg., Chicago, engrs.

Wis., Algoma—Making plans 8,385 ft. 10- to 33-in. storm and 15,517 ft. 8- to 21-in. sanitary sewers, vitr. clay. Total $70,000, about ⅓ of total to be expended this year. H. R. Albert, Courthouse, Green Bay, engr.

Ia., Vail—Plans sanitary sewerage system. $25,000. M. J. Monaghan, clk.

Kan., Independence—Making preliminary plans sewage disposal plant. $100,000. H. Crawford, City Hall, engr.

Tex., Dallas—Making plans 23,000 ft. 5 ft. storm sewer from Henderson and Grand Sts. to White Rock Creek. $150,000. E. A. Kingsley, city engr.

Okla., Newkirk—Election Mar. 24, $35,000 bonds, 1 mi. outfall sewer and disposal plant, 3,000 ft. 18 in. vitr. clay pipe, Imhoff tank and sludge bed. H. E. Musson, Grain Exch. Bldg., Oklahoma City, engr. Noted Feb. 7.

Wash., Centralia—Apr. 14 to vote on $80,000 bonds for sanitary trunk and storm sewers for east and south sides of city. W. L. Lovejoy, city engr.

Calif., Willits—See "Bridges."

Ore., Eugene—See "Excavation, Drainage, Irrigation."

Ore., Verona — Barr & Cunningham, engrs., Spalding Bldg., Portland, prepared plans and takes bids within 90 days sewerage system, here, for city. $95,000.

Calif., Arroyo Grande—Having plans prepared sewerage system and disposal works. To exceed $25,000. Burch & Beck, Commercial Bank Bldg., San Luis Obispo, engrs. Noted Feb. 21.

Calif., Monterey Park (Branch of Los Angeles)—Having plans prepared 1½ mi. storm sewer, Garvey Ave. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, consult. engrs.

Calif., Redondo Beach — Will vote on $25,000 bonds (probably in April), extending sewerage system.

Calif., San Francisco—See "Streets and Roads."

BIDS DESIRED

N. Y., Long Island City—Mar. 25, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., temporary sanitary sewer in 86th Rd. (William Rd.); sewers in Cooper, Whitlock, Ridgewood and Roanoke Aves., Barclay, Bleeker and West Vine Sts., 113th St. (Cedar Ave.), 114th St. (Stoothoff Ave.).

N. J., Sayreville—Apr. 2, by Boro Council, 2.63 mi. 8 in. and 1 mi. 10 in. vitr. tile sewer, 0.13 mi. 8 in. c.i. outfall sewer, 0.29 mi. 16 in. and 0.28 mi. 10 in. c.i. force mains. W. S. Coulter, 114 Liberty St, New York City, engr.

Pa., Elizabethtown—Apr. 15, by D. L. Landis, secy. Boro Council, sanitary sewerage system and disposal plant; adv. E. N.-R. Mar. 20.

Pa., Erie—Apr. 1, by City Council, intercepting sewer, Project 1. A. N. Aitken, city engr.; adv. E. N.-R. Mar. 20.

Pa, Sharon—Mar. 28, by Sharon Plan of Westinghouse Electric & Mfg. Co., 1,300 lin.ft. 42, 48 and 60 in. pipe in Clark St. Storm Sewer, 1,180 ft. 42 in. pipe in Sharpsville Ave. Storm Sewer, 193 ft. 12 in. V. P. pipe in Clark St. Sanitary Sewer, 720 lin.ft. 8 in. V. P. pipe in Sharpsville Ave. Sanitary Sewer. L. E. Burnside, city engr.

N. C., Black Mountain—See "Streets and Roads."

Ind., LaPorte—Mar. 25, by E. Gildersleeve, constr. comr., constructing Edward W. Kabelin Drain, Center Twp., incl. tunnel and covered drain work. $102,000. Noted Jan. 29.

Wis., Menomonee Falls — See "Waterworks."

Wis., Mukwonago—See "Waterworks."

Wis., West Allis—Mar. 24, by Bd. Pub. Wks., sewers in various streets, 329 ft. of 10 x 12 ft. monolithic concrete sewer, 3,454 ft. 6- to 36-in. vitr. or concrete pipe. W. Darby, City Hall, engr. $25,000.

Mont., Butte — Apr. 2, by city, storm sewers in 10 districts, 3,500 lin.ft. on 8 in., 2,600 ft. 10 in., 300 ft. 12 in. and 1,900 ft. 24 in. concrete pipe. H. J. Weigenstein, city engr.

Mo., Cameron—Mar. 28, by M. Wiley, city clk., 800 lin.ft. 15 in. vitr. outlet sewer, disposal plant, sewage pumping stations and force mains, 10,000 lin.ft. 8 in. vitr. sewer, etc., in Sewer Dist. 8. Black & Veatch, Mutual Bldg., Kansas City, engrs. Noted Mar. 6.

Mo., Carthage — Mar. 18, by C. A. Haskins, engr., 517 Finance Bldg., Kansas City, sewerage system and disposal plant, here, for city. $110,000. Noted Mar. 6.

Calif., Los Angeles—See "Streets and Roads."

Calif., Pasadena—B. Chamberlain, city clk., receiving bids for rein.-con., plain concrete and segment block sewers for streets from City Farm to Rio Hondo. To exceed $25,000. W. C. Earle, city engr. Noted Dec. 27.

Ont., Chippewa—See "Waterworks."

BIDS RECEIVED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Rosedale Ave., from Golfin Realty Corp. $46,931; in Dewey and Wilson Aves., from C. W. MacDonald, $63,477 and $123,470 respectively; in Cauldwell Ave., from A. Gregorio & Co., $17,582; in Leland Ave. from Hanratty Contg. Corp., $21,335. Noted Mar. 6.

Md., Baltimore — Bd. Awards, Mar. 12, sanitary sewers in Dist. 24-B and P-8, 47,500 lin.ft. 5- to 24-in. sanitary sewers and house connections, from N. Martell, 417 South Eden St., $169,573. Noted Mar. 6.

Ill., Chicago — Bd. Trustees, Sanitary Dist. of Chicago, 910 South Michigan Ave., Mar. 6, North Side Sewage Treatment Wks., Div. B, 30 thickener mechanisms, from Sanitary Constr. Co., 355 Union Park, $132,000. Div. C, three 60 x 96 in., one hundred and forty-four 15 x 15 in and six 8-in. circular sluice gates, from W. L. D'Olier, $26,094. Div. D, Subdivision A, fifty-four thousand 1½-in. aeration plates, from General Filtration Co., $100,980; Subdivision B, four thousand five hundred 1-in. aeration plates, from Morton Co., $8,145. Div. E, Subdivision A, sewage meters, from Simplex Valve & Meter Co., 30 North Michigan St., (as per specification) $122,095, (with standard meter registers) $119,595; General Electric Co., 230 South Clark St., (with venturi tubes for all meters) $95,126, (venturi tubes for 84-in. meters, flow nozzles for others) $82,366; Builders Iron Fdry., 122 South Michigan Ave., $86,500; Subdivision B, air meters from Republic Flow Meters Co., 2240 Divrsy Parkway, (as per specifications) $30,398, (with standard meter registers) $27,374; General Electric Co., 230 South Clark St., (venturi tubes for all meters) $43,926, (venturi tubes for 84-in. meters, flow nozzles for others) $26,460; Builders Iron Fdry., 122 South Michigan Ave., $28,550. Div. F, fine screens, Alternative A, Type 1, from Link Belt Co., 310 West Pershing Rd., $204,900, Type 2, $208,000, Alternative B from Dorr Co., Inc., 38 South Dearborn St., $112,460; Alternative C, Type 2 from W. L. D'Olier (with $\frac{1}{16}$-in. slots as per specification) $1,015,200, (with 3/64-in. slots, alternative) $1,128,000.

Wash., Seattle—Bd. Pub. Wks., Mar. 7, Perry St. sewage disposal works, from Olympic Constr. Co., 400 West Harrison St. Imhoff tank $8,700, contract tank $9,100, sludge bed $2,000, tank house $1,000, etc., total $27,377.

Calif., Los Angeles — See "Streets and Roads."

Calif., Oakland—See Streets and Roads."

CONTRACTS AWARDED

N. Y., Long Island City — M. E. Connolly, pres. Queens Boro, Queens Subway, sewers in Fisk Ave., to Duit Inc., $339,783; Westside and Atlantic Aves., to E. Muccinni, $2,434 and $3,028 respectively; Cuthbert Pl. and Metropolitan Ave., to Green Contg. Co., 734 Vernon Ave., Astoria, $2,461 and $5,389 respectively; Queens and Northern Blvds., to Peace Bros., Inc., 57 North Laurence St., Flushing, $900 and $1,145 respectively; Woodward Ave., to J. J. O'Brien, Jr., William St., Jamaica, $729; 126th St., to P. J. Greenhoff Eng. Co., $1,636. Noted Mar. 13.

N. Y., Stamford—R. S. Welch, village pres., to F. M. Gurney, 2 Irving Pl., Oneonto, sewer in Beaver St. $2,500, new outfall and disposal works $19.400. Noted Feb. 7.

N. C., Greensboro—See "Waterworks."

Miss., Meridian — See "Streets and Roads."

O., Cleveland—Cuyahoga Co., 16,000 ft. 8- to 27-in. vitr. clay and 3,200 ft. 30- to 40-in. segmental block sewer in Impvt. 55 of Co. Sewer Dist., to Langahan Constr. Co., Marshall Bldg., $120,746. Noted Mar. 6.

Wis., Milwaukee—Sewerage Comn., 508 Market St., superstructure 2 story, 220 x 330 ft., filter and drier house, brick and concrete, on Jones Island, to E. Steigerwald & Sons, 2303 Galena St., $208,449. Noted Feb. 28.

Neb., Fremont—Furnishing 38.800 ft. 27 in. concrete sewer pipe and 3,100 lin.ft. 21 in. concrete pipe to Platte Valley Cement Tile Mfg. Co., Fremont, $1.87 and $1.30 per lin.ft. respectively. Noted Feb. 28.

Ark., Pine Bluff—See "Streets & Roads."

Wash., Kelso—Concrete storm and sanitary sewers in West Kelso L. I. D. 55, to J. D. Hanley, Kelso, $52,241.

Sewers (Continued)

Calif., Huntington Park (Branch of Los Angeles)—Vitr. pipe outfall sewerage system, from Los Angeles River in Sante Fe and Florence Aves., 4 mi. long, to J. Chutuk, Wilcox Bldg., Los Angeles, $66,400. Noted May 10.

Calif., Los Angeles—See Streets and Roads.

Waste Disposal

BIDS DESIRED

N. Y., East Chester (Graycourt P. O.)—Apr. 9, by E. A. Mathews, clk. of Town Bd., at his office in Village Hall, Tuckahoe, incinerator plant, chimney and building, on White Plains Rd., here. J. F. Musselman, 101 Park Ave., New York City, consult. engr.; adv. E. N.-R. Mar. 20.

N. Y., Maspeth (independent station Flushing)—Mar. 25, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Long Island City, repairs to incinerator plant, Flushing and Metropolitan Aves., here.

Ind., Indianapolis—Mar. 25, by Bd. Sanitary Comrs., 21 trailers for use in collection and removal of garbage and ashes. J. L. Elliott, pres.

Ind., Michigan City—Mar. 24, by Comn. of City, at office of E. J. Heise, city clk., garbage rendering plant for Garbage Dept.

Mich., Detroit—Mar. 28, by Dept. Pub. Wks., 12 x 13 x 295 ft. subway and 15 x 96 ft. superstructure for refuse transfer station, Rose and 20th Sts. G. Jerome, city engr.

CONTRACTS AWARDED

Minn., Duluth—Duluth Water & Light Dept., 414 West 1st St., 2 story, 40 x 45 ft., steel, concrete pile foundation, Waterfront at 12th Ave. W., to Nye Odorless Incinerator Co., Georgia Life Bldg., Macon, Ga., $42,500.

Bridges

PROPOSED WORK

Mass., Dalton — Bd. Selectmen plan 2 highway bridges. $165,000-$280,000. E. W. Wiggin, 507 Cutler Bldg., 113 Church St., New Haven, consult. engr.

Mass., Holyoke—Making plans replacing 2 bridges, about 100 ft. long, 60 ft. wide, concrete and steel, Cabot St. $40,000 each. P. E. Bond, City Hall, engr.

N. Y., Buffalo—Plans 1 span 106 ft. steel plate girder bridge, rein.-con. substructure on piles, Stevenson St. To exceed $100,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., Fort Edward—State Hy. Dept., Albany, making plans plate girder bridge over Champlain Canal, two spans, 110 ft. long, 16 ft. roadway, concrete foundation, here. $40,000.

N. Y., Greenfield—Delaware & Hudson Co., foot State St., Albany, plans elimination of grade crossing by diverting highway under railroad tracks which will be carried on 36 ft. span plate girder bridge, 28 ft. between abutments, concrete foundation, 1½ mi. south of here. $32,000. J. MacMartin, ch. engr.

Pa., Morrisville—Bucks Co. Comn. (Langhorne) plans concrete bridge over Lehigh Canal, here. $25,000. E. H. Harvey, co. comr.

Ky., Burgin—Kentucky Hydro-Electric Co., M. E. Taylor Bldg., Louisville, soon takes bids steel truss highway bridge over Dix River near Dix River Dam (new site). $90,000. G. T. Bogard, c/o owner, engr.

Minn., Austin—Mower Co. rejected bids two 75 ft. concrete arch spans over Cedar River. Plans will be revised and new bids taken by State Hy. Dept., St. Paul. $50,000. Noted Feb. 7.

Mont., Miles City—Custer Co. had plans prepared bridge over Powder River, two 221 ft. spans, steel riveted or pin-connected bridge on concrete abutments. $50,000.

Missouri—State Hy. Dept., Jefferson City, plans one 80 ft. steel truss and six 20 ft. rein.-con. slab spans, 2 rein.-con. piers, etc., over Locust Creek, six 30-ft. rein.-con. deck girder and sixteen ,20 ft. rein-con. slab spans, etc., over Muddy Creek, one 80 ft. steel truss and eight 20 rein.-con slab spans, 2 rein-con. piers, etc., over West Yellow Creek, Linn Co. B. H. Piepmeier, state highway engr.

Mo., St. Joseph—City and Chicago Great Western R.R. Co., Grand Central Sta., Chicago, having plans prepared rein.-con. and steel viaduct, wood block surface from 6th St. to Wood Ave. $200,000. W. K. Seitz, city engr. Noted Jan. 25, 1923.

Texas, Pecos—Reeves Co. (Pecos) and Ward Co. (Barstow) soon take bids 125 ft. span bridge with 33 ft. rein.-con. girder span approach at each end, through Warren truss, over main channel, $25,000. S. S. Posey, Pecos, engr.

Okla., Harrah—Oklahoma Co., Oklahoma City, having surveys made 600 ft. 4 span steel bridge, concrete piers, here. $38,000. R. S. James, Court House, Oklahoma City, engr.

Okla., Sayre—Sayre Bridge Co. having surveys made 540 ft. 3 span steel toll bridge, here. $34,000. Engineer not selected.

Wash., Hoquiam—City Council accepted plans (tentatively) for Simpson Ave. Bridge, bascule double-leaf, with 28-ft. roadway and vertical clearance above river of 30 ft. $375,000. F. C. Black, city engr. Noted Dec. 13.

California—See "Streets and Roads."

Calif., Bonsall—Bd. Supervs. San Diego Co., San Diego, having plans prepared bridge, 600 ft. long, foundations sunk to depths of 45 to 65 ft., over San Luis River, near here. $100,000. P. R. Watson, engr.

Calif., Willits—Plans election to vote on $30,000 bonds for bridge, South Main St., and sewers various streets.

BIDS DESIRED

Delaware—See "Streets and Roads."

Ala., Eufaula—Apr. 14, by State Hy. Dept., Montgomery, bridge over Chattahoochee River, here, 190 ft. steel truss span, two 145 ft. steel deck spans, 58 cu.yd. Class A concrete in pedestals, 2,000 lb. reinforcing, removal of wooden bridge. W. S. Keller, state highway engr. Noted Sept. 27.

Louisiana—Mar. 27, by State Hy. Comn., Reymond Bldg., Baton Rouge, 11 bridges ranging from 15 to 131 ft. on Federal Aid Project 113 B, Lafourche Parish, incl., 4 creosoted timber trestle bridges, 5 steel I beam spans, and 2 creosoted timber swing bridges, 80,000 lb. structural steel, 9,000 lin.ft. creosoted piling, 70,000 lin.ft. untreated lumber.

Ill., Aurora—Mar. 24, by Council, constructing Benton St. and Holbrook St. bridges. J. P. Wetz, city clk.

Wisconsin—See "Streets and Roads."

Wis., Reedsburg—Mar. 25, by Sauk Co. Hy. Com., City Hall, here, Reedsburg Bridge, involving 1,326 cu.yd. concrete, 150,230 lb. reinforcing steel, etc. W. Halbersleven, Baraboo, co. comr.

Ia., Primghar—Mar. 25, by O'Brien Co., 22 box culverts, 5 I-beams, 4 concrete abutments, 3 pony trusses and 1 high truss. W. L. Anderson, Primghar, engr.

Minnesota — See "Material and Equipment."

Minn., Mantorville — See "Streets & Roads."

South Dakota—Mar. 27, by State Hy. Dept., Pierre, 1 viaduct on **(F. A. P. 50 B, Sanborn) means Federal Aid Project 50 B, Sanborn Co.,** 172.9 cu.yd. concrete, 18,958 lb. reinforcing and 63,958 lb. structural steel, 5 viaducts on F. A. P. 95 A, Faulk, 457 cu.yd. concrete, 45,658 lb. reinforcing and 183,507 lb. structural steel, one I-beam bridge on F. A. P. 138 B, Meade, 120.3 cu.yd. concrete, 9,265 lb. reinforcing and 28,656 lb. structural steel, 2 viaducts on F. A. P. 145, Beadle, 170.5 cu.yd. concrete, 18,272 lb. reinforcing and 62,802 lb. structural steel, 3 viaducts on F. A. P. 162 B, Haakon, 250.3 cu.yd. concrete, 27,789 lb. reinforcing and 76,264 lb. structural steel, 2 viaducts on F. A. P. 167 A, Bon Homme, 142 cu.yd. concrete, 16,698 lb. reinforcing and 31,814 lb. structural steel, 1 viaduct on F. A. P. 169 Pennington, 46.6 cu.yd. concrete, 4,458 lb. reinforcing and 18,988 lb. structural steel, 1 viaduct on F. A. P. 171 A, Roberts, 132.9 cu.yd. concrete, 12,973 lb. reinforcing and 46,529 lb. structural steel. F. D. Hudgins, ch. engr.

Kan., Iola—April 3, by Clerk Allen Co., 140 ft. concrete arch, ½ mi. from Humbolt, Federal Aid Project 168, Sect. B. A. R. Stroup, co. engr. Noted Mar. 20.

Kan., Kansas City — Apr. 1, by O. K. Williams, engr., Wyandotte Co., constructing superstructure, structural steel and iron work, timber, lighting, approaches and grading, 12th St. $485,000.

Ark., Pine Bluff—Mar. 31, by Plum Bayou Rd. Impvt. Dist. of Jefferson Co., three 40 ft. bridges and one 100 ft. bridge, either Arkansas State standard steel bridges with rein.-con. floor slab, or rein.-con. bridges. G. B. Smith, 104 Pine St., engr.

Tex., Austin—See "Streets and Roads."

Wash., Chehalis—Apr. 7, by Comrs. Lewis Co., 100 ft. steel bridge concrete piers and piling trestle, on Burchard Rd. R. L. Greene, Chehalis, engr.

California — Apr. 7, by State Highway Comn., Sacramento, bridge over Van Dusen River, Humboldt Co., incl. 2,975 cu.yd. concrete, 2,260 cu.yd. structure excav., 3,500 cwts. reinforcing, etc. R. M. Morton, state highway engr.

BIDS RECEIVED

Delaware — State Hy. Dept., Dover, Drawyers Creek Bridge, Contr. 37-B, from G. A. Flink & Co., 222 Market St., Harrisburg, Pa., 36,770. Noted Feb. 21 under "Streets and Roads."

Ohio—See "Streets and Roads."

CONTRACTS AWARDED

Georgia — State Hy. Dept., East Point, bridges over Buds Branch, Turkey Creek and Ocenee River, Laurens Co., to C. E. Strong, Johnson Bldg., Augusta, $8,033; bridge on Moultrie-Camilla Rd., Colquitt Co., to Savage & Ames, Newman, $9,840.

Structural Steel—Louisville, Ky.—Louisville & Nashville R.R. Co., 10th St. and Bway., 6,800 tons structural steel for bridge work in Louisiana, to Amer. Bridge Co., Ambridge, Pa. Est. cost $400,000. Noted Feb. 14.

Wis., Monroe—See "Streets and Roads."

Neb., Wilber—Saline Co., one 100 ft. and two 50 ft. concrete pony truss bridges, one 22 ft. and one 30 ft. I-beam bridges, and one 100 ft. pony truss bridge, to Home Constr. Co., Humboldt, $47,788. Noted Feb. 21.

Missouri — State Hy. Dept., Jefferson City, to Tibbitts & Tibbitts, Olathe, Kan., one 42 ft. rein.-con. deck girder and six 20 ft. rein.-con. slab spans, etc., over Moniteau Creek, Howard Co., $19,076, also one 80 ft. steel truss and six 20 ft. rein.-con. slab spans, 2 rein-con. piers, etc., over Bonne Femme Creek, Howard Co., $21,833. Noted Mar. 6.

Wash., Everett—Snohomish Co., Haller St. Bridge, one 210-ft. and one 105-ft. steel spans, concrete piers, 20-ft. roadway and 5-ft. walks, also Lincoln St. Bridge, 200-ft. steel span, 20-ft. roadway, 5-ft. walk, to J. A. McEachern Co., Colman Bldg., Seattle, $68,500 and $46,500 respectively; Snoqualmie River Bridge, 200-ft. span, 18-ft. roadway, to Amer. Pile Driving Co., Everett, $40,900.

Dams

PROPOSED WORK

Tex., Dallas—Making plans dam and pipe lines with miscellaneous equipment. $2,000,000 bonds sold. E A Kingsley, city engr. R. A. Thompson and J. C. Nagle, special engineers in charge plans and construction.

Calif., Los Angeles — Los Angeles Co. election May 6, to vote on bonds for flood control district, incl. dam at Tujunga $1,000,000, also dam at Pacoima $1,700,000. J. W. Reagan, co. flood control engr.

Calif., Grass Valley.— See "Excavation, Drainage, Irrigation."

Calif., San Diego—Election May 20, $3,500,000 bonds, additional dams, etc., on citys water impounding system. F. A. Rhodes, city engr.

Calif., San Luis Obispo — See "Waterworks."

CONTRACTS AWARDED

S. C., Lugoff — Southern Power Co., Charlotte, N. C., raising dam at Wateree Hydro-electric plant, near here, 6 ft., dam 1,700 ft. long, 75 ft. high, to E. H. Clements & Co., Commercial Bank Bldg., Charlotte, N. C., $250,000.

Railways

PROPOSED WORK

California—Fresno Traction Co., 1st Ave., Fresno having surveys made extending lines in south western section of city. To exceed $25,000. E. A. Deveraux, supt.

BIDS DESIRED

New York—Mar. 28, by Transit Comn., 49 Lafayette St., installation of tracks for portion of 14th St.-Eastern Line. G. McAneny, chn.

New York—Apr. 15, by R. K. Fuller, comr. Canals & Waterways, Albany, railroad track on Barge Canal terminal at Rochester, Contr. 95; adv. E. N.-R. Mar. 20.

Florida—Mar. 26, by D. M. Lamdin, Wilmington, N. C., ch. engr. Fort Myers-Southern Ry., constructing 23 mi. railroad from Fort Myers to Bonitas Springs, divided 3 parcels, 14 mi., 9 mi. and laying track.

Railways (Continued)

CONTRACTS AWARDED

Nevada—Western Pacific R.R. Co., Mills Bldg., San Francisco, double tracking, incl. widening to grade and laying ties, between Winnemucca and Palisade, to Utah Constr. Co., Phelan Bldg., San Francisco, sublet contract to Morrison & Knudsen Co., 302 Bway., Boise, Idaho.

Excavation, Drainage, Irrigation

PROPOSED WORK

Ia., Onawa—Monona Co. plans drainage work in Lamb D. D. 32. $122,000. C. Moriaity, United Bank Bldg., Sioux City, engr.

Neb., Gothenburg — Gothenburg South Side Irrigation Dist. voted $408,000 bonds for irrigation work. Engineer not selected.

Mo., Keytesville—Porterfield Levee Dist. having plans prepared levees and bank protection for 7,500 acres land in Chariton Co. To exceed $25,000. C. E. Jacoby Eng. Co., Interstate Bldg., Kansas City, engrs.

Ore., Eugene—City and Amazon Slough D. D. takes bids in August draining 900 acres in city and 5,000 acres in district, main drain and viaduct $251,186, sewers $43,700, incidentals $500. Will be submitted to vote at May election. R. H. Thomson, Seaboard Bldg., Seattle, Wash., engr.

Calif., Grass Valley—The Nevada Irrigation Dist., here, and the Pacific Gas & Electric Co., 445 Sutter St., San Francisco, entered into agreement, whereby latter will purchase water stored by irrigation district in proposed Jackson Meadow and Bowman Lake Dams and return water to district for irrigation, about 140,000 acre ft. will be delivered to power company for which district will receive $375,000 per year. Following work is planned: Jackson storage dam, 143 ft. high, incl. 540,000 yd. rock fill, 7,368 yd. concrete, 30,000 ft. roadway, $1,080,000; distribution system, canals and ditches, $1,500,000; pipe lines wood-stave pipe syphons from 18 to 60 in., $214,630; 19,500 metal flumes, $161,790; power houses by Pacific Gas & Electric Co., one at Spalding plant, $2,000,000, enlarging Drum Power Plant, tunnels, etc. Total cost $8,000,000. A. L. Wisker, Grass Valley, mgr. irrigation dist. F. H. Tibbetts and E. Hoar, Alaska Commercial Bldg., San Francisco, consult. engrs.

Calif., Los Angeles—See "Dams."

Calif., Stockton—Pescadero Recl. Dist., c/o F. C. Hermann, consult. engr., Merchants Exch. Bldg., San Francisco, had plans prepared canal, pumping plants, etc. $130,000.

Calif., Vina—Champlin, Peake & Godboldt, Red Bluff, plan to irrigate 1,310 acres, incl. 14,600 lin.ft. canals, 11 ft. wide on top, 5 ft. wide on bottom, 2 ft. deep; one 12 in. and one 10 in. centrifugal pump, near here. $26,500. J. B. Thompson, Chico, consult. engr.

BIDS DESIRED

New York — Apr. 15, by R. K. Fuller, comr. Canals & Waterways, Albany, excavating at various locations, canal channel in Mohawk River from Vischer Ferry to west end of Sect. 2, Contr. 217, from Fonda to Lock 16, Sect. 3, Contr. 218, also from Lock 16 to Herkimer-Oneida Co. line, Sect. 4, Contr. 219; excavating at various locations canal channel in Hudson River, land lines and wood creek from Waterford to Whitehall, Sects. 1 and 2, Contr. 220; adv. E. N.-R. Mar. 20.

N. Y., Rochester — Apr. 15, by R. K. Fuller, comr. Canals & Waterways, Albany, completing excavation of canal channel in Genesee River and placing rock spoil protection along river banks, here, Contr. 214—revised; adv. E. N.-R. Mar. 20. Noted Jan. 24.

N. Y., Tonawanda.— See "Streets and Roads."

Ill., Audubon—Mar. 25, by C. Shingledecker, aud. Audubon Co., Main Ditch 1, 186,000 cu.yd.; Lateral 1, 18,000 cu.yd.; Main No. 2, 200,000 cu.yd.; lateral No. 2, 45,000 cu.yd.; Main No. 3, 140,000 cu.yd.; Lateral No. 3, 11,780 cu.yd.; Main No. 4, 210,000 cu.yd.; Lateral No. 4, 38,111 cu.yd. and Lateral No. 5, 6,220 lin.ft. 15-in. tile in place, for East Nishnabotna D. D. No. 4. $108,500. A. J. Van Sise, Audubon, engr.

Ia., Emmetsburg—Mar. 31, by Palo Alto Co., constructing D. D. 147, Sect. 1, main line 6,100 lin.ft. 20- to 36-in. tile; Sect. 2, 7,900 lin.ft. 8- to 24-in. tile. $25,000. G. R. Campbell, Emmetsburg, engr.

Minn., Minneapolis—May 6, by Bd. Park Comrs., 325 City Hall, dredging in Powderhorn Lake, 15th Ave. S. and 34th St., 140,000 cu.yd. excav. $25,000. J. A. Ridgway, secy. Noted Feb. 28.

Minn., Olivia—Mar. 31, at office of A. O. Schmidt, aud. Renville Co., furnishing, hauling and laying 40,600 ft. 5- to 24-in. tile for Co. Ditch 97. E. L. Chamberlain, Olivia, engr. Noted June 7.

Ark., Newport—Mar. 25, by Browns Creek D. D. 13, constructing 6 mi. main open ditch. $25,000. Bowman Eng. Co., Newport, engrs.

Ark., Pine Bluff—Mar. 27, by Comrs. Consart D. D., c/o F. Bennett, engr., 410 Citizens Bank, main and lateral drainage ditches, levees, etc. $100,000.

Calif., Oroville — Apr. 2, by R. A. Leonard, secy. Thermalito Irrigation Dist., lapweld pipe, 500 ft. 0.272 in. thick, 900 ft. 0.375 in. thick and 800 ft. 0.409 in. thick, 20 in. outside diam., plain ends beveled for welding, coated with pipe dip, also one 18 in. blow off valve to operate under 730 ft. head, f.o.b. Oroville; 24,020 lin.ft. riveted slip joint pipe with tees, bends, wyes, branches, crosses and tapers.

Calif., Terra Bella—Mar. 31, by W. S. McClure, secy. Vandalia Irrigation Dist., furnishing 500 ft. 18 in. well casing and 5 starters; drilling 5 wells, 100 ft. deep or more; furnishing and delivering f.o.b. Sunland, one 125 hp., one 75 hp., one 40 hp. and five 40 hp. vertical motors, also three pumps; furnishing and laying in trench 55,000 ft. riveted steel pipe wrapped with soil proof covering, also furnishing and erecting 2 standpipes; digging and backfilling 55,000 lin.ft. trench for 4- to 26-in. pipe lines.

BIDS RECEIVED

O., Cleveland—For 170,000 yd. dredging in Cuyahoga River, from Great Lakes Dredge & Dock Co., Williamson Bldg., $206,100.

CONTRACTS AWARDED

Minn., Redwood Falls—Redwood Co., Co. Ditch 64, Sect 1, main open ditch, 21,500 lin.ft., 11,601 cu.yd. excav., Sect. 2, 282,821 cu.yd. excav., Sect. 3, 211,183 cu.yd. excav., Sect. 4, 80,535 cu.yd. excav., Sect. 5, 40,655 lin.ft. 6- to 32-in. drain tile, etc.; open work to Strom, Degerness & Hanson, Gary, $76,000; tile material, vitr. glass tile, to What Cheer Clay Products Co., What Cheer, Ia.; other material and all tile labor to Thefry & Hendrickson, Redwood Falls. Noted Feb. 14.

Mo., Kansas City—See "Buildings under Proposed Work."

Calif., Grimes—Recl. Dist. 108, to J. Phillips, 637 Santa Ray Ave., Oakland, constructing canals, incl. 66,400 cu.yd. earthwork Ditch 10-P $0.23, 3,000 cu.yd. Div. 5 $0.20, 2,250 cu.yd. Ditch 9h-2 $0.202, 2,800 cu.yd., Ditch 9-g $0.20.

Calif., Placerville—Eldorado Water Corp., 6 mi. canal from Weber Dam, to Simpson Bros., 25th St. and American River, Sacramento, $0.75 ft.

Streets and Roads

PROPOSED WORK

N. Y., Buffalo—Erie Co. plans concrete paving 80 mi. various roads. G. C. Diehl, 575 Ellicott Sq. Bldg., engr.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., received no bids Mar. 13, grading and regrading, etc., Bway. Noted Mar. 6.

N. Y., Gloversville — Plans curbing, underdrains, storm sewers and paving 4,600 ft. 2nd Ave., East State and Elm Sts., 30 ft., rein.-con. with bituminous top. $62,100. Storm sewers to be built by day labor. H. J. Hanmer, City Hall, engr.

New Jersey—Princeton and West Windsor Twps. plan paving Harrison St. from Princeton Boro line to Brunswick Pike. $60,000. Engineer not selected.

N. J., Newark—Plans paving 3,211 ft. Weequahic Ave., sheet asphalt, $63,381, 4,763 ft. 13th Ave., sheet asphalt and granite block $117,731; grading, curbing, flagging and paving 2,040 ft. South Munn Ave., sheet asphalt, $40,731. J. W. Costello, City Hall,

Pennsylvania—State Hy. Dept., Harrisburg, rejected bids Mar. 6 and 7 for 20 projects involving 58 mi. Readvertised. Noted March 13.

Pa., Hulmerville—Plans to pave Main St. and Trenton Ave. $60,000. J. C. Everitt, chn. Common Council.

Pa., New Castle—Bd. Control takes bids in spring improving ½ mi. Allen St., 40 ft. $30,000.

N. C., Salisburg—Rowan Co. plans paving 4 mi. road from Mooresville toward here, to county line, asphaltic or concrete. $120,000. A. E. Taplin, High Point, engr.

N. C., Wilson—Plans to pave 24 blocks, probably some asphaltic type. $175,000.

Fla., Clearwater—Pinellas Co. plans improving 5.6 mi. Lakeview Ave., $190,000, 3.6 mi. 4th St., $112,000, 2.85 mi. Tangerine Ave., $118,000, foregoing brick or concrete; 3.05 mi. Maximo St., $102,000, 2 mi. Point Pinellas St., $94,000 brick or asphalt, all 16 ft. wide with granite or concrete curb, in Special Rd. & Bridge Dist. 3. C. E. Burleson, Clearwater, engr.

Fla., Palm Beach—Mar. 31, to vote on $150,000 bonds (⅓ of total cost) widening and paving Ocean Blvd. and Palm Beach Ave.

Fla., Sanford—Plans paving Seminole Blvd., Sanford and Hood Aves., asphalt on rock, or other hard surface, 40 ft. $25,324. F. T. Williams, Sanford, engr.

La., Lake Charles—Plans 60,461 ft. 5 ft. concrete sidewalks on various streets. $65,000. E. L. Gorham, comr.

Kentucky—State Hy. Dept., Frankfort, preparing plans grading 15.43 mi. Bosworth Trail, 24 and 28 ft., State Project 30, Jackson Co. J. S. Boggs, state highway engr.

Ohio—Dept. Highways and Pub. Wks., Columbus, received no bids Mar. 14, grading, bridging and paving 2.214 mi. roads in Columbiana and Washington Counties, also bridge in Washington Co.; and cancelled bids which were to be opened Mar. 14, grading, bridging and paving 6.549 mi. road in Lake Co. Noted Mar. 6.

O., Alliance—Bd. Control takes bids in spring paving ⅜ mi. South Linden Ave., 40 ft., $42,000; improving 2.5 mi. South Union Ave., East Ely, West Main and Milton Sts., 40 ft., $135,000. H. Anderson, Alliance, engr. Noted Feb. 14.

O., Bexley (Columbus P. O) — Making plans and takes bids within a month paving 11,700 ft. Bexley Dr., Ardmore and Cassingham Rds., Elm and Roosevelt Aves., about 30,000 sq.yd. brick, asphalt or concrete. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

O., Canton—Stark Co. takes bids in spring concrete curbing and brick paving 4½ mi. South Canton-Massillon Rd., 18 ft. $120,000. A. M. Wise, Court House, engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 1,735 ft. Manhattan Ave., 26 ft., brick $36,648, asphalt $31,682; 1,963 ft. Dartmouth Ave., 25 ft., brick $33,281, asphalt $28,388; 422 ft. alley west of Wilson Ave. (Walton Ave.) 21 ft. brick $5,226, concrete $3,852; 4,513 ft. Belmont, Ardmore and Willshire Aves., 24 ft., brick $88,269, asphalt $75,258; 2,006 ft. Wall St., also alleys west of Ohio Adams and Pennsylvania Aves., 20 ft., brick $15,779, concrete $13,980; 1,428 ft. alleys west of Maryin Ave. and Hamlet St., 15 ft., brick $8,592, concrete $7,606; 771 ft. alleys west of Hamlet and 4th Sts., 16 ft., brick $4,907, concrete $4,338. R. H. Simpson, city engr.

Michigan—State Hy. Dept., Lansing, plans grading and surfacing with concrete or bituminous concrete, 175.525 mi. road in 32 counties, also 194.55 mi. gravel road in 12 counties. G. C. Dillman, ch. engr.

Michigan — State Hy. Dept., Lansing, plans grading and surfacing 3.187 mi. State Trunk Line Rd. 27-14, Van Buren Co., 25,181 cu.yd. excav., 37,400 sq.yd. concrete, asphalt or bituminous concrete. G. C. Dillman, ch. engr.

Mich., Detroit—Having plans prepared paving with 3½ in. sheet asphalt on 8 in. concrete, 17,000 sq.yd. Wyoming Ave. $85,280, 4,500 sq.yd. Ohio Ave. $29,640, 3,500 sq.yd. Alter Rd. $19,550, 2,800 sq.yd. Bulwer Ave. $15,710, 4,700 sq.yd. McPherson Ave. $26,600, 5,200 sq.yd. Drexel Ave. $13,475, 2,400 sq.yd. Kendall Ave. $13,475. G. Jerome, city engr.

Mich., Lansing—Plans grading and surfacing with asphalt, concrete or bituminous concrete, Max, Turner, Washington, Saginaw, Mt. Hope, William, Lenawee, Logan, Larned, Garden, Michigan, Leitrim, Sheridan, Shiawassee, Grand, 8th, Barnes and Franklin Sts. O. Eckert, city engr.

Wis., Madison—Having plans prepared paving various streets, 30 ft., one course concrete or asphalt, concrete curbs and gutters. $83,566. E. E. Parker, City Hall, engr. Noted Feb. 21.

Ia., Clinton—Plans paving 13,000 sq.yd. Dist. 3. $41,258. F. W. Leedham clk.

Ia., Sioux City—Plans paving 1 mi. road through Krummanns addition, North of 27th and East of Jackson Sts. $30,000. L. M. Hintgin, city engr.

Minn., Crosby — Plans concrete paving, etc., 0.5 mi. road. $25,000. H. I. Peral, Crosby, engr.

Minn., Jackson—Plans curbing, guttering and paving 20,000 sq.yd. various streets $65,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, Ia., engrs.

Minn., Minneapolis—Plans paving 3 mi. Lake of the Isles Blvd., limestone macadam base with tar macadam surface, $75,000;

Streets and Roads (Continued)

1.75 mi. west and south shore drive at Lake Calhoun, tar macadam surface, $30,000. T. Wirth, supt. of parks. Eng. Dept. Bd. Park Comrs., City Hall, engrs.

Minn., St. Peter — Nicollet Co. voted $150,000 for highway between New Ulm and Winthrop. State Hy. Dept., St. Paul, engrs.

Kan., Emporia — Lyon Co. soon takes bids grading and surfacing with bituminous macadam or concrete 2.003 mi. Federal Aid Project 224, Sect. A, 18 ft. W. S. Ruggles, Emporia, engr. Noted Sept. 20.

Kan., Sedan—Chatauqua Co. soon takes bids grading and surfacing with bituminous macadam or concrete 2.495 mi. Federal Aid Project 201, Sect. A, 18 ft. F. L. Appleby, co. engr.

Neb., Papillion — Sarpy Co. plans to gravel roads. $80,000 bonds voted.

Missouri—State Hy. Dept., Jefferson City, rejected bids Feb. 21 grading 3.501 mi. Mansfield-Springfield Rd., 26 ft., Wright Co. Noted Mar. 6.

Mo., Joplin—Plans grading, subgrading and surfacing 14 blocks Florida St., macadam. $32,500.

Mo., Kansas City—Jackson Co. making plans resurfacing 9 mi. road, 18 ft., brick or concrete; resurfacing 4 mi. Kansas City-Independence Rd., 18 ft., brick or concrete. L. Koeler, Kansas City, engr.

Mo., Lathrop—Making surveys paving streets. To exceed $25,000. E. T. Archer & Co., 609 New England Natl. Bank Bldg., Kansas City, engrs.

Mo., St. Louis—Bd. Pub. Serv. soon takes bids grading, concrete curbing, guttering and paving 13,440 sq.yd. Blow, Ohio, Varrelmann and Walsh Sts., warrenite on concrete, $95,800, 6,015 sq.yd. Botanical Ave. and Nashville St., asphalt on concrete, $33,800, 10,555 sq.yd. Devonshire Ave. and Utah St., willite on concrete, $73,550, 2,445 sq.yd. Tholozan St., Kentucky rock asphalt on concrete $15,250; grading and improving 13 alleys in City Blocks 1383, 1384, 4064, 5138, 5232, 5261, 5299, 5365 and 5543, 14,465 sq.yd. paving, brick on concrete $56,750, plain concrete $36,170. W. W. Horner, city engr.

Mo., Sedalia—Making preliminary plans concrete curbing, guttering and paving 17 blocks Carr Ave. $41,500. C. O. Manker, City Hall, engr.

Mo., Shrewsbury (Maplewood P. O.)—St. Louis Co. (Clayton) voted $45,000 bonds grading and concrete surfacing 18,480 sq.yd. Murdock Ave., here. H. Jablonsky, Court House, Clayton, engr.

Ark., Ashdown — Making preliminary plans grading and gravel surfacing 71 blocks, 24 and 26 ft. $30,000.

Tex., Austin—Travis Co. making plans reconstructing 3 mi. bituminous macadam and constructing 8 mi. crushed stone base with bituminous topping State Highway 20 from city limits to Hays Co. line, 16 ft. base, 15 ft. top, $138,500; resurfacing with gravel and bituminous topping 14 mi. State Highway 29, 16 ft., $96,000. O. Leonard, Box 256, co. engr.

Tex., Caldwell — Burleson Co. election Apr. 22, $400,000 bonds, constructing Highway 36 through county, starting on line of Milam Co. and extending to Washington Co. line. Address County Commissioners Court, Caldwell.

Tex., Cameron—Milam Co. plans election, $150,000 bonds or more, grading, surfacing, etc., 11 mi. Farrier Highway, Rockdale Rd. Dist. A. F. Mitchell, co. engr.

Tex., Cameron—Milam Co. voted $125,000 bonds 6 mi. Farrier Highway from Brazos River to Williamson Co. line and miscellaneous roads, in Thormdale Rd. Dist. A. F. Mitchell, co. engr.

Tex., Carrizo Springs—Dimmit Co. had plans prepared caliche and gravel surfacing 50 mi. Dilley-Eagle Pass Rd., 18 ft. $418,000. J. G. Lott, Carrizo Springs, engr. Noted Jan. 31.

Tex., Columbus — Colorado Co. having preliminary plans prepared improving 6.9 mi. Weimar-San Antonio Rd., 18 ft., 1 in. asphalt on concrete. $215,000. B. H. Faber, co. engr.

Tex., Cuero—De Witt Co. voted $135,000 bonds hard surfacing 20 mi. from Gonzales Co. line to Cuero, 18 ft. S. Kulawik, co. engr. Noted Jan. 31.

Tex., Dallas — Having plans prepared opening new street to connect Good and Lloyd Sts. from Commerce to Elm Sts., to include demolitions and paving 2 blocks, 50 ft. wide, $250,000; extension and paving through Fair Park of Pennsylvania St, to exceed $25,000. E. A. Kingsley, city engr.

Tex., Dallas—E. R. Moss, 4509 Live Oak St., plans paving, etc., new addition on East Grand Ave., 150 acres. $75,000. Engineer not announced.

Tex., Ennis — Making plans permanent paving 5 or more blocks East Ave., brick or miscellaneous types of high grade bituminous. $25,000. H. McCanless, city engr.

Tex., Falfurrias—Brooks Co. voted $250,000 bonds hard surfacing main roads. J. A. Brooks, co. judge. Noted Nov. 22.

Tex., Houston—Harris Co. plans grading, surfacing, etc., 20 mi. La Porte Air Line Rd., from South Houston to La Porte. $200,000. Howe & Wise, co. engrs.

Tex., La Pryor—Zavala Co. election soon, (probably $100,000 bonds), improving road from Frio Co. line through Batesville to La Pryor. N. P. Hunt, co. engr.

Tex., Nixon—Gonzales Co. voted $125,000 bonds hard surfacing 20 mi. road between Wilson and De Witt Counties, through Nixon, Smiley and Sample, 18 ft. J. G. Irby, co. engr.

Tex., Wichita Falls—Wichita Co. election soon $500,000 bonds, grading and surfacing Clara, Sunshine Hill and Archer Rds. in Rd. Dist. 4, J. M. Isbell, co. engr.

Okla., Oilton—Plans grading and paving 5 blocks 2nd and 4th Sts., Dist. 2, 6,800 sq.yd. concrete, 3,600 lin.ft. curbing, 2,400 cu.yd. excav. $31,000. Benham Eng. Co., Gumbel Bldg., Kansas City, Mo., engrs.

Okla., Oklahoma City — Plans grading and paving 6 blocks 18th, McKinley and Klein Sts., 6,600 sq.yd. asphalt, 3,800 lin. ft. curbing, etc. $31,000. B. M. Hart, city engr.

Okla., Tulsa — Preparing plans paving Greenwood Ave., various types. $75,000. C. Schultz, city engr.

Idaho—State Highway Dept., Boise, had plans prepared 8.25 mi. Old Oregon Trail from Twin Falls Co. line east toward Burley, Cassia Co., Federal Aid Project 70; 14 mi. from Hansen, Twin Falls Co. east to Cassis Co. line, Federal Aid Project 23-C; 8 mi. between Georgetown and Montpelier, Bear Lake Co., Federal Aid Project 80. $215,000.

Wash., Hoquiam—City Comn. takes bids about Apr. 7, concrete paving and sidewalks on Emerson Ave. et. al. $100,000. W. L. Lovejoy, Hoquiam, engr. Noted Feb. 21.

California—State Highway Comn., Sacramènto, plans improving 9½ mi. highway between Janesville and point 4 mi. west of Milford, Lassen Co. County will build necessary bridges. R. M. Morton, state highway engr.

California—State Highway Comn., Sacramento, plans grading and graveling 8 mi. highway north from Independence, Inyo Co. R. M. Morton, state highway engr.

California — Santa Barbara Co. (Santa Barbara), Kern Co., (Bakersfield) and San Luis Obispo Co. (San Luis Obispo) plan grading 40 mi. highway and constructing bridges, etc., along Santa Maria River between Maricopa and Santa Maria, Joint Highway Dist. 3. Burch & Beck, Commercial Bank Bldg., San Luis Obispo, engrs.

Calif., Azusa—Voted $50,000 bonds paving various streets. Noted Jan. 31.

Calif., Claremont—Plans paving various streets, asphaltic concrete. To exceed $25,000.

Calif., Compton—Had plans prepared improving Arbutus and Magnolia St., etc., 730,000 sq.ft. grading, 730,800 sq.ft. 5 in. concrete, etc. E. M. Lynch, Central Bldg., Los Angeles, consult. engr.

Calif., Fullerton — Had plans prepared improving East Wilshire and East Commonwealth Aves., etc., incl. 570,299 sq.ft. 4 in. and 157,795 sq.ft. 5 in. pavement, 9,442 lin.ft. concrete curb. To exceed $150,000. W. C. Redord, city engr.

Calif., Los Angeles—Los Angeles Co. plans paving road through Cahuenga Pass, 8 in. rein.-con. $100,000 will be appropriated each year for 3 years.

Calif., Oakland—Had plans prepared improving portion Best Ave., 6,974 sq.ft. grading, 3,580 sq.ft. oil macadam; portion Trumbull Ave., 27,550 sq.ft. grading, 14,171 sq.ft. oil macadam, etc.; portion Galdino St., 9,292 sq.ft. grading, 4,312 sq.ft. oil macadam, 1,859 sq.ft. cement walks, etc. W. W. Harmon, city engr.

Calif., San Diego—Had plans prepared paving Richmond and several streets in University Heights, 675 sq.yd. 3 in. asphaltic concrete, 39,256 sq.yd. 1½ in. asphaltic concrete top on 4 in. concrete, 56,165 sq.yd. 1½ in. bituminous concrete on 2½ in asphaltic concrete, 9,411 lin.ft. cement curbing, 2,217 sq.ft. cement sidewalk. F. A. Rhodes, city engr.

Calif., San Diego—Having new plans prepared improving Girard Ave. and Coast Blvd., incl. 118,601 sq.ft. 5 in. cement concrete, etc. F. A. Rhodes, city engr. Former contract rescinded. Noted Jan. 10.

Calif., San Francisco—Had plans prepared improving Vicente St. between 14th and 19th Aves., incl. 19,592 cu.yd. cut, 8,225 cu.yd. fill, 2,878 lin.ft. concrete curb, 85,392 sq.ft. asphaltic concrete, 3,000 sq.ft. artificial stone sidewalks, $57,000; Judah St. between 31st and 41st Aves., 19,962 cu.yd. cut, 49,804 cu.yd. fill, 5,234 lin.ft. concrete curb, 4,623 sq.ft. artificial stone walks, 148,491 sq.ft. asphaltic concrete, $102,300. M. M. O'Shaughnessy, city engr.

Calif., San Jose—Santa Clara Co. having plans prepared paving portion Hanchett, Yosemite and Sierra Aves., Superv. Dist. 5, 5 in. concrete. To exceed $25,000. R. Chandler, co. surv.

Ont., Guelph — Having plans prepared paving work $45,000, also storm sewers $20,000. N. S. Nicholson, city engr.

Ont., Sandwich—Essex Co. Good Roads Com. having plans prepared and takes bids about May 1, 2 mi. concrete roadway on Front Rd. and 1½ mi. on Division Rd. $200,000. W. B. Clifford, County Bldgs., engrs.

BIDS DESIRED

New Hampshire—Mar. 28, by State Hy. Dept., Concord, paving 2.415 mi. Projects 158 and 175, in Derry, Rockingham Co. Former bids rejected. F. E. Everett, state highway comr. Noted Mar. 6.

New York—Apr. 4, by A. W. Brandt, comr. Highways, Albany, constructing and reconstructing highways in Allegany, Chemung, Clinton, Columbia, Essex, Genesee, Greene, Monroe, Oneida, St. Lawrence, Steuben, Ulster and Yates Counties; adv. E. N.-R. Mar. 20.

N. Y., Brooklyn—Mar. 26, by E. Riegelmann, boro pres., Boro Hall, asphalt paving East 34th and Union Sts., Blake and Hegeman Aves.; grading sidewalk space, curbing and flagging Dahill Rd. and 7th Ave.; grading, curbing and flagging East 37th St.; grading Flatbush Ave.

N. Y., Long Island City—Mar. 25, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., curbing and paving, etc., Barclay St., sheet asphalt on concrete; regrading, curbing and laying sidewalks on Beach Channel Dr.; grading, curbing and laying sidewalks on 88th Rd., 89th and Lewis Aves., Buckley and Merritt Sts., 55th (Lewis) Ave., 89th (Ridgewood) Ave.; grading sidewalk space and laying sidewalks where necessary on 87th St. (Benedict Ave.); paving 88th Rd. and 89th Ave. sheet asphalt on concrete, Linden St., bituminous macadam.

N. Y., New York—Mar. 24, by J. Miller, pres. Manhattan Boro, Municipal Bldg., repairing wood block, granite block and oak block pavements in railroad area where and when directed; granite block repaving 1st Ave., etc.

N. Y., Tonawanda—Apr. 15, by R. K. Fuller, comr. Canals & Waterways, Albany, removing old superstructure, making fill and roadway across old Erie Canal bed and rebuilding approaches at Bouck St., here, also improving New York State Canals; adv. E. N.-R. Mar. 20.

N. Y., White Plains—Apr. 7, at office of F. L. Merritt clk. Bd. Supervs. Westchester Co., Court House, improving 0.22 mi. Camp Woods Rd. Co. Rd. 19, in Village of Ossining, and 4.85 mi. Pines Bridge-Whitehall Corners Rd., Co. Rd. 20, in towns of Yorktown and Somers, rein.-con.; adv. E. N.-R. Mar. 20.

N. J., Freehold — Apr. 9, by Bd. Freeholders Monmouth Co., reconstructing 2.531 mi. Sect. 2 Farmingdale-Manasquan Rd. 34, rein.-con. G. D. Cooper, 60 Broad St., Red Bank, civil engr.; adv. E. N.-R. Mar. 20. Noted Mar. 13.

N. J., Newark—Mar. 27, at office of T. L. Raymond, dir. Pub. Wks., grading, curbing, flagging and asphalt paving 42,650 sq.yd. Osborne Terrace, Underwood and Aldine Sts., Patton, Mulford and Clinton Places, Tremont, Nye, Maple, Brookdale, Weequahic and Conklin Aves., $237,044. Noted Mar. 13.

N. J., Oakhurst—Mar. 27, by Ocean Twp., concrete or asphalt paving Sunset, Corlies and Edgemont Aves., etc. J. W. Seaman, 192 Bway., Long Branch, twp. engr.; adv. E. N.-R. Mar. 20.

N. J., Paterson—Apr. 8, by Bd. Pub. Wks., paving several streets, asphalt, bituminous concrete, bitoslag or National pavement. H. J. Harder, city engr.; adv. E. N.R. Mar. 20.

N. J., Princeton—Apr. 7, by Princeton Twp Com., Branch Bldg., paving 8,652 sq. yd. Cedar Grove Rd., bituminous surface macadam pavement. Sincerbeaux & Moore, Mechanics Bldg., Trenton, engrs.

N. J., Salem—Apr. 8, by Rd. Com. of Bd. Freeholders Salem Co., reconstructing Sect. 2 Pennsgrove-Pedricktown Rd., and portion of Sect. 1 Pedricktown-Woodstown Rd. in Oldmans Twp., also Sect. 1 Salem-Hancocks Bridge Rd., in city of Salem and Elsinboro Twp., bituminous macadam. H. B. Keasbey, Salem, co. engr.; adv. E. N.-R. Mar. 20.

Streets and Roads (Continued)

Pennsylvania—Apr. 7, by State Hy. Dept., Harrisburg, constructing 52 mi. roads; adv. E. N.-R. Mar. 20.

Pennsylvania—Apr. 8, by State Hy. Dept., Harrisburg, construction 54 mi. roads; adv. E. N.-R. Mar. 20.

Delaware—Apr. 9, by State Hy. Dept., Dover, constructing 0.265 mi. Marsh Road Underpass, Contr. CN-7 A, 0.632 mi. Hickman and Ridge Rds., Contr. CN-18. 1,925 mi. Summit Bridge-Kirkwood, Constr. SN-19; steel superstructure, Seaford Bridge, Contr. 42-C; adv. E. N.-R. Mar. 20.

Md., Towson—Mar. 27, by Comrs. Baltimore Co., (1) furnishing and applying 145,000 gal. tar or oil; (2) furnishing 117,000 gal. patch material, f.o.b. plant; 58,710 tons stone of different sizes. S. A. Green, rd. engr.

W. Va., St. Albans—Apr. 14, by H. O. Palmer, city clk., grading and paving 10,000 sq.yd. 5th Ave. E. Bruce, 321 Boyd Bldg., Charleston, engr.

N. C., Black Mountain—Mar. 24, by Mayor, paving 6,500 sq.yd. streets and sidewalks, also installing 6,000 lin.ft. sewer pipe. J. F. Foy, Black Mountain, engr.

N. C., Cherryville — Apr. 4, by F. U. Mauney, mayor, improving various streets, 40,000 sq.yd. paving, 5,000 sq.yd. cement walk, 10,000 cu.yd. grading, 27,000 cu.yd. lin.ft. curb and gutter. Bids on various types hard surface. Carolina Eng. Co., Charlotte, engrs.

Fla., Milton—Apr. 8, by Bd. Comrs. Santa Rosa Co., constructing or improving Yellow River-East River and Yellow River State Rd. 1, Sect. Milton-Camp Walton Natl. Forest Rd. within or partly within Choctawhatchee Natl. Forest, 12,086 mi. Sect. A and 4.53 mi. Sect. B, incl. 17,533 cu.yd. common excav., 11.348 mi. road machine grading, 6,235 cu.yd. sand clay 0 to 1 mi. free haul, 3,546 cu.yd. sand slay 1 to 2 mi. haul, 1,859 cu.yd., 2 to 3 mi. haul, 1,636 cu.yd., 3 to 4 mi. haul, 263 cu.yd. 4 to 5 mi. haul, 7,000 cu.yd. clay pit striping. C. H. Overman, co. engr.

Tennessee—Apr. 4, by Dept. Hys. & Pub. Wks., Nashville, grading and surfacing with bituminous macadam on crushed stone, 4.1 mi. Harriman Rd. to Federal Aid Project 85, 18 ft., State Project 161, Roane Co., with bituminous concrete 3.68 mi. Nashville-National Cemetery Rd., 24 ft., Federal Aid Project 206, Davidson Co., with bituminous macadam 8.72 mi. New Market-Knox Co. line Rd., 16 ft., State Project 133, Jefferson Co., with cement concrete 8.32 mi. Blountsville-Bristol Rd., 18 ft., Federal Aid Project 98, Sullivan Co., 3 small bridges on foregoing project, with gravel 10.03 mi. Henderson-McNairy Co. line Rd., 8 ft. surface, State Project 159, Chester Co., incl. corrugated metal pipe structures and timber bridges; grading 5.13 mi. Smithville- White Co. line Rd., 16 ft., State Project 163, DeKalb Co., 8.69 mi. Clinton-Knox Co. line Rd., 26 ft., Federal Aid Project 82, Anderson Co., 3.07 mi. Morristown-Granger Co. line Rd., 16 ft., State Project 160, Hamblen Co.; surfacing with bituminous macadam 3.5 mi. Obey River-Overton Co. line Rd., 16 ft., State Project 162, Pickett Co., with waterbound macadam 5 mi. Tate Springs-Hamblin Co. line Rd., 9 ft., State Project 164, Grainger Co. J. G. Creveling, comr. Noted Feb. 14 and Mar. 6.

Kentucky—Apr. 7, by State Hy. Dept., Frankfort, constructing and surfacing with bank gravel, waterbound macadam or surface treatment, 19.22 mi. Henderson-Madisonville Rd., Federal Aid Project 34, Sect. F, Webster Co., 18 ft. Former contract rescinded. J. S. Boggs, state highway engr. Noted Nov. 22.

O., East Cleveland (Cleveland, P. O.)—Mar. 25, paving Dover and Nela Courts, repaving Lakeview, Shaw and Cort Aves. and 7 ft. strip on Euclid Ave., also resurfacing 4th and 6th Aves., granite block and asphalt. W. M. Garnett, City Hall, engr.

O., Steubenville—Mar. 25, at office Buena Vista Heights Co., Sinclair Bldg., improving 8,937 sq.yd. Buena Vista, Rosslyn and Kingston Blvd., waterbound macadam, for F. S. King and W. C. Brown. O'Hara & Watson, 904 Sinclair Bldg., civil and mining engrs.

Ind., Wabash—Apr. 8, by Comrs. Wabash Co., improving W. D. Hoffman et al. Rd., Chester Twp., $103,379; Thomas Bechtold et al., Rd., Chester Twp., $74,557. W. Beauchamp, aud.

Ind., Winchester—Apr. 4, by Comrs. Randolph Co., improving 14,080 ft. road in Monroe Twp. and town of Farmland incl. grading and paving road bed with cement, etc. $82,100. R. A. Tooker, aud.

Michigan—Apr. 2, by State Hy. Dept. at dist. office Port Huron, shaping and surfacing 2.123 mi. State Trunk Line Rd. 27-4 B, St. Clair Co., 24,908 sq.yd. concrete, asphalt or bituminous concrete, 2.731 mi. State Trunk Line Rd. 27-15, A, St. Clair Co., 32,470 sq.yd. asphalt or concrete, 1.874 mi. State Trunk Line Rd. 27-17, A, St. Clair Co., 22,035 sq.yd. concrete, asphalt or bituminous concrete. G. C. Dillman, ch. engr.

Michigan—Apr. 7, by State Hy. Dept. at dist. office St. Joseph, grading and surfacing 0.747 mi. State Trunk Line Rd. 11-64, Berrien Co., 8,764 sq.yd. concrete, asphalt or bituminous concrete, also 1.25 mi. State Trunk Line Rd. 11-22, B, Berrien Co., 14,850 sq.yd. concrete, asphalt or bituminous concrete. G. C. Dillman, ch. engr.

Mich., Mt. Clemens—Mar. 25, at office Bd. Macomb Co. Rd. Comrs., Mt. Clements, grading and surfacing with concrete or bituminous concrete, 4.028 mi. Assessment Dist. Rd. 70. W. Lehner, engr.

Wisconsin—Mar. 31, by State Hy. Comn., Madison, and Village Bd. of Menomonee Falls at div. office 2, Stephenson Bldg., Milwaukee, grading, surfacing and bridging, etc., Milwaukee-Menomonee Falls Rd., Federal Aid Project 358, 19,935 cu.yd. earth and 2,624 cu.yd. rock excav., 42,365 sq.yd. concrete, etc. A. R. Hirst, Madison, state highway engr.

Wisconsin—Mar. 31, by State Hy. Comn., at div. office 2, Stephenson Bldg., Milwaukee, grading and surfacing, etc., Fond du Lac-Ripon Rd., Project 365, Fond du Lac Co., Sect. A commencing at end of present pavement on Trunk Highway 23 and extending east 5.63 mi. to Seymour St., 16,600 cu.yd. earth and 5,132 cu.yd. loose rock excav., 55,000 sq.yd. concrete, Sect. B commencing at Seymour St. extending to Lincoln Ave. in city Fond du Lac, 3,400 cu.yd. earth excav.; 5,770 sq.yd. concrete. Contractor to furnish 2,150 bbl. cement f.o.b. cars Fond du Lac. A. R. Hirst, state highway engr.

Minn., Duluth—May 1, by W. H. Fischer, city comr., paving East St. from 24th to 44th Aves., 14,445 sq.yd. concrete, 6,523 lin.ft. concrete curb, etc. $62,378. J. Wilson, city engr.

Minn., Duluth—May 1, by W. H. Fischer, comr., concrete or asphalt paving 18,740 sq.yd. 1st St. from 1st to Mesable Aves. $96,211 for concrete and $108,542 for asphalt. J. H. Wilson, city engr.

Minn., Elbow Lake—Apr. 7, by C. M. Nelson, aud. Grant Co., improving 9 mi. State Rd. 9, Job 2401, 58,344 cu.yd. excav., 58,575 cu.yd. overhaul, 695 lin.ft. portable culverts; gravel surfacing State Rd. 1, Job 2404, and 7 mi. State Rd. 2, Job 2405. $30,000.

Minn., Mankato — Apr. 2, by C. L. Kennedy, aud. Blue Earth Co., 5 mi. Job 2401, State Rd. 16, 5 mi. Job 2402, State Rd. 20, 3 mi. Job 2403 and 4 mi. Job 2404, 136,046 cu.yd. excav., 243,720 cu.yd. overhaul. $35,000. J. W. Hruska, Mankato, engr.

Minn., Mantorville—Apr. 4, by G. L. Taylor, aud. Dodge Co., 7.5 mi. Job 2303, State Rd. 1, 85,452 cu.yd. earth excav., 273,965 cu.yd. overhaul, 2,505 lin.ft. 6-in. tile, placing 1,635 lin.ft. sectional concrete culverts; 8 mi. Job 2401, State Rd. 5, 66,500 cu.yd. excav., 77,840 cu.yd. overhaul, 2,010 lin.ft. sectional concrete or corrugated metal culverts, 1 low truss 50-ft. bridge, 128 cu.yd. concrete in monolithic culverts. $40,000. D. P. Poboish, Mantorville, engr.

Minn., St. Paul—Mar. 31, by G. J. Ries, aud. Ramsey Co., improving Upper Afton Rd., 32,014 cu.yd. excav., 64,421 cu.yd. overhaul, 4,589 cu.yd. gravel surface, $23,000; Division St. from north city limits of White Bear village to Park Ave. in town of Bald Eagle, $5,000. P. N. Coates, co. surv.

Kan., Atchinson — Apr. 4, by Clerk Atchinson Co., grading and surfacing with brick or concrete 7.632 mi. Federal Aid Project 83, Sect. A, and 7.522 mi. Sect. B, 18 ft. R. D. Coleman, co. engr.

Kan., Iola—Apr. 3, by Clerk Allen Co., grading and surfacing with 1 course concrete 2.036 mi. Federal Aid Project 168, Sect. A, 18 ft. A. R. Stroup, co. engr.

South Dakota—Mar. 27, by State Hy. Dept., Pierre, grading 144.1 mi. roads in 15 counties. F. D. Hudgins, ch. engr.

Tex., Austin—Mar. 25, by G. S. Mathews, judge Travis Co., grading and bridging 11 mi. Manchaca Rd. to Bear Creek, Fredericksburg Rd. and Post Rd., 24 ft. $30,000. O. Leonard, Box 256, co. engr.

Tex., Brownsville—Cameron Co. taking bids improving 3 mi. road just north of Harlingen, 18 ft., concrete. $100,000. W. O. Washington, co. engr.

Nevada—Mar. 26, by State Highway Comn., Carson City, improving 1.27 mi., Route 2 Sect. D-1, White Pine Co., 4,035 cu.yd. unclassified excav., 4,850 cu.yd. selected material for fills, 8,620 yd. sta. overhaul, preparing 1.27 mi. subgrade and shoulders, 13,430 sq.yd. cement concrete, etc. (cement furnished by state, f.o.b. Ely); 8.03 mi., Route 1 Sect. D, from Derby to Fernley, Washoe and Lyons Counties, 34,750 cu.yd. unclassified excav., 8,173 yd. sta. overhaul, preparing 2.46 mi. subgrade and shoulders, 3,950 cu.yd. loading and screening gravel, 11,160 yd. mi. hauling gravel, 3,950 cu.yd. spreading gravel, etc. (sand and gravel furnished by State). G. W. Borden, state highway engr.

California—Apr. 7, by State Highway Comn., Sacramento, paving 2.8 mi. between Pasadena Ave. and Montebello, Los Angeles Co., cement concrete and asphaltic concrete. R. M. Morton, state highway engr.

Calif., Burbank—City Council receiving bids improving Lincoln St., 6,000 lin.ft. 3½ in. asphaltic concrete base with 1½ in. Natl. surface, grading, etc.; 5th St., 2,400 lin.ft. long, grading and paving with 3 in. rock and oil macadam, etc.

Calif., Los Angeles—Bd. Pub. Wks. receiving bids improving Waverly Ave. between Auburn and Hyperion Sts., incl. 52,816 sq.ft. concrete, sanitary sewer system, 7,879 sq.ft. walks; 20th St. between Oak and Toberman Sts., 20,463 sq.ft. asphalt, 1,420 sq.ft. bituminous base pavement, 3,147 sq.ft. walks; alley west of Pacific Ave. between 17th and 18th Sts. 15,000 sq.ft. concrete; Hoover St. between Santa Monica and Fountain Sts., 50,285 sq.ft. Warrenite-bitulithic, 4,332 sq.ft. walks, 2,309 sq.ft. gutter, etc.; Sentinel Ave. between Ganahl and Wabash Sts. 19,970 sq.ft. oil and roll, 7,227 sq.ft. walks, 2,893 sq.ft. gutter, sanitary sewers, etc.; Oxnard St. between Woodman Ave. and Sherman Way, 108,902 sq.ft. of 6 in. concrete, etc. J. A. Griffin, city engr.

Calif., Los Angeles—Mar. 31, by Supervs. Los Angeles Co., improving Western Ave. near Torrance, 3,600 cu.yd. excav., 10,300 sq.yd. shaping, 10,300 sq.yd. sub-base, 10,300 sq.yd. asphaltic concrete, 10,300 sq. yd. Topeka surface.

Calif., San Francisco—Bd. Pub. Wks. taking bids improving 48th Ave. from Lawton to Santiago Sts., Ortega St. from 48th Ave. to Great Highway. To exceed $25,000. M. M. O'Shaughnessy, city engr. Noted Oct. 18.

Calif., Santa Cruz—Supervs. Santa Cruz Co. taking bids paving 2 mi. San Jose Rd., oil macadam. L. Bowman, co. surv.

Calif., South San Francisco (Branch San Francisco)—City Trustees receiving bids improving various alleys, incl. 238,000 sq. ft. concrete, 32,500 sq.ft. of 4 in. concrete base with 1½ in. Topeka surface, 2,600 sq. ft. concrete walks, 6,300 cu.yd. grading, etc. G. A. Kneese, Courthouse, Redwood City, engr. Noted Mar. 6.

Ont., Kitchener—Mar. 25, by S. Cassel, clk Waterloo Co., Court House, paving 60,400 sq.yd. 7 in. concrete in Woolwich, Waterloo, and Wilmot Twps. and Ayr Village. Prices wanted on all materials.

BIDS RECEIVED

New York—State Hy. Dept., Albany, Mar. 14, constructing and reconstructing 6.24 mi. Repair Contr. 3080, Trenton-Remsen-Boonville Rd., Oneida Co., from Hogeboom, Campbell, Inc., Kingston, $257,427, engrs. est. $288,040; 4.18 mi. Highway 8171, Monticello-Woodbourne, Part 2, Sullivan Co., from Ferber-Gill Co., Inc., Hackensack, N. J., $189,236, $209,232; 4.57 mi. Highway 8170, Putnam-Essex Co. line, Washington Co., from McCambly, Butterfield & Co., Plattsburgh, $145,644, $165,944; 3.1 mi. Repair Contr. 3079, Livingston-Hudson, Part 2, Columbia Co., from J. Walker Constr. Co., 19 Steuben Ave., Albany, $146,808, $153,203; 6.61 mi. Highway 5694, Caledonia-Mt. Morris, Part 2, Livingston Co., from Greenfield Constr. Co., 89 Main St., Hornell, $249,209, $272,803; 2.44 mi. Highway 8167, Deans Corners-Rundall Corners, Putnam Co., from Strong & Steffy, Inc., 522 5th Ave., New York $114,285, $123,721; 3.76 mi. Repair Contr. 3078, Waterford-Mechanicsville, Saratoga Co., from Collins Bros., Mechanicsville, $158,997, $173,749; 6.18 mi. Highway 8168, Panama-Ashville, Chautauqua Co., from M. H. Ripton, Carter Bldg., Rochester, $268,821, $297,731; 9.6 mi. Highways 8169 and 1670, Arcade-Bliss Rd., Parts 1 and 2, Wyoming Co., from J. W. Gurnett, Watkins, $373,457, $418,895. Noted Feb. 28.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Mar. 12, grading, curbing, flagging and paving (1) East 18th St., macadam; sheet asphalt paving (2) Lenox Rd. (3) Lott Ave. (4) Quentin Blvd. (5) Warehouse Ave., etc. (6) West 8th St., est. (7) West 35th St. (8) 10th Ave. (9) 43rd St. (10) 67th St. (11) 77th St (12) 79th St. (13) 81st St., curbing and flagging

Streets and Roads (Continued)

where necessary on (14) Lott Ave. (15) Quentin Blvd. (16) West 12th St. (17) 66th St. (18) 67th St. (19) 73rd St., from Galecor Contg. Co., Ridge Blvd., (1) $5,613 (16) $3,717 (18) $4,059; Cranford Co., 52 9th St., (2) $3,404 (3) $3,615 (4) $16,077 (5) $40,919 (6) $91,932 (8) $11,652 (9) $10,094 (11) $8,298 (12) $8,607 (13) $9,288; M. J. O'Hara Contg. Co., 717 65th St., (7) $17,671; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., (10) $7,383; Borough Asphalt Co., 1301 Metropolitan Ave., (3) $3,615; W. G. Grimm, (14) $1,817 (15) $2,165; W. E. Carberry, 45 South Elliott Pl., (17) $4,403; L. Mangieri, 190 31st St., (19) $3,961; Interstate Contg. Co., (19) $3,961. Noted Mar. 6.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Mar. 13, grading, curbing, laying sidewalks and crosswalks on (1) Randall Ave. (2) Worthen St., grading, building inlets and receiving basins in (3) Metcalf Ave. (4) Fenton Ave., curbing, laying sidewalks and crosswalks on (5) Houghton Ave., grading, curbing, laying sidewalks, etc. on (6) East 227th St. (7) East 171st St. (8) West 180th St., sheet asphalt paving (9) Grant Ave. (10) Webb Ave. (11) Steuben Ave. (12) Findlay Ave. (13) White Plain Ave., bituminous concrete paving (14) Elliot Pl. (15) Mounteden Ave., granite block paving (16) Cauldwell Ave., from Hanratty Contg. Co. (1) $20,573 (3) $7,461 (4) $10,796; P. J. Kane, Jr., 600 East 149th St., (2) $13,110; Interstate Contg. Co., Inc., (5) $6,876; L. DiMinna (6) $33,866; Asphalt Constr. Co., 208 Bway., (7) $45,462 (10) $24,341; Interboro Asphalt Co., 2306 Creston Ave., (8) $44,947 (9) $56,976 (11) $15,148 (12) $14,983 (14) $19,943 (15) $70,920; J. E. Gaffney, 438 East 91st St. (13) $209,606; Astoria Contg. Co., 169 Hunter Ave., Long Island City, (16) $25,514. Noted Mar. 6.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, regrading, curbing, recurbing, flagging, reflagging and granite block paving 5th Ave. from 140th to 142nd Sts, from Asphalt Constr. Co., 208 Bway., $45,220. Noted Mar. 6.

Delaware—State Hy. Dept., Dover, constructing roads (a) stone concrete pavement corrugated pipe (b) stone concrete, rein.-con. pipe (c) slag concrete, corrugated pipe (d) slag concrete, rein.-con. pipe, 1.903 mi. Walker-Deakynsville Rd., Contr. CN-14, from Sherman & Rhodes, Smyrna, (a) $82,970 (b) $83,090 (c) $81,584 (d) $81,704; 2.276 mi. Mt. Pleasant-Summit Bridge Rd., Contr. CN-15, from W. Eisenberg, Camden, N. J., (a) $82,738 (b) $82,963 (c) $81,578 (d) $81,803; 1.01 mi. Walnut St.-Milford Rd., Contr. CK-20, from Hannaman-Burroughs, Salisburg, Md., (a) $33,747 (b) $33,927 (c) $33,322 (d) $33,502; 4.56 mi. Wescoats Corner-Rehoboth Rd., Contr. CS-30, from Roberts Paving Co., Quantico, Md., (a) $165,688 (b) $166,268, D. E. O'Connell & Sons, Ridley Park, Pa., (a) $179,396 (b) $179,576 (c) $175,396 (d) $175,576; 2.43 mi. Bethel-Broad Creek Rd., Contr. CS-31, from Field, Barker & Underwood, Commercial Trust Bldg., Phila., Pa., (a) $73,193 (b) $73,493 (c) $70,980 (d) $71,280, Hannaman-Burroughs Co., Salisburg, Md., (a) $72,383 (b) $72,783 (c) $72,008 (d) $72,408; 0.507 mi. road through Frederica, Contr. CK-17, from George & Lynch, Dover, stone concrete $18,232, slag concrete $17,980. Noted Feb. 21.

Md., Baltimore—Bd. Awards, Mar. 12, grading, curbing and paving streets listed in Contr. 250-OANA, 1,400 sq.yd. vitr. brick, 21,150 sq.yd. asphalt, from Amer. Paving Co., Montebello Ave., $91,960. Noted Mar. 6.

Md., Towson—Comrs. Baltimore Co., Mar. 13, concrete paving 1 mi. Group 5, Tufton Ave., 4th Dist., from Harry T. Campbell Sons Co., Inc., Towson, $27,490; macadam paving Group 6, from P. Reddington & Son, 2 East Lexington St., Baltimore, $28,609.

W. Va., Buckhannon—State Rd. Comn., Charleston, and Upshur Co., grading and bituminous paving 6 mi. road, 16 ft., from C. E. Price & Co., Huntington, $255,544. Noted Feb. 28.

Ohio—Dept. Highways and Pub. Wks., Columbus, Mar. 14, grading, bridging and paving with (a) Kentucky rock asphalt (b) brick (c) bituminous concrete on concrete (d) bituminous concrete on waterbound (e) plain concrete (f) waterbound surface treated (g) concrete on concrete (h) rein.-con. (i) bituminous macadam, asphalt (j) bituminous macadam, tar (k) bituminous concrete (l) Topeka mixed asphalt (m) asphaltic macadam (n) tar macadam (o) sheet asphalt (p) asphaltic concrete (1) 3.365 mi. Sect. "E-2" Lima-Bellefontaine Rd., Allen Co. (2) 2.57 mi. Sect. "D" Barberton-Greenwich Rd., Ashland Co. (3) 2.587 mi. Sect. "E" Barberton-Greenwich Rd., Ashland Co. (4) 0.971 mi Sect. "New Bremen" Piqua-St. Marys Rd., Auglaize Co. (5) 0.971 mi. Sect. "New Bremen" Piqua-St. Marys Rd., Auglaize Co. (6) 0.495 mi. Sect. "Owensville" Milford-Hillsboro Rd., Clermont Co. (7) 1.17 mi. Sect. "C" Youngstown-East Liverpool Rd., Columbiana Co. (8) 2.049 mi. Sect. "A" Akron-Cleveland Rd., Cuyahoga Co. (9) 2.68 mi. Sect. "A" Youngstown-East Liverpool Rd., Mahoning Co. (10) 3.275 mi. Sect. "A" Marion-Mt. Gilead Rd., Marion Co. (11) 2.287 mi. Sect. "B-1" Marion-Mt. Gilead Rd., Marion Co. (12) 6.403 mi. Sects. "C, D and E-2" Ft. Recovery-Minster Rd., Mercer Co. (13) 1.045 mi. Sect. "Camion" Eaton-Hamilton Rd., Preble Co. (14) 2.73 mi. Sect. "D" Eaton-Greenville Rd., Preble Co. (15) 1.56 mi. Sect. "C-1" Akron-Massillon Rd., Summit Co (16) 1.7 mi. Sect. "J" Cuyahoga Falls-Kent Rd., Summit Co. (17) Sect. "A" Akron-Canal Fulton Rd., Summit Co. (18) Sects. "E and F" Akron-Wooster Rd., Wayne Co., resurfacing (19) 0.402 mi. Sect. "A" Cincinnati-Columbus Rd., Warren Co., (20) 1 mi. Sect. "A" Portsmouth-Hillsboro Rd., Scioto Co., concrete curbing (21) 1.85 mi. road Ashtabula Co., from W. Sousley Co., Ada, (a1) $83,686; E. J. Heil, Lima, (b1) $131,085; D. A. Phillips & Son, Ashland, (c2) $77,728 (d2) $70,283 (d3) $72,156 (g3) $79,934; Newell & Smith, Defiance, (e2) $69,781 (e3) $71,886; Standard Paving & Contg. Co., Lakewood, (f2) $58,574 (f3) $60,331; Churchill Enck Co., Lima, (h4) $32,685 (h5) $22,836; Craig & Jordan, Blanchester, (i6) $10,026 (n19) $4,410; A. C. Pickleheimer, 3555 Mooney Highway Park, Cincinnati, (j6) $10,258; General Asphalt Paving Co., 1268 Dueber Ave., S. W., Canton, (k7) $26,152 (17) $26,152 (p18) $144,265; Ohio Constr. Co., Cleveland, (h8) $111,095; J. L. McCormick, Ravenna, (b8) $141,973 (21) $13,060; C. J. Brown & Taylor, Farmdale, (i9) $60,083 (j9) $59,693; L. L. Clymer, Bluffton, (i10) $62,805 (i11) $46,702 (m14) $73,330; G. W. Purdum, 2634 West Broad St., Columbus, (j10) $65,910; N. B. Putnam, Van Wert, (j11) $49,995; Hinton & Smalley, Celina, (h12) $158,479; Eldorado Paving Co., Eldorado, (b13) $40,574; C. Wilmore, Middletown, (e14) $80,623; Straw & Huber, Eaton, (n14) $74,835; Guilford-Wright Co., Akron, (b15) $82,197 (e15) $69,234 (b17) $19,735 (h17) $17,666; T. E. McShaffrey, 171 South Forge St., Akron, (k15) $70,242; McCort Constr. Co., Akron, (o16) $50,172; Studebaker & Son, Greenville, (b18) $163,661; Merkle Bros., Mansfield, (h18) $123,219; Brunson & Van Horn, Cincinnati, (q19) $4,622; W. C. Brown, Chillicothe, (i20) $44,731. Noted Mar. 6.

Wis., Antigo—G. O. Palmiter, city clk., Mar. 11, paving various streets, from Manitowoc Constr. Co., 826 South 8th St., Manitowoc, $141,090 (for concrete); C. T. Welsh Co., 703 1st Natl. Soo Bldg., Minneapolis, $151,562 (for sheet asphalt); F. P. Coughlin Co., 30 North LaSalle St., Chicago, $159,335 (for bitulithic). Noted Feb. 7.

Wis., Monroe — Green Co. grading and concrete surfacing York Church Rd., from J. L. Frame, Blue Mounds, 1,000 cu.yd. earth excav. $0.90, 2,500 cu.yd. fine grading $1.50, 29,400 sq.yd. concrete $1.47, etc., total $58,416. Noted Feb. 28.

Neb., Omaha—Douglas Co., paving 2.49 mi. Omaha-Elkhorn Rd., Federal Aid Project 2C, from Amer. Paving Co., 1325 Grace St., $3.98 for brick on 6 in. concrete, $2.86 on 7 in. concrete; Allied Contractors, 1803 Douglas St., $3.30 for bituminous concrete on 6 in. concrete; A. H. Reed Co., Omaha, $3.95 sheet asphalt.

Ark., Pine Bluff—Paving Dist. 71 incl. 21,000 sq.yd. brick on concrete, 2,100 sq. yd. 6 in. base, 300 ft. each of 18- and 36-in. sewers, 1,120 lin.ft. concrete curb and gutter, etc., from Kaw Paving Co., 616 N. E. Bldg., Topeka, Kan., $54,116. Noted Feb. 21.

Colorado—State Hy. Dept., Denver, Mar. 11, concrete paving 2.339 mi. Federal Aid Project 17-R, El Paso Co., from La Nier-Selandes & White, Ft. Morgan, $81,399; concrete viaduct over Denver & Salt Lake R.R. tracks on Denver Brighton Rd., from A. F. Hewett, 1250 Pearl St., Denver, $11,006. Noted Mar. 6.

California—Improving highway between south boundary Ventura Co. and Camarillo, 13.5 grading, 7.4 mi. cement concrete paving, 2.5 mi. widened with cement concrete shoulders, from S. Hunter, 122 Valero St., Santa Barbara, $319,145. Noted Feb. 21.

Calif., Hawthorne—Improving Raymond Ave. between east and west city limits, 1½ in. Willite on 2½ in. asphaltic concrete over 2 in. sand cushion, curbs, gutters and walks, from Oswald Bros., 366 East 58th St., $46,975. Noted Dec. 20.

Calif., Los Angeles — Los Angeles Co., improving Crescent St. between Burbank city limits and 2,800 ft. south, etc., Co. Rd. Impvt. 63, from G. R. Curtis, 2440 East 26th St., 8,689 cu.yd. excav. $1.35, 23,190 sq.ft. gutters $0.35, 30,779 sq.yd 1½ in Natl. pavement $1.35, 30,779 sq.yd. 3½ in asphaltic concrete $1.45, etc., total $106,028. Noted Feb. 7.

Calif., Monterey — Improving portion Laine, Spencer, Archer Sts., etc., 35,000 lin.ft. concrete curb and gutter, 450,000 sq.ft. 5 in. waste quarry rock pavement, 2,500 lin.ft. corrugated iron and culvert, from J. L. Conner, Box 565, Santa Cruz, $81,900. Noted Feb. 14.

Calif., Oakland — Improving Monticello, Birdsall Sts., etc., from Bates & Borland, Bank of Savings Bldg., 84,899 sq.ft. grading $0.075, 3,170 ft. concrete curb $0.69, 6,327 ft. concrete gutter $0.24, 42,172 sq.ft. oil macadam $0.13, 1,420 lin.ft. 6 in. vitr. pipe sewer $1.75, etc. Noted Feb. 28.

Calif., San Diego—Improving A, Ash, Beech, Cedar and 7th Sts., from D. H. Ryan, 1615 Fern St., 176,272 sq.ft. 1½ in. asphalt concrete on 2½ in. bituminous $0.16, 88,382 sq.ft. 4 in. cement concrete $0.165, 1,300 sq.ft. 1½ in. asphalt concrete gutters $0.05, 4,101 sq.ft. cement concrete sidewalk $0.22, 1,522 lin.ft. cement concrete curb $0.65, etc. Noted Jan. 24.

CONTRACTS AWARDED

New Hampshire—State Hy. Comn., Concord, paving highway in Concord, waterbound macadam, etc., to A. D. Bridges Sons Inc., Hazardville, Conn., $33,018. Noted Mar. 13.

N. Y., Buffalo—Dept. Parks & Buildings, City Hall, curbing and paving 7,177 sq.yd. Red Jacket Parkway, to Rock Asphalt Constr. Co., Morgan Bldg., $40,909. Noted Mar. 6.

N. J., Freehold—Monmouth Co. concrete paving 2.15 mi. Palmer Ave., Keansburg, to Jannarone Contg. Co., 225 Passaic Ave., Belleville, $115,217. Noted Mar. 13.

Pennsylvania—State Hy. Dept., Harrisburgh, constructing Route 102, Sect. 2, Tioga Co., and Route 102, Sect. 3, Potter and Tioga Counties, to D. Schoentag, 68 Ulster Ave., Saugerties, N. Y., $408,107 and $318,422 respectively; Route 163, Carbon Co., to Neely Bros., Oxford Ave. and Wakeling St., Phila., $121,299; Application 1775, Clearfield Co., to M. S. McMahon, Brookville, $21,951; Route 231, Adams Co., to Frey Constr. Co., 50 West Phila. St., York, $42,029; Route 174, Susquehanna Co., to R. D. Richardson Constr. Co., 828 Connell Bldg., Scranton, $36,555; Route 120, Westmoreland Co., to J. S. Rinehart, East Liverpool, O., $61,910; Route 116, Fayette Co., to Swaney & Gilmore, R. F. D. 5, Uniontown, $78,123; Route 59, Elk Co., to G. Metzger Jr., 12 4th St., Emporium, $54,787; Route 65, Clearfield Co., to Milliron Constr. Co., 224 Deposit Natl. Bank Bldg., DuBois, $98,897. Noted Mar. 13.

Pa., Southmont—R. G. Wertz, secy. Boro. Council, grading 13,025 sq.yd. and paving 14,723 sq.yd. with one course rein.con., on Shady Lane, Hochstein Rd., Harding and Cox Sts., to James & Nicholson, Johnstown, $54,000. Noted Feb. 28.

Maryland—State Rds. Comn., Baltimore, oiling roads in Dist. 3-A, to Barrett Co., 36th St. and Grays Ferry Ave., Phila, Pa., $75,000; Dists. 1, 2 and 6, to Atlantic Refining Co., Locust Point, Baltimore, $100,000; Dists. 3, 4 and 5, to Lansdell & Earle, 15 Panta Pl., Hackensack, N. J., $125,000. Noted Feb. 28.

Md., Towson—Comrs. Baltimore Co., concrete paving 7,390 sq.yd. Group 2, 3rd Ave. to Hammonds Ferry Rd., to G. Long Constr. Co., 1st Ave. and 12th St., Baltimore, $19,992; 8,000 sq.yd. Group 3, Carroll Rd. to intersection of Sparks Rd., to Huse & Knight, 2800 Montebello Ave., Baltimore, $24,960. Noted Mar. 13.

W. Va., Parkersburg—Paving Washington Ave., 11th, Bird, Jeannette, North Cornmell, Liberty, 6th, Juliana and William Sts., to Ebersbach Constr. Co., Pomery, O., $72,673. Noted Feb. 28.

N. C., Wadesboro—Paving, curbing and guttering various streets, to Ely Constr. Co., Lamar Bldg., Augusta, Ga., $250,000.

Georgia—State Hy. Dept., East Point, improving 5.832 mi. Cleveland-Blairsville Rd., Lumpkin Co., to J. H. Moore, Dahlonega, $47,825; 8.14 mi. Jesup-Brunswich Rd., Wayne and Glenn Counties, and 3.576 Moultrie-Camilla Rd., Colquitt Co., to Caye Andrews Co., Americus, $39,437 and $17,976 respectively.

Fla., Tampa—Improving McBerry St., to W. L. Harwell, Tampa, $7,960; Tampa and 12th Sts. to Cone Bros., Tampa, $35,922. Work involves 17,000 sq.yd. 2½ in.

Streets and Roads (Continued)

asphalt blocks and 13,400 lin.ft. granite curbing.

Alabama—State Hy. Dept., Montgomery, bituminous macadam paving 6 mi. Decatur-Moulton Rd., 20 ft., Moulton Co., to McQuarry Bros., Albany, Ala., $114,592. Noted Mar. 13.

Miss., Meridian—Paving 10 mi. various streets sheet asphalt and Warrenite on concrete, etc., to Dunn Constr. Co., Chamber of Commerce Bldg., Birmingham, Ala. and J. E. Wright Constr. Co., Meridian; curb and gutters, to A. P. Pool & Son, Meridian; sewers, to R. T. Meyers Constr. Co., Meridian.

Louisiana—State Hy. Dept., Reymond Bldg., Baton Rouge, 11.33 mi. Federal Aid Project 144, Many-Mansfield Highway, Sabine Parish, to Hankins Bros., Compti, $103,941. Noted Feb. 21.

La., New Orleans—Comn. Council. paving and subsurface work for 1924 program as follows: to Craven & Lang, 1015 Carondelet St., 890 sq.yd. Antonine St., warrenite, $8.97 front ft., 9,790 sq.yd. Baldwin St., cascemco, $14.75, 10,300 sq.yd. Carondelet St., warrenite, $11, 8,310 sq.yd. Carondelet St., warrenite, $10.82, 800 sq.yd. Cadiz St., cascemo, $8.50, 25,100 sq.yd. Canal Blvd., warrenite, $23.38, 900 sq.yd. Calhoun St., warrenite. $10.55, 2,760 sq.yd. Nashville St., warrenite, $13.73; to Globe Constr. Co., Louisiana Bldg., 17,300 sq.yd. South Claiborne Ave., vitr. brick, $26.15, 1,740 sq.yd. South Liberty St., refined trinidad asphalt, $10.88, 8,130 sq.yd. Poplar St., Kentucky rock, $9.54, 7,130 sq.yd. State St., Dr., Kentucky rock, $9.28, 14,770 sq.yd. Willow St., warrenite, $9.83, 26,330 sq.yd. Washington St., vitr. brick, $22.78; to Southern Roads Co., Weiss Bldg., 5,900 sq.yd. Louisiana Ave. Parkway, Uvalde, $11.43. Subsurface drains to A. P. Boh & Co., 417 Baronne St., Antonine St. $3,975, Calhoun St. $2,482, Nashville St. $7,474; to Hampton Reynolds, Maison Blanche Bldg., Baldwin St. $28,738, Washington St. $57,043; to Grasser Contg. Co., Canal Commercial Bank Bldg., Carondelet St. from Philip to Louisiana Sts. $36,819, Carondelet St. from Louisiana to Napoleon Sts. $49,356, Cadiz St. $5,875, Poplar St. $28,965, State St. Dr., $38,638; to Williams Eng. Co., c/o City Engineer, City Hall, Canal Blvd. $102,852; to M. Mitchell & Son, 2646 Banks St., South Claiborne St. $33,850, South Liberty St. $9,096; to J. O. Chisolm, 200 Saratoga St., Louisiana Ave. Parkway, $29,692; to H. W. Bond & Bros., 1010 Constantinople St., Willow St. $46,475. Noted Feb. 28.

Tenn., Livingston—Overton Co., grading, structures, etc., 24 mi. road from Fentress to Clay Co. lines, to F. H. Crow & Co., 42nd Ave., N., Nashville, and Pitts Bros. Constr. Co., Mt. Pleasant. Est. cost $300,000.

O., Akron—W. F. Peters, dir. Pub. Serv., improving 5,000 sq.yd. Aqueduct St., sheet asphalt, 7 in. base, brick gutter (texaco), also 5,400 sq.yd. Big Falls Ave., sheet asphalt, Trinidad, 7 in. base, brick gutter, asphalt filler 6 in. base, to Columbus Asphalt Paving Co., 304 Buckeye Bldg., $28,029 and $38,085 respectively; 2,170 sq.yd. Allyn St., brick, asphalt filler, to Hollinger & Davidson, 435 South Bway., $16,995; 5,490 sq.yd. South Arlington St., brick, asphalt filler, 6 in. base, to V. Olson Contg. Co., 501 Herberich Bldg., $30,285; 190 sq.yd. Power St. (Bellewood Ave.), brick, asphalt filler, 6 in. base, to McAlonan Bros., 127 West Buchtel Ave., $10,994. Noted Mar. 6.

O., Akron—W. F. Peters, dir. Pub. Serv., to E. H. Rawle, 1466 Holly Ave., improving 1,375 ft. McKinley Ave., 42,700 sq.ft. 4 in. cement sidewalk $0.23 per sq.ft., 11,500 cu.yd. earth excav. $0.60, 2,400 cu.yd. cinders $1.10, total $25,442, engrs. est. $28,027. Noted Mar. 6.

O., Akron—W. F. Peters, dir. Pub. Serv., grading and brick paving, etc., 1,920 sq.yd. Wellesley Ave. and 400 sq.yd. Elma St., to McAlonan Bros., 127 West Buchtel Ave., $11,834 and $15,793 respectively; 753 sq.yd. Garden alley and West Center St., to H. Gilbert, 19 North Martha Ave., $5,441. Noted Feb. 21.

O., Columbus — W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections and paving Hosack St., 464 ft. Isabel St., 24 ft., and 2,126 ft. Essex St., 30 ft., all brick, to R. J. Dienst, 480 South 5th St., $53,360, $7,812 and $43,396 respectively; 3,142 ft. Ohio Ave., 30 ft. asphalt to Franklin Asphalt Paving Co., 209 South High St., $50,784; 765 ft. Hamlet St., 17 ft., and 743 ft. alley west of 11th St., 14 ft., both concrete, to Yale Constr. Co., 146 Yale Ave. $6,397 and $4,629 respectively. Noted Mar. 6.

O., Toledo—Dir. Pub. Serv., to H. P. Streicher Co., Inc., 319 Terminal Bldg., paving Ashwood Ave. $18,159, Everett St. $20,662, Idaho St. $9,455, Upton Ave. $20,561, all asphalt; to Continental Bitumen Co., Toledo, Brighton Ave. $40,129, Cornell Dr. $9,296 both asphalt; to Peters Bros. & Co., 561 Spitzer Bldg., Geneva St., 4 in. brick $42,463; to J. H. Horan, Toledo, Washington St. alley, rein.-con., $2,369; to Launder & Son, Toledo, Noble St. alley, rein.-con. $6,972.

Ind., Winchester—Randolph Co., paving H. G. Kemp Rd., 31,140 sq.yd. concrete, to C. Minnick, New Castle, $66,539. Noted Jan. 17.

Wis., Monroe—Green Co. grading and concrete surfacing Illinois State Line-Monroe Rd., to J. F. Icke, Madison, 16,000 cu.yd. earth excav. $0.70, 45,480 sq.yd. concrete $1.29, etc., total $82,223; Monroe-Argyle Rd., to L. O. Christianson, Cambridge, 11,000 cu.yd. earth excav. $0.84, 28,600 sq.yd. concrete $1.44, etc., total $80,947; Brodhead-County Line and Brodhead Juda Rds., to J. O. Legreid, Stoughton, 6,200 cu.yd. earth excav. $0.80, 31,800 sq.yd. cement concrete $1.30, etc, total $60,621; New Glarus-Mt. Vernon Rd., to W. A. Liljequist, Freeport, Ill., 4,300 cu.yd. earth excav. $0.70, 13,200 sq.yd. concrete $1.59, etc., total $32,190; Sugar River Bridge, to E. Kelley, Sun Prairie, $19,784. Noted Feb. 28.

Wis., Wisconsin Rapids—Wood Co. improving roads, to Bossert Coal Co., Wisconsin Rapids, Rudolph-Wisconsin Rapids Rd., 2,639 cu.yd. earth excav. $0.90, 6,347 sq.yd. concrete $1.52, etc., total $13,771; Portage Rd., 1,089 cu.yd. excav. $0.75, 4,638 sq.yd. concrete $1.52, etc., total $8,420; 8th St. South Rd., 2,030 cu.yd. earth $0.60, 10,501 sq.yd. concrete $1.47, etc., total $21,621; Wisconsin Rapids-Sherry Rd., 5,689 cu.yd. earth $0.90, 18,686 sq.yd. concrete $1.91, etc., total $43,863; Port Edwards-City Point Rd., 4,361 cu.yd. earth excav. $0.75, 8,367 sq.yd. concrete $1.49, etc., total $19,032. Noted Feb. 21.

Ia., Indianola—Warren Co. grading, etc., 8.359 mi. primary road, to J. C. Parquette 2347 Capitol, Des Moines, 120,707 cu.yd. excav. $0.2479 per cu.yd., etc. Noted Feb. 28.

Nebraska—State Dept. Pub. Wks., Lincoln, Feb. 26, 27 and 28, **(P. 7B, Clay, means Project 7B, Clay Co.)** graveling P. 7B, Clay, and 7C, Adams, to Allied Contractors, 1803 Douglas St., Omaha, $32,756 and $51,025 respectively; grading P. 48F, Thurston, to G. Condon, 510 Farnam Bldg., Omaha, $21,070; graveling P. 55B, Saline, to Yant Constr. Co., Omaha, $9,866; grading and graveling P. 68B, Red Willow, grading to C. T. Whelan, North Platte, $11,990, gravel to Stevens Bros., St. Paul, Minn., $82,128, guard rail to Mid State Co., Hastings, $13,197; grading P. 70C, Wayne and Cuming, to A. Miller, Sioux City, Ia., $6,945; grading P. 68C, Hitchcock, to C. T. Whelan, North Platte, $2,784; grading P. 153C, Cass, to J. W. McGeer, Lincoln; grading P. 164C, Nuckolls, and P. 164D, Thayer, to J. N. Miller, Sioux City, Ia., $10,084 and $14,588 respectively; grading and graveling P. 79B, Morrill, grading to Adams & Brooks, Mitchell, $13,368, gravel to F. McCarther, Bayard, $12,761; graveling P. 110A, Boyd, to Norfolk Bridge & Constr. Co., Norfolk, $7,683; graveling P. 131A, Perkins, to Bowker & Knutzen, Kearny, $19,361; grading P. 139H, Madison, to Madison Co.; grading P. 139C, Antelope, to Antelope Co.; grading and graveling P. 149A, Cheyenne, grading to H. L. Lucke, Lodgepole, $6,370, gravel to Cheyenne Co., $1,938; grading and graveling P. 169, Adams, grading to L. Tanner, Hastings, $8,328, gravel to Allied Contractors, 1803 Douglas St., Omaha, $15,507; graveling P. 172, Cuming, to Yant Constr. Co., Omaha, $53,888; graveling P. 174, Buffalo, to R. T. Cumming, Elm Creek, $5,458; graveling P. 186A, Kimball, to Bowker & Knutzen, Kearney, $9,641; grading P. 198A, Box Butte, to Box Butte Co., $22,807; grading and graveling P. 206 Chase, grading to Peterson, Shirley & Gunther, 1411 WOW Bldg., Omaha, $31,184, gravel to Stevens Bros., St. Paul, Minn., $9,466; grading and graveling P. 213, Dawes, grading to Union Constr. Co., Kearney, $26,311, gravel to Fremont Constr. Co., Fremont, $26,474; bridge on P. 68C, Hitchcock, to Diamond Constr. Co., Grand Island, $6,371; one 22 ft. and one 16 ft. I-beam bridges on P. 164D, Thayer, to Standard Dredging Co., Omaha, $2,517 and $2,183 respectively; bridge on P. 145A, Cheyenne, and P. 198A, Box Butte, to Diamond Eng. Co., Grand Island, $2,010 and $2,646 respectively; bridge on P. 153C, Cass, to Monarch Eng. Co., Falls City, $8,435; bridge and corrugated culverts on P. 216A, Merrick, to Western Bridge Co., 748 Peters Trust Bldg., Omaha, $2,304 and $2,185 respectively; P. 110A, Boyd, to Pittsburgh Des Moines Bridge Co., Tuttle and S. W. 10th Sts., Des Moines, Ia., $15,965. Noted Feb. 14.

Neb., Fairbury—Paving 7th and H Sts. brick on concrete, to Roberts Constr. Co., 404 First Natl. Bank Bldg., Lincoln, $96,000.

Neb., Lincoln—Paving in Dists. 49 and 50, to Abel Constr. Co., 31[illegible] Terminal Bldg., $27,000.

Neb., Omaha — City Clerk, City Hall grading, curbing and paving 64,000 yd. various streets, asphaltic concrete to M. L. Flinn Paving Co., Sioux City, Ia., $2.53 per yd. Noted Feb. 14.

Neb., Omaha—Metropolitan Utilities Co. Omaha, grading for gas holder. 150,000 cu.yd. excav., to J. F. Bolen, Omaha, $52,500.

Missouri—State Hy. Dept., Jefferson City, graveling 4.983 mi. road from Unionville north and south, 16 ft., Putnam Co., and 2.09 mi. Paris-Shelbina Rd., Monroe Co., to Kiefner & Geile, Perryville, $20,099 and $20,671 respectively; 3.84 mi. road from Montgomery City north, 16 ft., Montgomery Co., to Teague Holmes & Co., Troy, $29,299, 5 mi. Jefferson City-Fulton Rd., 18 ft., Callaway Co., to Felix Kersting Co., Jefferson City, $22,176, 3.37 mi. Neosho-Anderson Rd., 16 ft., Newton Co., to Kelly & Underwood, Granby, $24,612, 3.314 mi. Paris-Shelbina Rd., 16 ft., Monroe Co., to Farrell & Dubrouillett, Linn, $40,747; concrete paving and graveling 4.185 mi. road from Princeton north and south, Mercer Co., and 4.002 mi. Fairfax-Tarkio Rd., Atchison Co., to C. H. Atchison Paving Co., Watertown, S. D., $44,426 and $39,065 respectively; grading 3.42 mi., 3.798 mi. and 3.864 mi. Kansas City-St. Louis Rd., 34 ft., Howard Co., to Tibbitts & Tibbitts, Olathe, Kan., $37,233, $64,002 and $19,882 respectively, 2.286 mi. Jefferson City-Springfield Rd., 24 ft., Camden Co., to Short & Bramer, Monett, $14,479, 4.295 mi. road from Lancaster north and south, 30 ft., Schuyler Co., to Wilson Constr. Co., Warrensburg, $25,532. Noted Mar. 6.

Ark., Pine Bluff—Paving Dist. 75 incl. 2,736 cu.yd. excav., 12,978 sq.yd. rein.-con. pavement, 7,964 ft. curb and gutter, 2,255 lin.ft. 12 to 36-in. sewer, etc., to H. E. Monk & Co., Pine Bluff, $37,513.

Tex., Wichita Falls—Wichita Co., Seymour Rd., State Highway 30, Job 243-F, Federal Aid Project 432, to L. E. Whitham & Co., Wichita Falls, $223,289. Noted Feb. 21.

Okla., Tulsa — Vibrolithic paving Dist. 537, to Tibbetts & Pleasant, Daniels Bldg., $77,905; concrete paving Dist. 532, to Ward Paving Co., Tulsa, $23,030; concrete paving Dist. 539, to H. L. Cannady Co., Tulsa, $34,842; concrete paving Dists. 521, 522, 523, and 526, to Standard Paving Co., 1742 East 6th St., $46,923, $21,948, $58,687 and $35,553 respectively. Noted Feb. 21.

Colo., Denver—Surfacing roadway and constructing concrete gutters where necessary in North Denver Surfacing and Sidewalk Dist. 6, to H. C. Lallier Constr. & Eng. Co., Hudson, $47,939.

Wash., South Bend—Pacific Co., grading, rocking and trestling 1 mi. Ocean Beach Highway from South Bend south, to Western Dredging Co., Raymond, $31,129. Engrs est. $31,952.

Wash., Tacoma—Concrete paving Portland Ave. from Bay to Fairbanks Sts., to Albertson, Cornell Bros. & Walsh, South 12th and Pacific Sts., $73,387.

Wash., Yakima — Comrs. Yakima Co., paving 1.8 mi. Selah Rd., 28 ft., 5-in. one-course concrete, to Hardy & Richings, Yakima, $34,978.

Calif., Covina—Improving 1st St. between Puente and Front Sts., to Griffith Co., Railway Bldg., Los Angeles, 8,192 cu.yd. excav., etc. $1, 553,181 sq.ft. asphaltic concrete $0.15, 21,405 lin.ft. concrete curb $0.45, 71,879 sq.ft. concrete gutter $0.22, 7,806 sq.ft. cement walks $0.19, 3,063 sq.yd. paving crushed rock and mineral oil $0.50, removing 3,594 ft. old curb $0.05, total $120,000. Noted Mar. 13.

Calif., Los Angeles—To Griffith Co., Railway Bldg., improving Griffin Ave., etc. incl. grading $4,595, 81,810 sq.ft. asphalt $0.228, 51,768 sq.ft. concrete $0.22, 3,119 sq.ft. walks $0.21, 5,413 sq.ft. gutters $0.25, total $38,300, portion Wilton Pl., grading $4,484, 110,323 sq.ft. asphalt $0.228, 1,034 sq.ft. bituminous $0.12, 2,441 sq.ft. gutter $0.25, storm drain $1,550; to E. Schelling, Higgins Bldg., portion Vestal Ave., grading $8,500, 17,714 sq.ft. concrete $0.25, 7,981 sq.ft. oil and roll $0.08, 2,714 ft. curb $0.75, 7,142 sq.ft. walks $0.22, 5,248 sq.ft. gutter $0.35, sanitary sewer $3,500; to W. Liddington, 420 East 60th St., Beachwood Dr., grading $3,830, 123,872 sq.ft. concrete $0.229, storm drain $20,000, sewer $8,575. Noted Mar. 13.

Calif., Redding — Improving various streets to Warren Constr. Co., Bacon Bldg., Oakland, incl. 191,000 sq.ft. 2½ in. asphaltic

Streets and Roads (Continued)

concrete with 1⅛ in. Warrenite-bituminous surface $0.243, 59,400 sq.ft. 3½ in. asphalt concrete with 1⅛ in. Warrenite-bituminous surface $0.27, etc.

Calif., Richmond—Improving Macdonald, Roosevelt Aves., etc., 12,500 cu.yd. excav., 222,923 sq.ft. 6 in. Richmond standard macadam, etc., to Hutchinson Co., 1706 Bway., Oakland, $72,595. Noted Feb. 21.

Calif., Watts—To Fleming Constr. Co., 105 North Park Ave., paving Hickory St., 5 in. concrete, $16,036; North Wilmington St., 6 in. concrete, $17,583; Rouff St., 6 in. concrete, $37,800. Noted Nov. 22.

Que., Montreal—Will pave with asphalt 3,400 ft. Amherst St., 30 to 36 ft. wide, $50,050, 2,800 ft. Angers St., 30, 36 and 52 ft. wide, $66,420 556 ft. lane between Victoria and McGill College Aves. 18 ft., $52,880, by day labor. E. Gauthier, asst. city clk.

Industrial Works

PROPOSED WORK

Mass., Cambridge — Radio — General Radio Co. having plans prepared 3 story and basement, 50 x 80 ft., rein.-con. Lockwood, Greene & Co., 24 Federal St., Boston, engrs.

Mass., Monson — Factory — Rubwood Wheel Co. plans 1 story, 60 x 300 ft., brick and steel, plain foundation. $50,000. Engineer and architect not selected.

Conn., Waterbury—Factory—Plume & Atwood Mfg. Co., 470 Bank St., had plans prepared 50 x 150 ft., about 5 story, brick and steel, plain foundation, Bank St. $130,000. Private plans.

N. Y., Buffalo—Factory—Iroquois Door Co., 629 Exchange St., plans 4 buildings, rein.-con., brick and steel, Exchange St. To exceed $40,000.

N. Y., Ogdensburg — Mill — Algonquin Paper Co., plans new 80 x 200 ft., concrete and steel mill. $150,000-$200,000.

N. C., High Point—Mill—Slane Hosiery Co. plans 2 story, 60 x 200 ft., brick; Mangum Ave. $50,000. W. H. Slane, pres.

N. C., Winston—Salem—Freight Depot—Southern R.R., 13th St. and Pennsylvania Ave., Wash., D. C., plans new freight station, here. $150,000. H. W. Hesselbach, c/o Owner, archt.

Tenn., Lenoir City—Sub-Station—East Tennessee Power Co. plans rein.-con. substation. $100,000.

Ky., Ashland—Plant—Carter Co. Clay Co., Kitchen Bldg., plans power plant at proposed brick plant in Mt. Salvage section of city. $40,000.

Ky., Henderson—Plant—City plans new light and power plant. $75,000. L. Hite, Henderson, engr.

O., Cleveland—Plant—Scripps Publish-Co., 4500 Euclid Ave., having plans prepared by Howell & Thomas, 4500 Euclid Ave., 2 story and basement, 53 x 163 ft., brick, steel and concrete addition, Rockwell Ave. $150,000. R. A. Huber, mgr.

O., Cleveland — Warehouse — Standard Sanitary Mfg. Co., 4409 Euclid Ave., plans 1 story, brick and steel, 100,000 sq.ft. floor space, Random Rd. along tracks of New York, Chicago & St. Louis R R. $200,000. E. B. Goodwin, mgr. Engineer and architect not selected.

Kan., Topeka—Plant—Western Iron & Fdry. Co. plans structural plant. $60,000. Private plans.

Calif., San Bernardino—Bakery—J. W. Willets, c/o H. E. Jones, archt., Katz Bldg., having plans prepared 2 story, 60 x 125 ft., rein.-con., 3rd and D Sts.

Ont., Sudbury—Sawmill—Spanish Mills Co. Ltd., plans sawmill here.

Ky., Louisville — Boiler House — Louisvilel Gas & Electric Co., 311 West Chestnut St., plans addition at Waterside Power station on riverfront. $103,000. F. Strang, c/o owner, engr.

Ky., Louisville — Plant — Von Allmen Sanitary Milk Co., Oak St. and Garvin Pl., having plans prepared by F. Erhart, 409 Norton Bldg., 2 story and basement, 42 x 45 ft., brick and cut stone addition, Oak St. $40,000.

Ky., Louisville — Printery — Standard Printing Co., 218 1st St., plans 4 story addition. $200,000.

Ky., Mt. Savage—Plant—Carter County Clay Co., Kitchen Bldg., Ashland, plans large face brick plant, here. $200,000.

Ky., Paducah—Foundry—Shelton Bros. Fdry. Co. having plans prepared by A. Jamison, Campbell Bldg., 1 story, 60 x 92 ft. addition. $40,000. Noted Dec. 27.

O., Cleveland—Factory—T. Cusack Co., 2120 East 19th St., having plans prepared by Zimmerman, Saxe & Zimmerman, 64 East Van Buren St., Chicago, 1 and 2 story and basement, 40 x 110 ft., brick and steel, Sumner Ave. $50,000.

O., Cleveland — Factory — Pompeian Co., 2400 Payne Ave., having plans prepared by C. W. Hopkinson, Rose Bldg., 5 story and basement, 60 x 80 ft., brick, steel and concrete addition, East 24th St. and Payne Ave. $50,000.

O., Cleveland—Factory—Willard Storage Battery Co., East 131st St. and St. Clair Ave., had plans prepared 1 story, 80 x 135 ft. addition, brick and mill construction. $50,000. P. H. Voth, constr. engr. Private plans.

O., Maple Heights (Cleveland P. O.)—Factory—Silicia Products Co., 4500 Euclid Ave., Cleveland, plans 2 or 3 story and basement, brick and steel, here. $60,000. E. C. Raeder, pres. Private plans.

Ind., Bloomington—Service and Repair—Standard Oil Co. of Indiana, Whiting, plans 2 story, 150 x 200 ft., 501 North Madison Ave, here. $150,000.

Ind., Indianapolis — Auto Service — Bd. Pub. Wks. having plans prepared by F. B. Hunter, 912 State Life Bldg., 70 x 105 ft. and 200 x 200 ft. auto service and repair buildings. $150,000.

Ind., Pendleton—Machine Shop, etc.—Indiana State Reformatory plans new building to house machine shop and woodworking departments. $250,000.

Ill., Sterling—Plant Addition—Peerless Level & Tool Co. plans 1 story and basement, 100 x 127 ft. addition. $45.000. W. Harley, 32 North State St., archt.

Wis., Chippewa Falls — Laundry — St. Joseph Hospital, c/o J. Stroub, dir., Springfield, Ill., having plans prepared by Foeller, Schober & Stephenson, 219 North Adams St., Green Bay, 2 story, 44 x 52 ft., brick and rein.-con., plain foundation, here. $50,000.

Wis., Milwaukee—Barn-Stable—Gridley Dairy Co., 140 8th St., having plans prepared by A. Luedicke, engr., c/o Owner, 2 story, 92 x 125 ft., brick and concrete, plain foundation, Teutonia Ave. $150,000

Wis., Sheboygan — Factory — D. & D. Hanger, Panel & Glue Co., 722 Jefferson Ave., plans to rebuild 2 story and basement, 50 x 90 ft., brick and rein.-con., plain foundation, Water St., recently destroyed by fire. $50,000. Engineer and architect not selected.

Ia., Greenfield—Light Plant—Plans election, $45,000 bonds, enlarging light plant. H. G. Spooner, clk.

Minn., Fergus Falls—Power Plant—Election Apr. 1, $600,000 bonds for power plant and $15,000 for water mains. H. J. Collins, city clk.

Minn., Minneapolis — Factory — Builders Sideboard Co., 115 North east 5th St., soon lets contract 3 story and basement, 75 x 180 ft., rein.-con. and brick, 215 7th St. N. E. $100,000. H. A. Einhorn, pres.

Minn., St. Paul—Factory—Ronning Mchy. Co., 300 Washington Ave. N., Minneapolis, plans brick and concrete, near new Ford Motor Co. plant, here. $75,000. A. C. Ronning, pres. Engineer not announced.

Minn., St. Paul—Factory—White-McGee Corp., 1311 Harmon Pl., Minneapolis, plans brick and concrete, Edsel Ave., near new Ford Plant, here. $50,000. M. Leren, 3400 32nd Ave. S., Minneapolis, secy. Private plans.

Mo., St. Joseph — Plant — Collier-Adams Mfg. Co., 4th and Mitchell Aves., soon lets contract 3 story, brick and concrete factory, also boiler house and lumber storage shed, 4th St. $100,000. E. R. Meier, Lincoln Bldg., archt. Noted Apr. 5.

Calif., Grass Valley—Power Houses—See "Excavation, Drainage, Irrigation.

Calif., Los Angeles—Plant—Ward Baking Co., St. Andrews Pl. and 60th St., had plans prepared by J. M. Cooper, Marsh-Strong Bldg., 1 story, 90 x 160 ft., brick and steel addition to baking plant, 60th St. $42,000.

Calif., San Francisco—Gas Plant—Pacific Gas & Electric Co., 445 Sutter St., plans addition, on 12 acre site.

Calif., Westwood — Veneer Plant — Red River Lumber Co., Monadnock Bldg., San Francisco, plans veneer plant, here. To exceed $250,000.

Calif., Yuba City—Packing Plant, etc.—Earl Fruit Co., 85 2nd St., San Francisco, plans packing plant and distributing warehouse, 800 ft. frontage, here. $80,000. Noted Apr. 12.

Que., Cap Rouge—Mill—St. Regis Pulp & Paper Co., St. Regis, plans mill, here. $5,000,000.

Que., Quebec—Mill—Gulf Pulp & Paper Co., 85 St. Peter St., plans new mill either within city limits or at Sillery, to cost several million dollars.

BIDS DESIRED

Pa., Somerset—Plant—Apr. 15, by H. A. Zimmerman, Hollsopple, pres. Somerset Drug Co., 4 story and basement, 66 x 112 ft., Main St., here. $150,000. E. H. Walker, Somerset, archt. Noted Feb. 28 under "Buildings."

Ky., Covington—Freight Station—Louisville & Nashville R.R. Co., 10th St. and Bway., Louisville, receiving bids 2 story, 50 x 225 ft., here. $80,000. W. Courtnay, ch. engr.

Mich., Detroit—Factory—Building Service Bureau, archts., 301 Bway. Market Bldg., taking bids 3 story, 114 x 115 ft. rein.-con. and brick addition to plant, plain foundation, Hamilton Blvd., for Superior Safety Furnace Pipe Co., 6100 Hamilton Blvd. $100,000.

Mich., Detroit—Factory—A. Kahn, archt., 1000 Marquette Bldg., taking bids and opens same about Mar. 22, 4 story, rein.-con. and brick, plain foundation, Grandy Ave., for Mazer Cigar Co., 5041 Grandy Ave. $100,000. Noted Feb. 28.

Ill., Metropolis—See "Waterworks."

Calif., San Francisco — Bakery — C. O. Clausen, archt., Hearst Bldg., receiving bids 2 story and basement, rein.-con., Howard St. and Washington Alley, for Twentieth Century Bakery Co., 1650 Polk St. $55,000. Noted Feb. 14.

Calif., San Francisco—Factory—W. Lowe, archt., Monadnock Bldg., taking bids 2 story, 113 x 149 ft., rein.-con., Howard and 10th Sts. for Fisher-Gaffney Co., 555 Bryant St. $80,000. Noted Feb. 28.

Calif., San Francisco—Laundry—J. J. Foley, archt., 770 5th Ave., taking bids 2 story and basement, 200 x 200 ft., rein.-con., Alabama and 18th Sts., for Independent Laundry, 2798 19th St. $90,000.

BIDS RECEIVED

Ky., Louisville—Garage and Salesroom—Summers-Herman Inc., 905 3rd St., 3 story, 90 x 100 ft., rein.-con. and brick addition, 3rd and Breckenridge Sts., from Natl. Concrete Constr. Co., Board of Trade Bldg., Louisville. Archts. est. $150,000. Noted Mar. 6.

CONTRACTS AWARDED

Mass., Chelsea—Factory—S. Cabot, Inc., 50 x 225 ft., brick, steel and concrete, to M. C. Tuttle Co., 826 Park Sq. Bldg., Boston.

Conn., Hartford—Factory—L. F. Dettenborn Woodworking Co., 337 Sheldon St., 3 story, 44 x 144 ft., brick and timber, to Industrial Constr. Co., 721 Main St. Archts. est. $60,000-$70,000.

Conn., Thompsonville — Factory — Bigelow-Hartford Carpet Co., 4 story, 90 x 305 ft., brick, plain foundation, to L. E. Locke & Sons, Bay State Bldg., Laurence, Mass. Archts. est. $300,000.

N. J., Hightstown—Power House—W. E. H. Dyer, archt. and engr., Land Title Bldg., Phila., 1 and 2 story, 45 x 57 ft., brick and steel, plain foundation, here, to F. G. English, 1610 North Carlisle St., Phila., for Peddie School. Noted Nov. 8.

N. J., Plainfield—Plants—International Motor Corp., two 4 story plant extensions, and 1 story heat treating plant, to Barney-Ahlers Constr. Corp., 110 West 40th St., New York City. Archts. est. $500,000. This corrects report in Mar. 6 issue.

Pa., Darby—Distribution—Supplee Wills Jones Milk Co., 26th and Jefferson Sts., Phila., 2 story and basement, 96 x 144 ft. brick and steel, plain foundation, 9th and Summit Sts., to G. Kessler Constr. Co., 1733 North Marvine St., Phila. Archts. est. $100,000.

Md., Baltimore—Factory—S. A. Ripple & Bro., 1206 Ridgley St. will build 2 story, 33 x 78 x 208 ft., brick, plain foundation, Clare St, by day labor. $42,000. Private plans.

Tenn., Nashville — Plant — Cumberland Presbyterian Publishing Co., Nolensville Road, 3 story, 40 x 100 ft., brick and steel, 8th and McGavock Sts., to J. Moore Constr. Co., Arcade Bldg., $80,000. Noted Jan. 10.

Ky., Covington—Freight Station—Louisville & Nashville R.R. Co., 10th St. and

Industrial Works (Continued)

Bway., Louisville, brick and steel freight station, here, to G. Rommell Co., 956 Logan St., Louisville. Archts. est. $80,000.

Ky., Louisville—Assembly Plant—Ford Motor Co., Detroit, Mich., general contract plant on river front near State Fair Grounds, here, to L. W. Hancock Constr. Co., Louisville Trust Bldg., about $500,000. Noted Jan. 31.

Ky., Louisville—Factory, etc.—Standard Sanitary Mfg. Co., 6th and A Sts., 4 story and basement, 160 x 450 ft. factory and office, to L. W. Hancock Constr. Co., Louisville Trust Bldg., $700,000. Noted Mar. 6.

O., Cincinnati — Plant — Union Gas & Electric Co., 4th and Plum Sts., superstructure for Ft. Miami power plant, to Foundation Co., 120 Liberty St., New York City.

O., Cleveland—Factory—C. E. Lowe Co., Fidelity Mortgage Bldg., 1 story, 50 x 120 ft., brick and steel, East 81st St. near Kinsman Rd., to L. W. Lapp, 2020 Brunswick Rd. Archts. est. $40,000.

Ind., Bloomington — Factory — Showers Bros., 2 story, 150 x 160 ft., to H. K. Ferguson Co., 6521 Euclid Ave., Cleveland, O. Archts. est. $100,000. Noted Jan. 24.

Ind., Evansville—Plant—Imperial Desk Co., 3 story, 75 x 132 ft., to M. J. Hoffman Constr. Co., 402 Furniture Bldg. Archts. est. $50,000.

Ind., Princeton — Mill — Southern Ry., Wash., D. C., 1 story, 80 x 290 ft. planing mill, to W. Toelle, Princeton. Archts. est. $65,000. Noted Jan. 17.

Wis., Granville — Cannery — Granville Canning Co., A. J. Kreutzer, secy., 1 story, 98 x 120 ft., cannery, also boiler house, brick and timber, plain foundation, to Vollmar & Gruenwald, Cedarburg. $60,000.

Wis., Waupun—Factory—Waupun Canning Co., F. T. Clark, pres. and mgr., will build 2 story, 60 x 120 ft., brick, rein.-con. and steel, plain foundation, by day labor. $100,000. Private plans.

Ia., Webster City—Plant—Amer. Cement Plaster Co., Ft. Dodge, cement plant to W. J. Zitterell, Webster City, $65,000.

Calif., Los Angeles—Ice Cream Plant—Lincoln Ice Co., c/o contractors, 1 story, 150 x 175 ft., frame, Albion St., to Hamm & Grant, Inc., Ferguson Bldg., $46,000.

Calif., Los Angeles—Ice Storage—Jefferson Ice Co., 157 East Jefferson St., 5 story, 93 x 98 ft., rein.-con., to Gay Eng. Corp., 2650 Santa Fe Ave. Noted Mar. 6.

Calif. San Francisco — Factory — San Francisco Realty Syndicate, 240 Montgomery St., 1 story and mezzanine, rein.-con., to contain 180,000 sq.ft. floor space, 9th St. near Howard St., to Barrett & Hilp, 918 Harrison St., $45,000. Gruss Air Spring Co., Inc., 865 Post St., lessee.

Calif., San Francisco—Furniture Plant—M. Saroff, 851 Bryant St., 2 story, brick and steel, Howard St. near 13th St., to S. Schell, 180 Jessie St., $42,000.

Calif., San Francisco—Packing Plant, etc.—Frye & Co., 9th and Walker Sts., Seattle, Wash., will build 1 story, 83 x 240 ft. packing plant and 42 x 240 ft. warehouse, Townsend St., between 3rd and 4th Sts., here, by day labor and subcontracts. $50,000 and $20,000 respectively. Noted Jan. 31.

Calif., San Francisco—Printing Plant—Recorder Printing & Publishing Co., 693 Stevenson St., 2 story and basement, brick addition, to C. R. Collypy, 464 California St., $40,000.

Buildings

PROPOSED WORK

Mass., Boston—Club and Home—Durant, Inc., 336 Huntington Ave., had plans prepared by Coolidge & Carlson, 89 State St., 10 story and basement, rein.-con., brick and stone, wood pile foundation, Huntington Ave. $2,000,000.

Mass., Wakefield — Apartment — J. S. Griffiths had sketches made by Hutchins & French, 8 Winter St., Boston, 3 story, 65 x 85 ft., brick, Main and Park Sts. $150,000.

R. I., Warwick—High School—Town had sketches made by Hoppin Field & Pierce, 32 Westminster St., Providence, 19 room fireproof, Apponang Rd. $400,000. Noted Mar. 13.

Conn., Bridgeport—Business—Schnee & Schnee, 1115 Main St., plan 3 story, brick and steel, plain foundation, Broad and Fairfield Sts. E. B Caldwell, Jr., 886 Main St., archt.

Conn., Middletown—Nurses Home—Connecticut State Hospital, had plans prepared by W. P. Crabtree, 272 Main St., New Britain, 3 story and basement, 78 x 41 ft. with two 37 x 78 ft. wings, brick, along Connecticut River. $190,000. R. L. Leak, supt. Noted Oct. 11.

N. Y., Coney Island (Brooklyn P. O.)—Office—Brooklyn Boro Gas Co., Surf Ave., having plans prepared by Bloch & Hess, archts. and engrs., 18 East 41st St., New York, 4 story, brick, steel and stone, plain foundation. 17th St. and Mermaid St. $175,000.

N. Y., Glens Falls—Hotel—Chamber of Commerce plans 125 room, brick and steel, plain foundation. $600,000. Engineer and architect not selected. Hotel to be operated by Amer. Hotels Corp. subsidiary of United Hotels Corp. Local business interests pledged funds.

N. Y., New York—Theatre and Store—A. D. Phelps, c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., having plans prepared brick, steel and stone, plain foundation, Fordham Rd. $500,000.

N. Y., North Tonawanda—Schools—Bd. Educ. having plans prepared by Johnstone & Eggert, 140 Bryant St., 2 story and basement, rein.-con., brick and stone grade school, Payne Ave., $250,000 voted; also plans 3 story and basement, 150 x 200 ft. high school, $400,000 voted for project, engineer and architect not selected. Noted Sept. 20 and Jan. 17.

N. Y., Tonawanda — High School — Bd. Educ. plans 3 story and basement, 250 x 275 ft., rein.-con., brick and stone. $600,000. Engineer and architect not selected.

N. Y., White Plains—City Hall—Having plans prepared by J. H. Freedlander, 681 5th Ave., New York City, brick, steel and stone, plain foundation. $500,000. Noted Dec. 6.

N. J., Newark—Warehouse and Service—L. Bamberger & Co., Market St., soon lets contract 5 story, rein.-con., concrete pile foundation, Plain St. $1,000,000. Abbott, Merkt & Co., Inc., 175 5th Ave., New York City, archts. and engrs. This corrects report in Feb. 28th issue.

N. J., Nutley—Bank—First Natl. Bank having plans prepared by Holmes & Winslow, archts. and engrs., 134 East 44th St., New York City, brick, steel and stone, plain foundation. $150,000.

Pa., Conshohocken — Temple — Masonic Lodge 420 soon lets contract 3 story and basement, 42 x 100 ft. brick and steel, plain foundation, here. $150,000. W. Chryst, 1145 South Willow St., Phila., archt.

Pa., Johnstown — Lodge — Johnstown Shriners Assn. plans 3 story and basement, 100 x 200 ft. concrete, brick and stone, Valley Pike and Linton St. $300,000.

Pa., Phila.—Apartment—Nineteen Hundred Rittenhouse Sq. Corp., c/o Sugarman, Hess & Berger, archts., 16 East 43rd St., New York City, having revised plans prepared and soon takes new bids, apartment, 19th and Rittenhouse Sts. $600,000. Noted Feb. 28.

Pa., Phila.—Schools—City having plans prepared senior high school at 59th and Oxford Sts., also junior high school at 53rd and Media Sts. Private plans.

Md., Takoma Park (Wash., D. C. P. O.)—Club and Recreation — American Red Cross, 17th, D and E, N. W., Wash., D. C., plans club and recreation building at Walter Reid Hospital, here. $150,000.

D. C., Wash.—Bank and Office—Federal Amer. Natl. Bank, 1315 F St. N. W., having revised plans prepared by A. C. Bassom, 680 5th Ave., New York City, and J. H. DeSibour, associated archt., Edmonds Bldg., constructing bank building, 14th and G Sts. N. W., $800,000. Weinberg & Weishoff, 345 Madison Ave., New York City, engrs. Noted Nov. 22.

D. C., Wash. — Church — Church of Blessed Sacrament having plans prepared by Maginis & Walsh, archts., 100 Boylston St., Boston, Mass., and Murphy & Olmstead, associated archts., 1413 H St. N. W., constructing church, Western Ave. and Quesada Sts., $200,000.

D. C., Wash.—Museum and Art Gallery—Regent on Smithsonian Institute, 10th and B Sts., having plans prepared by C. A. Platt, 101 Park Ave., New York City, museum and art gallery on the Mall, between 8th and 9th St. N. W. $6,000,000.

W. Va., Wheeling — Office — Fourteenth Street Building Co. having plans prepared by C. W. Bates, 77 12th St., 10 story and basement, 14th St. $300,000.

N. C., Greensboro—Hotel—J. T. Morehead (owner) and C. C. Hartmann, archt., Greensboro, soon take bids 14 story, 106 x 121 ft., steel, concrete and brick, Greene St. $700,000. Noted Mar. 6.

Fla., Palm Beach—Hotel—D. S. Linderman, Miramar Inn, Miami, had plans prepared by H. La Pointe, Miami, for Hotel Ostend, here, 5 story, rein.-con. and steel. $250,000.

La., New Orleans—Theatre—A. Pantages, Pantages Theatre Bldg., Los Angeles, Calif., had plans prepared theatre here. $1,000,000. M. Gilbert, engr. and B. Patekia, archt., c/o owner.

La., Shreveport — Y. M. C. A. C. B. Minor, chn. building com., had plans prepared by C. W. King, Shreveport, new Y. M. C. A., McNeill and Travis Sts. $500,000.

Ky., Louisville — Administration — Kentucky Jockey Club, Churchill Downs, having plans prepared by D. X. Murphy & Bro., Louisville Trust Bldg., administration building. $150,000.

Ky., Louisville—Office—Starks Realty Co., Starks Bldg., having plans prepared by Graham, Anderson, Probst & White, 80 East Jackson Blvd., Chicago, 16 story, Walnut St. near 4th St. $1,000,000 to $1,500,000.

Ky., Paducah—Lodge—Benevolent Protective Order of Elks having plans prepared by Joseph & Joseph, Francis Bldg., Louisville, 3 story and basement. $200,000.

O., Cleveland — Apartment — Ninetieth-Euclid Co., c/o W. S. Ferguson Co., archts., 1900 Euclid Ave., having plans prepared 4 story and basement, brick, steel and concrete, Euclid Ave. near 90th St. $250,000.

O., Cleveland—Commercial and Apartment—Euclid Villa Co., c/o E. H. Krueger, Fidelity Mortgage Bldg., having plans prepared by J. F. Steffens, 601 Fidelity Mortgage Bldg., 4 story and basement, brick and steel joist addition, 6801 Euclid Ave. $200,000.

O., Cleveland — Commercial — Syndicate, c/o J. Laronge, Union Trust Bldg., plans 2 or 3 story, brick and steel, on 68 x 280 ft. lot., East 71st St. and Euclid Ave. $250,000. Engineers and architects names withheld.

O., Cleveland — Seminary — St. Marys Seminary Co., c/o J. Schrembs, bishop, 1007 Superior Ave., having preliminary plans prepared by F. C. Warner, Hippodrome Annex Bldg., 2 or 3 story, and basement, brick, steel and concrete, Ansel Rd. $750,000.

O., Cleveland — Store and Office — Superior-9th Co., c/o L. Abrams, Engineers Bldg., having plans prepared by J. F. Steffins, Fidelity Mortgage Bldg., 4 story (ultimately 6 story), brick, steel and concrete, on 132 x 296 ft. site, East 9th St. and Superior Ave. $500,000.

O., Lakewood—Commercial and Apartment—Owego-Detroit Co., c/o J. G. Russell, pres., Ulmer Bldg., Cleveland, plans 3 story and basement, brick, Detroit and Owego Aves., here. $150,000. Private plans.

O., Lisbon — Court House and Jail — Columbiana Co. election Apr. 27, $150,000 bonds, court house and jail.

O., Warren—Bank and Office—Union Savings & Trust Co., plans bank and office, Market and Park Sts.

Ind., French Lick—Garage—French Lick Hotel plans 2 story, 85 x 250 ft., rein.-con. and brick, College St. $150,000.

Ind., Indianapolis—College—Bd. Trustees Butler College, Irvington, plans college buildings, Fairview Park. $1,000,000. R. F. Daggett, Consolidated Bldg., archt.

Ind., Kokomo — Storage — Armstrong-Langdon Co., plans 6 story, 66 x 130 ft. $150,000.

Ind., Indianapolis—Office—Reserve Loan Life, 429 North Pennsylvania Ave., having preliminary plans prepared and soon takes bids 4 story and basement, 68 x 195 ft., rein.-con., brick and stone, Pennsylvania Ave. $350,000. Private plans. Noted Nov. 29.

Mich., Detroit—Hotel—C. D. Lundblad, archt., 206 New Telegraph Bldg., preparing plans 4 story and basement, 35 x 220 ft. brick and steel, plain foundation, $250,000. Owner's name withheld.

Mich., Detroit—School—St. Marks Parish, c/o V. J. Waier, archt., 403 Hoffman Bldg., having plans prepared 3 story and basement, 124 x 151 ft. rein.-con., brick and steel, plain foundation, Lenox and Avondale Aves. $200,000.

Wis., Chippewa Falls—Auditorium—City election Apr. 1, $150,000 bonds, brick memorial auditorium. E. J. Hancock, Lacock Bldg., Eau Claire, archt.

Wis., Dodgeville — Hospital — Lutheran Hospital Assn., c/o C. O. Hanson, chn., Hollandale, plans 2 story and basement, brick, rein.-con. and steel, plain foundation, here. $150,000. Engineer and architect not selected.

Wis., Janesville—Hotel—E. W. Sparling, 494 Cass St., Milwaukee, having preliminary plans prepared by Rowe, Dillard & Rowe, 127 North Dearborn St., Chicago,

Buildings (Continued)

6 story and basement, 100 x 110 ft., brick and concrete, plain foundation, West Milwaukee St., here. $400,000-$500,000. Noted Feb. 7.

Wis., Madison—Church—Methodist Episcopal Congregation, J. M. Walters, pastor, Wisconsin and Dayton Sts., plans remodeling and constructing 3 story addition, brick and steel, plain foundation. $150,000. Engineer and architect not selected.

Wis., Oostburg—Factory—Oostburg Canning Co. having plans prepared by E. A. Stubenrauch, 629 North 8th St., Sheboygan, 2 story, 44 x 50 ft., rein.-con. and brick, plain foundation.

Wis., Sheboygan—Office and Store—H. C. Prange Co., 731 North 8th St., having plans prepared by W. C. Weeks, 720 Ontario Ave., 2 story and basement, 85 x 110 ft., brick, rein.-con. and steel, plain foundation, Wisconsin St. $150,000.

Minn., Brainerd — High School — Bd. Educ plans 2 story and basement, 140 x 175 ft., steel, concrete pile foundation. $325,000. L. Holman, clk. Engineer and architect not selected.

Minn., St. Paul—Schools—Bd. Educ. having plans prepared by F. X. Tewes, city archt., City Hall, 2 story school at Freemont and East 3rd Sts., $200,000; 2 story, Fulton and James Sts., $180,000, both rein.-con. and brick. L. R. S. Ferguson, comr.

Kan., Parsons—High School—Bd. Educ. having plans prepared by T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 3 story and basement, rein.-con. and brick. Election soon to vote on $500,000 bonds. Noted Jan. 17.

Mo., Kansas City — High School — Bd. Educ. having plans prepared by C. A. Smith, Finance Bldg., Central Jr. High School, 3 story and basement, rein.-con., brick and stone, $900,000. Contract for excavation let to Quinlan Bros., 1204 Armstrong Ave., $22,500.

Mo., Kansas City — School — Bd. Educ. having plans prepared by C. A. Smith, Finance Bldg., 3 story and basement, 30 x 106 ft., rein.-con. and rubble stone. $300,000.

Mo., St. Louis—Hotel—Natl. Realty Co., 312 North 8th St., having preliminary plans prepared by P. J. Bradshaw, International Life Bldg., 15 story and basement, 69 x 128 ft., rein.-con., brick, stone and terra cotta, 8th St.

Ark., Hot Springs—Office—Rector Estate, J. A. Rector, Federal Reserve Bldg., St. Louis, Mo., having plans prepared by Le Beaum & Klein, Compton Bldg., St. Louis, Mo., 4 story rein.-con. fireproof, opposite Arlington Hotel, here. $250,000.

Ark., Little Rock—Office—Pulaski County Medical Society, c/o A. C. Shipp, Donaghey Bldg., plans fireproof office. $250,000. Engineer and architect not selected.

Tex., Brownfield—Court House—Terry Co., D. J. Broughton, judge, plans new court house. $150,000 or more. Engineer and architect not selected.

Tex., Dallas—Hotel—R. F. Easterwood, 716 Lowell St., plans 5 or 6 story and basement, 60 x 150 ft., Browder and Wood Sts. $250,000. Dearing & Sons, general contractors, Sumpter Bldg., interested. Engineer and architect not announced.

Tex., Ft. Worth—Hospital—All Saints Hospital, I. A. Withers, pres., Magnolia and 8th Sts., making plans brick and concrete addition. $150,000. Engineer and architect not announced.

Tex., Ft. Worth—Store—J. I. Burgess, Jarvis Heights, plans 6 story and basement, 100 x 100 ft., brick and concrete, 5th and Houston Sts. $300.000. Engineer and architect not announced. Sanger Bros., lessee.

Tex., Ft. Worth—Store—Fakes Furniture Co., 5th and Houston Sts., making plans concrete and brick, 6th and Throckmorton Sts. $150,000. Engineer and architect not announced.

Tex., Ft. Worth — Theatre — Pantages Theatre, Pantages Bldg., Los Angeles, Calif., had plans prepared by B. Patekia, Pantages Bldg., Los Angeles, Calif., theatre, here. $1,000,000. M. Gilbert, Pantages Bldg., Los Angeles, Calif., engr.

Tex., Houston — Club — Knights of Columbus, 820 Crawford St., having revised plans prepared by M. Sullivan, 2nd Natl. Bank Bldg., 3 story and basement, brick and concrete, Crawford St. $150,000. Noted Dec. 6.

Tex., Houston—Schools—Election Apr. 3, $3,000,000 bonds for schools. Noted Feb. 21.

Tex., San Antonio—Home—Knights of Pythias having plans prepared by Seutter & Simons, Moore Bldg., 2 story, 200 x 260 ft., rein.-con. and tile, brick or stucco facing, plain foundation, Houston, Bowie, Elm and Starr Sts. $200,000. Noted Mar. 6.

Okla., Guthrie—High School—Bd. Educ. soon takes bids 3 story and basement, T shape, main building 94 x 184 ft., rein.-con., brick and stone, plain foundation. $300,000. Hawk & Parr, Cotton Exch. Bldg., Oklahoma City, engrs. Noted Dec. 27.

Okla., Tulsa—Schools—Voted $2,000,000 bonds for 2 new schools and additions. Engineer and architect not selected.

Okla., Tulsa — Theatre — Pantages Theatre, Pantages Bldg., Los Angeles, Calif., having palns prepared by B. Paterka, c/o owner, theatre, here. $1,000,000. M. Gilbert, c/o owner, engr.

Wash., Seattle — Hall — University of Washington having plans prepared by Bebb & Gould, Hoge Bldg., 2 story, rein.-con. and brick, known as Anderson Hall. $250,000.

Ore., Eugene—Lodge, Office and Store—Eugene Elks Lodge plans lodge. $150,000. O. A. Faust, Eugene, exalted ruler. Engineer and architect not selected.

Ore., Portland—Crematorium—Lawrence & Holford, archts., Chamber of Commerce Bldg., take bids in about 60 days 1-3 and 4 story, 50-100 x 800 ft. with 50 x 50 x 50 ft. tower, brick and marble addition, plain foundation, East 14th St., Duke and Bylee Aves., for Portland Crematorium Assn. $1,300,000.

Calif., Culver City—City Hall, Firehouse and Police Station—City plans to vote on $150,000 bonds for city hall, firehouse and police station.

Calif., Culver City—Orphanage—Jewish Orphanage Society, c/o Norton & Wallis, archts., 716 South Spring St., Los Angeles, having preliminary plans prepared, group of 1 and 2 story buildings, masonry, here. $200,000 or more.

Calif., Huntington Park (Branch of Los Angeles)—Schools—Huntington Park High School Dist. voted $750,000 bonds for schools.

Calif., Inglewood — School — Inglewood High School Dist. voted $200,000 bonds for 20 room addition to school. Noted Mar. 6.

Calif., Long Beach—School—Long Beach City School Dist. having plans prepared by H. L. Gogerty, 239 East Bway., Long Beach, and Norenberg & Johnson, Railway Bldg., Los Angeles, 2 story, brick elementary school, Edison School site. $185,000.

Calif., Los Angeles—Apartment—Walker & Eisen, archts., Pacific Finance Bldg., preparing plans 5 story and basement, 100 x 175 ft. brick, Franklin Ave. Owner's name withheld.

Calif., Los Angeles—Loft—S. Goodman, c/o Walkerd & Eisen, archts., Pacific Finance Bldg., having plans prepared 12 story and basement, 50 x 100 ft., rein.-con., 7th and Los Angeles Sts.

Calif., Los Angeles—School—City had plans prepared by F. J. Catton, 953 South Park View Ave., concrete school, to contain 12 classrooms, etc., Beverly Vista site. $200,000.

Calif., Los Angeles—Theatre and Store—West Coast Theatres, Knickerbocker Bldg., plans fireproof, Pasadena St. and Ave. 56. $150,000.

Calif., Los Angeles—Warehouse—McFie Supply Co., 213 North Los Angeles St., plans two 1 story warehouses, each to contain 50,000 sq.ft., in vicinity of Alameda and Slauson Sts. Engineer and architect not selected.

Calif., Oakland—Automobile Stage Depot—California Transit Co., 366 14th St., having plans prepared by Miller & Pflueger, Lick Bldg., San Francisco, automobile stage depot, San Pablo Ave. near 22nd St. $150,000.

Calif., Oakland — Labor Temple and Garage—Central Labor Council, c/o W. J. Wilkinson, archt., Amer. Bank Bldg., having plans prepared, 5 story rein.-con. labor temple, basement will be equipped for garage, Franklin and 11th Sts. $250,000.

Calif., San Francisco — Apartment — J. and D. De Martini, c/o E. E. Young, archt., 2002 California St., having plans prepared 6 story and basement, brick and steel, California St. near Jones St. $150,000.

Calif., Santa Ana—Schools—Santa Ana Grammar School Dist. voted $150,000 bonds for school; Santa Ana High School Dist. defeated $100,000 bonds. Noted Mar. 13.

Calif., Santa Monica—Schools—Trustees Santa Monica Junior High School Dist. soon take bids brick and frame, incl. domestic science quarters, gymnasium, cafeteria building, etc. To exceed $150,000. Allison & Allison, Hibernian Bldg., Los Angeles, archts. Noted Mar. 13.

Calif., Sausalito—Apartment Hotel—C. Mason, 358 Litho St., having plans prepared by R. S. Chew, Rialto Bldg., San Francisco, 6 story and basement, rein.-con. or brick, Buckley Ave. $265,000.

Ont., Ottawa—Office—Metropolitan Life Insurance Co., 23rd St., New York City, plans 6 story and basement, 120 x 200 ft., Sparks St., here. $700,000. Architect not selected.

Que., Montreal—Theatre—M: A. Lawland, Bernard Ave., plans 3 story, 100 x 100 ft. rein.-con. $150,000.

BIDS DESIRED

R. I., Providence—School—Mar. 24, at office of City Clerk, City Hall, brick and steel, Reservoir and Woodmount Sts. $150,000. Private plans.

N. Y., Brooklyn—School—Apr. 8, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., P. S. 216, Ave. X from East 1st to West Sts., for Bd. Educ., 500 Park Ave., New York. Noted Feb. 21.

N. Y., Buffalo—School—Apr. 9, by Bd. Educ., 1400 Telephone Bldg., altering and building 2 story and basement, rein.-con., brick and stone addition to P. S. 63, Cordova Ave. To exceed $200,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. J., North Plainfield (Watchung P. O.)—High School—Mar. 28 (extended date), by Bd. Educ., 2 story and basement, 136 x 178 ft., brick, steel and limestone, Greenbrook Rd. $300,000. J. T. Simpson, 31 Clinton St., Newark, archt. Noted Feb. 21.

Pa., Jenkinstown—Bank—Mar. 26, by H. Trumbauer, archt., Land Title Bldg., Phila., 2 story and basement, 57 x 151 ft. brick and steel, plain foundation, for Jenkintown Bank & Trust Co. $500,000.

Pa., Mt. Carmel—School and Convent—Mar. 24, by P. A. Monahan, archt., 1713 Sansom St., Phila., 2½ story and basement, 62 x 150 ft. brick, steel and stone, plain foundation, for Our Mother of Consolation Church. $150,000. Noted Mar. 6.

Pa., Pittsburgh—Office—E. B. Lee, archt., Chamber of Commerce Bldg., taking bids 6 story and basement, 45 x 68 ft. brick and hollow tile, Natalie St., for Physicians Land Co., $175,000.

W. Va., Charleston — High School — Charleston School Dist. taking bids and opens same about Apr. 2, 2 story and basement, Garvin St. $250,000.

Tenn., Memphis—Jail—Apr. 1, by Shelby Co., 5 story, Washington St. Former bids rejected. Jones & Furbringer, Porter Bldg., archts. Noted Feb. 7.

Ky., Greenville—High School—Mar. 28, by Bd. Trustees, 3 story and basement, 60 x 150 ft., brick. Former bids rejected. $150,000. Joseph & Joseph, Francis Bldg., Louisville, archts. Noted Feb. 28.

Ky., Lebanon—Church—Apr. 5, by Nevin, Wischmeyer & Morgan, archt., Starks Bldg., Louisville, stone church with 3 story wing, for United Presbyterian Church. $150,000. Noted Mar. 13.

O., Cleveland—Apartment—W. Epstein, 9203 Yale Ave., taking bids 3 story, 66 x 126 ft., brick, 1416 West 80 Pl. $150,000. M. Weis, 617 Union Bldg., archt.

O., Cleveland—Church—Bohnard & Parssor, archts., 1900 Euclid Ave., taking bids and opens same about Mar. 22, 1 story and basement, brick, West 85th St. and Sauer Ave., for St. Lukes Evangelical Lutheran Church, c/o H. C. Sauer, pastor, 2128 West 85th St. $150,000.

O., Cleveland — Commercial — Dresser-Minton Co., The Arcade, taking bids 3 story and basement, 64 x 75 ft., brick, West 26th St. and Detroit Ave., for International Union of Wood, Wire & Metal Lathers. $150,000. Noted Feb. 7.

O., Columbus—Hospital—Mar. 31, by C. S. Steen, secy. Bd. Trustees Ohio State University, constructing hospital, 4 story and basement, about 120 x 150 ft., rein.-con. and brick, on campus. J. N. Bradford, Ohio State University, archt.

O., Toledo — School — Mar. 26, by Bd. Educ., 3 story and basement, 160 x 165 ft., brick, stone or terra cotta trim, plain foundation, Nevada St. $350,000. E. M. Gee, c/o Bd. Educ., archt.

Ind., Indianapolis—Club House—Rubush & Hunter, archts., 428 Amer. Central Life Bldg., taking bids 12 story and basement, 74 x 131 x 139 x 220 ft., Monument Circle, for Columbia Club, T. A. Wynne, pres. $1,000,000. Noted Jan. 24.

Wis., Kimberly—High School—Mar. 27, by School Dist. 3, 2 story and basement, 70 x 145 ft., brick and tile, plain foundation, 1st unit. $150,000. M. Kettenhofer, dir. Oppenhamer & Obel, Nicollet Bldg., Green Bay, archts. Noted Mar. 13.

Minn., Hopkins—School—Mar. 31, by Bd. Educ., 2 story and basement, rein.-con., brick and tile. $175.000. A. H. Miller, clk. Jacobson & Jacobson, 350 Northwestern Natl. Life Bldg., Minneapolis, archts. Noted May 3.

Kan., Emporia—High School—Apr. 1 (change of date), by J. H. Felt & Co.,

Buildings (Continued)

archts., 800 Grand Ave. Temple, Kansas City, Mo., junior high school, rein.-con., brick and stone, for Bd. Educ., here. Noted Mar. 13.

Neb., Beatrice—School—Apr. 9, by Bd. Educ., 2 and 3 story, brick, concrete and stone. $400,000. J. H. Felt & Co., 800 Grand Ave. Temple, Kansas City, Mo., archt.

Tex., Dallas—Home—Mar. 25, by J. W. Westbrook, 407½ South Bishop St., 2 story and basement, 40 x 210 ft., stone and concrete, Dallas-Ft. Worth Pike. for Young Memorial Home, A T. Wilson, 318 South Brighton St. $300,000.

Tex., Marshall—School—Apr. 3, by E. B. Hayes, 3 story and basement, 94 x 190 ft., concrete, brick and stone, for Marshall Independent School Dist. $200,000. W. G. Clarkson & Co., First Natl. Bank, Ft. Worth, archts.

Calif., Beverly Hills — School — Mar. 26, by Trustees Beverly Hills School Dist., concrete and brick. $150,000. F. J. Catton, 933 South Park View Ave., Los Angeles, archt.

Calif., Huntington Park (Branch of Los Angeles) — School — Trustees Huntington Park Union High School Dist., receiving bids and open same about Mar. 26, 2 story, 180 x 268 ft., brick, arts building. Rea & Garstang, Trust & Savings Bldg., Los Angeles, archts.

Calif., Long Beach—Bank and Office—Security Trust & Savings Bank, 502 South Spring St., receiving bids 13 story, 75 x 150 ft., brick and steel, 1st and Pine Sts. $1,000,000. Curlett & Beelman, Union Bank Bldg., Los Angeles, archts. Noted Feb. 14.

Calif., Los Angeles—Apartment—T. C. Kistner Co., archts., Spreckels Bldg., San Diego, taking bids 4 story and basement, 45 x 125 ft., brick and steel, Bonnie Brae St., here, for A. Chase, c/o architects. Noted Jan. 31.

Calif., Los Angeles—Club—Allison & Allison, archts., Hibernian Bldg., receiving bids 7 story and basement, 150 x 155 ft., rein.-con., Flower St., for Womens Athletic Club, Junior Orpheum Bldg. To exceed $300,000. Noted May 3.

Calif., Los Angeles — Hall — Mar. 31 (change of date), by Bd. Supervs. Los Angeles Co., general contract, Hall of Justice, rein.-con., brick and tile, Temple St. Noted Mar. 6.

Calif., Oakland—Store and Hotel—L. H. Ford, archt., 306 14th St., taking bids 6 story and basement, brick and steel, 15th and Harrison Sts., for Coit Hotel Co., c/o architect. To exceed $250,000.

Calif., Pasadena—Church—G. A. Howard, Jr., archt., 820 Story Bldg., Los Angeles, taking bids hollow tile church, main auditorium will seat between 500 and 600, Sunday School 300 to 400, Claremont St. and Hudson Ave., here, for Second Church of Christ Scientist, North Lake Ave. and Washington St.

Calif., Paso Robles—Apr. 3, by Trustees Paso Robles Union High School Dist. 2 story, masonry and frame. $200,000. O. 4 Clark, 518 Charles C. Chapman Bldg., Los Angelesh, archt. Noted Sept. 13.

Calif., San Rafael — High School — San Rafael School Dist. taking bids 1 story rein.-con., incl. auditorium. $200,000. Shea & Shea, Chronicle Bldg., San Francisco, archts. Noted Aug. 30.

BIDS RECEIVED

N. Y., Solvay (Syracuse P. O.)—High School—Bd. Educ., Junior High School, general contract from Shane Constr. Co., Herald Bldg., Syracuse, $331,000; heating and ventilating, from J. R. Sheehan Co., 16 South Center St., Schenectady, $66,900. Noted Sept. 6.

O., Findlay—High Schools—Bd. Educ., Mar. 14, North Junior High School, 2 story and basement, and South Junior High School, 2 story and basement, fireproof construction, from Orr & Miller, 510 Savings Bldg., Lima, $128,771 and $140,761 respectively. Noted Mar. 6.

O., Toledo—School—Bd. Educ., Mar. 7, 3 story and basement, rein.-con. and brick, Toronto Ave., from J. H. Berkebile & Sons, Bway., $324,619. Noted Feb. 28.

Mich., Detroit—Morgue—W. H. Green, secy. Wayne Co., County Bldg., 2 story and basement, 85 x 136 ft. rein.-con., brick and steel, plain foundation, Lafayette Ave., from Culbertson & Kelly, 827 West Milwaukee St., $332,607. Noted Feb. 21.

Mich., Northville—School—Bd. Supervs. Wayne Co., (Detroit) Mar. 10, from W. E. Wood, 1805 Ford Bldg., Detroit, hospital $105,219, service building $76,324, school $67,398, administration $58,116, girls' industrial building $27,089, boys' industrial building $44,259, laundry $20,583, dormitories $853,856; from F. H. Goddard, 2130 Franklin St., Detroit, assembly building $93,330 power plant $110,678. Noted Feb. 28.

Minn., Minneapolis—School—Bd. Educ., Mar. 10, superstructure for 1 story and basement, 150 x 300 ft., rein.-con., brick and tile, Mississippi River Blvd., general contract from S. M. Klarquist Sons Co., 745 Security Bldg., $135,887. Noted Feb. 28.

CONTRACTS WARDED

Mass., Boston — Office — Liability Assurance Co., c/o Coolidge & Shattuck, archts., 122 Ames Bldg., 13 story and basement, 106 x 117 x 123 ft., rein.-con., steel and terra cotta, wood pile foundation, Kilby St., to G. N. Harvey Co., 115 Chauncy St., $2,500,000.

Mass., Webster — School — St. Josephs Church, T. M. O'Leary, pastor, 2 story and basement, 107 x 145 ft., brick and steel, plain foundation, Whitcomb St., to T. J. Pardy Constr. Co., 1481 Seaview Ave., Bridgeport, Conn. Archts. est. $250,000.

Mass., Worcester—Hospital—Hahneman Hospital, Inc., 3 story and basement, 45 x 140 ft. with 38 x 59 ell, brick, to James Miles & Sons Co., Worcester, $300,000.

R. I., Providence—Church—Our Lady of Lourdes Roman Catholic Church, 1 story and basement, 60 x 128 ft., brick and stone, plain foundation, 70-ft. tower, Atwells Ave. and Mongenais St., to Mahoney & Tucker, 72 Weybosset St Archts. est. $150,000. Noted Feb. 28.

R. I., Providence — Office — Providence Gas Co., Turks Head Bldg., 5 story, 60 x 129 ft., brick, steel and stone, Weybosset St., to Aberthaw Constr. Co., 27 School St., Boston, Mass. Archts. est. $200,000. Noted Feb. 7.

N. Y., Albany—Garage—Albany Garage Co., 10 story, rein.-con., Beaver St., to J. J. Finn & Son, 75 Northern Blvd., $750,000.

N. Y., Albany—Hotel—Lussier Hotel Co., New York City, 16 story, 80 x 100 ft., brick and steel, plain foundation, South Pearl and Howard Sts., to H. L. Stephens Co., Binghamton. Archts. est. $2,500,000.

N. Y., Brooklyn — Apartment — Penn Realty Co., Inc., c/o Kieswetter & Hamburger, archts. and engrs., 186 Remsen St., will build 6 story, brick, steel and stone, plain foundation, Park Ave., by day labor. $500,000.

N. Y., Brooklyn — Apartments — Rubby Constr. Co., c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build two 4 story, brick, steel and stone, plain foundations, Ocean Ave., by day labor. $250,000 each.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, to Hayson Constr. Co., Arverne, P. S. 214, Pitkin Ave., here, $781,000, A deduct $18,000, also P. S. 212, Bay 49th St., here, $807,000, deduct $23,000; to George Colon & Co., 81 East 125th St., New York, P. S. 180, 16th Ave. and, 56th St., here, $962,000, deduct $28,000. Noted Mar. 6 and 13.

N. Y., Coney Island (Brooklyn P. O.)—Theatre—Chanin Constr. Co., (owner and builder) 104 West 29th St., New York, will build 104 x 185 ft., brick, steel and stone, plain foundation, Surf and Stillwell Aves. $1,250,000. Owner will award sub-contracts. Reilly & Hall, 405 Lexington Ave., New York, archts.

N. Y., New York—Apartment—E. Brandt, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 5 story, brick, steel and stone, plain foundation, Edgecomb Ave. near 150th St., by day labor. $200,000.

N. Y., New York — Apartment — Broff Constr. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Amsterdam Ave. and 188th St., by day labor.

N. Y., New York—Apartment—I. Feldman, c/o Rouse & Goldstone, archts. and engrs., 512 5th Ave., will build brick, steel and stone, plain foundation, Lexington Ave., by day labor. $500,000.

N. Y., New York—Apartment—M. Goldberg, c/o Goldner & Goldner, archts. and engrs., 47 West 42nd St., will build brick, steel and stone, plain foundation, East 169th St., by day labor. $200,000.

N. Y., New York—Apartment—S. Halperin, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Grand Ave., by day labor. $300,000.

N. Y., New York—Apartment—Owner, c/o Margon & Glaser, archts. and engrs., 2804 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Monroe Ave. and 174th St., by day labor. $150,000.

N. Y., New York—Apartment—L. Wolf, c/o Margon & Glaser, archts. and engrs., 2804 3rd Ave., will build 5 story, brick, steel and stone, plain foundation, Teller Ave. and 169th St., by day labor. $175,000.

N. Y., New York—Banks—Italian Savings Bank, Spring and Lafayette Sts., brick, steel and stone, plain foundation, East 116th St., also 12 story, brick, steel and stone, plain foundation, Spring and Lafayette Sts., to Lignante & Udall, 29 West 34th St. Archts. ests. $15[illegible] and $750,000 respectively.

N. Y., New York—Nurses Home—Bellevue & Allied Hospital, 415 East 26th St., 5 story, brick, steel and stone, plain foundation, foot of East 26th St., to George A. Fuller, 175 5th Ave. Archts. est. $500,000. Noted Nov. 1.

N. Y., New York—Office—D. Greenberg, c/o G. and E. Blum, archts. and engrs., 505 5th Ave., will build brick, steel and stone, plain foundation, West End Ave., by day labor. $300,000.

N. Y., Schenectady—Chapel—Union College, brick and steel memorial chapel, on campus, to Hanrahan Bros., 336 Bwine Ave., $159,235. Noted Mar. 6.

Pa., Phila.—Apartment—Ballinger Co., archts., 12th and Chestnut Sts., 15 story and basement, 44 x 133 ft. brick and steel, plain foundation, 19th and Spruce Sts., to Roberts & Roller, 1904 Sansom St. for 19th and Spruce St. Realty Corp., Land Title Bldg. Archts. est. $750,000. Noted Feb. 28.

Pa., Phila.—Church—Church of Transfiguration, 55th and Cedar Sts., 1 story and basement, 75 ft. high, 62 x 175 ft., steel and granite, plain foundation, 55th and Cedar Sts., to F. V. Warren Constr. Co., 1913 Arch St. Archts. est. $400,000. Noted Feb. 21.

Pa., Pittsburgh—Warehouse—J. Eichleay Co., 45 South 20th St., 6 story and basement, 120 x 304 ft., Wharton St., to Hughes-Foulkrod Co., Stevenson Foster Bldg., Archts. est. $500,000. Noted Mar. 6

Pa., West Chester—Hospital—Chester Co. Hospital, 2 story and basement, 50 x 200 ft. steel and stone, plain foundation, to Longwood Constr. Co., Kennett Square. Archts. est. $250,000.

Md., Baltimore—Bath and Field House—Park Bd., Gay and Lexington Sts., will build 1 story, concrete and brick, plain foundation, Druid Hill Park, by day labor. $155,000. Noted Mar. 13.

Md., Baltimore—Insurance—C. N. and N. Friz, archts., Lexington Bldg., 3 story, 60 x 150 ft., rein.-con. and brick, plain foundation, Cathedral and Centre Sts., for Home Friendly Insurance Co., 1026 Linden Ave., to R. B. Mason, 308 West Madison St. $200,000. Noted Jan. 3.

D. C., Wash.—Apartments—M. and R. B. Warren, 1412 Eye St. N. W., owner and builders will build 6 apartments, Porter and 30th Sts. N. W., by day labor. $360,000.

Fla., Miami—Hotel—T. R. Knight and W. G. Just, constructing Hotel Commodore, 11 story, rein.-con. and steel, to contain 180 rooms, 2nd Ave. and 1st St., to R. B. McAlley, Miami, cost plus basis. Archts. est. $666,000.

Fla., Sarasota—Bank, Office and Store—J. H. Lord and 1st Natl. Bank, 7 story, 200 x 250 ft., Main and Central Sts., to G. A. Fuller Co., 949 Bway., New York, cost plus basis. Archts. est. $260,000.

La., Baton Rouge — Bank — Louisiana Natl. Bank, 8 story, (ultimately 12 story) 64 x 126 ft. rein.-con., brick, steel and stone, 3rd and Convention Sts., to Underwood Contg. Co., Louisiana Bldg., New Orleans, $60,000. Noted

La., Eunice—School—Bd. Educ., c/o Superintendent of Schools, Opelousas, 2 story, 154 x 189 ft. rein.-con. and brick, to Caldwell Bros., 816 Howard Ave., New Orleans, $123,475.

La., New Orleans—Church—R. DeBuys, archt., Hibernia Bank Bldg., 76 x 146 ft., 106 ft. high, steel, stone and hollow tile, to J. A. Petty, Godchaux Bldg., $166,000, for Church of Holy Rosary 3368 Esplanade Ave.

Ky., Hazard—Hotel—E. Middleburg, 2 story and basement, 78 x 103 ft., to I. A. Rhodes Constr. Co., 320 17th St., Ashland. Archts. est. $150,000.

O., Cleveland—Bank and Office—State Banking & Trust Co., c/o C. R. Dodge, pres., 734 Euclid Ave., 3 story and basement, 30 x 125 ft., brick, steel and concrete, Bway. and Hamm Ave., to Drummond-Miller Co., 7500 Euclid Ave. Archts. est. $150,000. Noted Feb. 14.

O., Cleveland—Clubhouse and Apartment—Fraternal Order of Eagles (Aeria 135), 2226 East 55th St., 3 story and basement, 100 x 150 ft. lodge, and 10 story and basement, 40 x 300 ft. apartment, brick, steel and concrete, East 40th St. and Windsor Ave., to J. F. Sperry, Pittsburgh Bldg., St. Paul, Minn. Archts. est. $1,500,000.

O., Cleveland—Office—Union Sq. Co., c/o W. I. Lewis, Williamson Bldg., altering and constructing 2 story and basement, 17 x 104 ft. brick and steel addition, East 8th

Buildings (Continued)

St. and Euclid Ave., to Van Blarcom Co., Plymouth Bldg. Archts. est. $500,000. Noted Feb. 21.

O., Garfield Heights (near Cleveland)—School—Bd. Educ. 2 story and basement, 60 x 150 ft., brick, steel and concrete, Turney Rd., to J. Grant & Son, 4500 Euclid Ave, Cleveland, $137,459. Noted Mar. 13.

Mich., Detroit—Theatre—Imperial Building Corp., 13311 Jefferson Ave., 3 story and basement, 140 x 160 ft. rein.-con., brick, steel and stone, plain foundation, Gratiot Ave., to J. N. Robertson, 13311 East Jefferson Ave. Noted Mar. 13.

Mich., Detroit—Warehouse—Natl. Terminals Corp., 930 Penobscot Bldg., 30 x 600 ft. loading shed, and two 3 story, 100 x 600 ft. and 100 x 500 ft. buildings, 1 story, 100 x 400 ft. building, rein.-con. and brick, plain foundation, Lonyo Rd., to Ferro Concrete Constr. Co., 3rd and Elm Sts., Cincinnati, O. Archts. est. $1,650,000. Noted Mar. 13.

Ill., Waukegan—Business—J. Blumberg, 112 South Genesse St., 5 story and basement, brick and concrete, plain foundation, to R. Maki, 627 McAlister Ave. Archts. est. $150,000. Noted Jan. 24.

Wis., Chippewa Falls—School—St. Marys Catholic Congregation, c/o J. McGuirk, 117 Allen St., rein.-con., brick and stone, plain foundation, to Schafer & Olson, 222 Bay St. Archts. est. $150,000. Noted Jan. 24.

Wis., Lacrosse—Garage—Fox Bros., 129 North 3rd St., 3 story and basement, 62 x 150 ft., to C. W. Noble, State Bank Bldg. $150,000.

Wis., Madison—School—Bd. Educ., 22 West Dayton St., 2 story and basement, 90 x 140 ft., rein.-con., brick and steel, plain foundation, Spooner St., to A. D. and J. V. Frederickson Co., 702 East Main St. Archts. est. $150,000. Noted Feb. 28.

Wis., Verona — Asylum — Dane Co., 2 story and basement, brick and steel, plain foundation, to Concrete Eng. Co., Colby Abbot Bldg., Milwaukee. Archts. est. $150,000. Noted Jan. 24.

Wis., Waupun—Hospital—State Bd. Control, c/o W. Lorenz, secy., Capitol, Madison, 2 story and basement, brick, rein.-con. and steel, plain foundation, to J. P. Cullen & Sons Co., Eastern Ave., Janesville, $135,331. Noted Mar. 13.

Minn., Duluth—Store—W. M. Prindle & Co., Lonsdale Bldg., representing R. M. Bradley and associates, Boston, 4 story and basement, 110 x 150 ft., rein.-con., brick and steel, Superior St. and Lake Ave., to G. H. Lounsberry, 322½ East Superior St., $300,000. Noted Sept. 27.

Neb., Omaha—College—Brownell Hall, c/o E. V. Shaylor, bishop, 202 Kennedy Bldg., 4 story and basement, Happy Hollow Dist., to P. Kiewits & Sons, 908 Omaha Natl. Bank Bldg., $200,000.

Neb., South Sioux City—High School—Bd. Educ., 3 story, 144 x 160 ft. rein.-con. and brick to B. E. Short, Sioux City, Ia. Archts. est. $150,000. Noted Nov. 29.

Mo., Kansas City—Office and Store—F. E. McIllvain, archt., 1001 Orear Leslie Bldg., 7 story and basement, 87 x 115 ft., rein.-con., brick, steel and stone, 12th St. and Grand Blvd., to Bickel Constr. Co., 901 A and R Bldg., for Palace Clothing Co., 909 Main St. Archts. est. $500,000. Noted Feb. 7.

Mo., Kansas City—Office—Kansas City Southern Ry. Co., 11th and Wyandotte Sts., general contract 2 story, 97 x 142 ft., rein.-con., brick and terra cotta addition, to Pratt-Thompson Constr. Co., Huntzinger Bldg. Archts. est. $150,000. Noted Jan. 10.

Mo., St. Joseph — Factory — Collier Adams Mfg. Co., 4th and Mitchell Aves., will alter and construct 3 story and basement, 94 x 139 9ft., rein.-con. and brick factory addition, also lumbersheds, 63 x 72 ft. dry kilns, 35 x 36 ft. boiler room, by day labor. $75,000. E. I. Meier, 203 Lincoln Bldg., archt. Noted Apr. 5.

Mo., St. Louis—Apartment—Berta Realty Co., 1650 South 39th St., general contract 3 story and basement, 60 x 137 ft., rein.-con., brick and stone, 39th St., to F. F. Meckfessel, 4604A Greer St. Archts. est. $150,000.

Okla., Tulsa — Store — Vandever Dry Goods Co., 109 South Main St., 5 story and basement, 60 x 135 ft., rein.-con., brick and stone, to Rucks & Brandt, Mid Continent Bldg. Archts. est. $250,000. Noted Jan. 3.

Colo., Denver—Church, etc.—Holy Ghost Catholic Church, 19th and California Sts., for partial construction 40 x 79 ft. parish house and 100 x 125 ft. church, rein.-con., terra cotta and brick, to Kirchoff Constr. Co., 718 Lawrence St., $170,000. Archts. total est. $350,000.

Calif., Alameda—Hospital—K. Creedon, 4 story and basement, rein.-con., Clinton and Willow Sts., to A. H. Vogt, 185 Stevenson St., San Francisco, $350,000. Noted June 6.

Calif., Beverley Hills—Theatre, Apartment and Store—West Coast Theatres, Inc., Knickerbocker Bldg., Los Angeles, 2 story, 100 x 150 ft., brick and concrete, here, to A. Bard & Co., Union Oil Bldg., Los Angeles, $150,000.

Calif., Glendale—Hotel—Ambrosini Hotel Co., 5 story, rein.-con., Bway and Glendale Blvd., to Kinme-Westerhouse Co., H. W. Hellman Bldg., Los Angeles, $420,000. Noted Aug. 9.

Calif., Lemoore—High School—Lemoore Union High School Dist., rein.-con., to contain 30 classrooms and auditorium, general contract to W. J. Ochs, 405 West Clark St., Fresno, $151,000. Noted Feb. 28.

Calif., Long Beach—School—First Congregational Church, 237 Cedar Ave., 3 story, 45 x 150 ft., brick addition, to McGrew & Sons, 1345 West Ocean Blvd. Noted Jan. 25, 1923.

Calif., Los Angeles — Hotel — Eastern Realty Co., c/o H. Gensler, archt., Hibernian Bldg., 4 story and basement, brick, Union Ave., to M. Coverlacheck, 605 North Cummings Ave., $182,000. Noted Mar. 6.

Calif., Los Angeles—Hotel and Store—Briggs & MacGowan, c/o I. H. Seehorn, archt., 328 Clay St., 4 story and basement, 60 x 150 ft., brick, 7th and Whittier Sts., to S. E. McRae, 5927 6th Ave., $155,000.

Calif., Piedmont — School — Piedmont Junior High School Dist., 1 and 2 story, rein.-con., general contract to Hannah Bros., 142 Sansome St., San Francisco. Noted May 17.

Calif., San Francisco — Apartment — J. Pasqualetti, Humboldt Bank Bldg., will build 6 story and basement, rein.-con., Van Ness Ave., by day labor. $235,000.

Calif., San Francisco—Store and Office—Crocker Estate Co., Crocker Bldg., 4 story and basement, Class A, brick and steel, Market St., to Dinwiddie Constr. Co., Crocker Bldg., $400,000. Noted Nov. 15.

Federal Government Work

PROPOSED WORK

N. Y., Buffalo—Barges—U. S. Engineer, Buffalo, plans to purchase 8 steel deck barges, 30 x 100 ft.

Fla., Jacksonville—Dredge Depot, etc.—U. S. Engineer, Jacksonville, plans dredge depot incl. 300 ft. pier, here.

Ind., Leavenworth — Water Turbine — U. S. Engineer, P. O. Box 72, Louisville, Ky., plans to purchase one 33 in. water turbine complete with gearing, etc., for Dam 44, here.

BIDS DESIRED

Pa., Tobyhanna—Pumps, etc.—Apr. 1, by Quartermaster, Tobyhanna, furnishing and installing 2 centrifugal pumps, constructing water tank, concrete reservoir, etc., here.

Del., Wilmington—Excavating—Apr. 19, by U. S. Engineer, excavating in inland waterway from Delaware River to Chesapeake Bay; adv. E. N.-R. Mar. 20.

Tenn., Memphis—Fuel Oil Pump, etc.—Mar. 31, by Mississippi River Comn., 1st and 2nd Dists., Room 1006 McCall Bldg., Memphis, fuel oil pumps, oil meters, strainers and oil suction hose; adv. E. N.-R. Mar. 20.

Ky., Louisville—Pumps—U. S. Engineer, P. O. Box 72, Louisville, in market for 2 horizontal duplex piston pumps, capacity 140 gal. of oil per minute at pressure up to 300 lb.

O., Cincinnati—Power Houses—Apr. 7, by U. S. Engineer, Cincinnati, constructing power houses at Dams 34, 36, and 38 Ohio River; adv. E. N.-R. Mar. 20.

Mich., Detroit—Riprap—Apr. 18, by U. S. Engineer, Detroit, furnishing and placing and for recovering and replacing stone riprap, at Harbor Beach Harbor; adv. E. N.-R. Mar. 20.

Mich., Hastings—Post Office—Apr. 15, by Treas. Dept., Office Supervising Architect, Wash., D. C., 1 story, 55 x 79 ft. brick and tile post office, here; adv. E. N.-R. Mar. 20.

Calif., San Diego—Surface—Apr. 2, by Bureau Yards & Docks, Navy Dept., Wash., D. C., surface for parade ground at Training Sta. here.

BIDS RECEIVED

Ky., Addison—Lumber—U. S. Engineer, P. O. Box 72, Louisville, furnishing 820 pieces (177,000 ft.) 12 x 12 in. x 18 ft. yellow pine, from W. R. Willett Lumber Co., Starks Bldg., $48 per m. Noted Mar. 13.

Ky., Pikesville—Hospital—U. S. Veterans Bureau, Room 791, Wash., D. C., constructing complete U. S. Veterans Hospital, here, from Dickie Constr. Co., Syndicate Trust Bldg., St. Louis, Mo., (1) $194,100 (2) no bid (3) no bid (4) add $2,600 (5) $100 (6) deduct $1,350 (7) deduct $3,300 (8) $150 (9a) $1 (9b) $2.50 (9c) $12 (9d) $13 (9e) $0.75 (9f) $110 (9g) $0.25 (9h) $0.20 (240 days). Noted Feb. 21.

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, Providence, maintenance dredging in Stamford and Greenwich Harbors, to J. S. Packard Dredging Co., Turks Head Bldg., $50,510. Noted Feb. 28.

Pa., Phila.—Rubber Dredging Sleeves—U. S. Engineer, War Dept., Wash., D. C., rubber dredging sleeves, to Goodyear Tire & Rubber Co., East Market St., Akron, O., $25,738.

Ala., Florence—Cement—U. S. Engineer, furnishing cement for Wilson dam, 75,000 bbl. to Dixie Portland Cement Co., James Bldg., Chattanooga, Tenn., $158,200; 20,000 bbl. to Lehigh Portland Cement Co., Birmingham, Ala., $45,000; 20,000 bbl. to Atlas Portland Cement Co., B. M. Bldg., Birmingham, $45,000.

Ky., Addison—Soft Steel Rods, etc.—U. S. Engineer, P. O. Box 72, Louisville, furnishing 70 tons round steel soft rods and structural steel angles, to Knoxville Iron Co., Lonsdale Ave., Knoxville, Tenn., $2.81 per cwt. Noted Mar. 6.

Wash., Puget Sound — Barrack — Spec. 4928—Bureau Yards & Docks, Navy Dept., Wash., D. C., barrack for operators at Navy Yard radio station, to Parker & Wood, Bremerton, $13,913 (90 days). Noted Jan. 31.

Unclassified

PROPOSED WORK

Transmission Line—New York—Kingston Gas & Electric Power Co., 611 Bway., Kingston, plans 3 phase high tension transmission line extension in Olive Twp. To exceed $50,000.

Subway—Eldorado (Altoona, P. O.), **Pa.**—Blair Co. (Hollidaysburg) and Pennsylvania R.R. plan 80 ft. concrete and stone subway under railroad tracks at Burns Crossing, here. $25,000. D. A. McCloskey, Hollidaysburg, engr.

Lighting System — Palm Beach, Fla. — Mar. 31, to vote on $25,000 bonds extending lighting system. M. A. Taylor, clk.

Transmission Line and Distribution System—Kansas—City of Grainfield had plans prepared transmission line and distribution system from Grainfield to Grinnett. $40,000. A. T. Archer & Co., 609 New England Bldg., Kansas City, Mo., engrs.

White Way—Dallas, Tex.—City making plans white way on Young St. from Harwood to Jefferson Sts., ornamental standards, cable, etc. $80,000. E. A. Kingsley, city engr.

Park—Houston, Tex.—City plans improving Sam Houston Park, incl. larger lake, also miscellaneous work in other parks, to exceed $30,000 J. C. McVea, city engr. S. H. Hare, Houston, landscape architect.

Distributing System—Carmichael, Calif.—Carmichael Pub. Utility Dist. defeated $60,000 bonds for electrical distributing system. Noted Dec. 13.

Street Lighting System — Los Angeles, Calif.—Plans installing 136 concrete standards, etc., on North Bway., Lincoln, Park and Pasadena Aves. J. A. Griffin, city engr.

Pier and Harbor Improvements — San Diego, Calif.—Election May 20, $225,000 bonds, completing Municipal Pier 2, and $250,000 for harbor development. F. A. Rhodes, city engr.

Pier, Retaining Wall, etc.—San Francisco, Calif.—State Bd. Harbor Comrs., Ferry Bldg., having plans prepared, Pier No. 50, $1,000,000 to $1.500,000; retaining wall and fill in lands at Islais Creek; additional docking facilities at China Basin, total $2,000,000. F. G. White, ch. engr. Noted Sept. 20.

Breakwaters—Venice, Calif.—City plans to vote on $180,000 bonds for 2 breakwaters, 5.500 ft. long, 25 ft. above low water level, average top width 12 ft.

Oil Pipe Line—Mexico—Huasteca Petroleum Corp., El Bano, plans new oil pipe line from El Ebano to port of Tampico. $1,000,000. Work will probably be done by day labor. Private plans.

BIDS DESIRED

Heating and Ventilating Apparatus — Flushing, N. Y.—Mar. 24, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S 107,

Unclassified (Continued)

Franconia Ave., Upper Flushing, here, for Bd. Educ., 500 Park Ave., New York City.

Heating and Ventilating Apparatus—New York, N. Y.—Mar. 24, by W. H. Gompert, supt. School Buildings, Flatbush Ave. and Concord St., Brooklyn, heating and ventilating apparatus in George Washington High School, Audubon Ave., also in P. S. 70, Weeks Ave., for Bd. Educ., 500 Park Ave. Former contract rescinded. Noted Feb. 21.

Heating and Ventilating Apparatus—Richmond Hill (branch of Jamaica), **N. Y.**—Mar. 24, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 108, Suwanee Ave., here, for Bd. Educ., 500 Park Ave., New York.

Electric Light Line—North Carolina—Apr. 1, by W. S. Elks, mayor of Grimesland, 9 mi. electric light line from Washington to Grimesland. $30,000. E. P. Meredith, Washington, engr.

Grade Separation—Detroit, Mich.—Mar. 25, by Wayne Co. Rd. Comn., 1103 Real Estate Exch. Bldg., grade separation, depressing Eureka Rd. under Detroit, Toledo and Ironton R. R., 15,000 cu.yd. excav., 600 cu.yd. rein.-con., pumping station, etc. $35,000.

Lock—Marked Tree, Ark.—Mar. 25, by Bd. Directors D. D. 7, Poinsett Co., rein.-con. lock near here, 2,800 cu.yd. concrete, 460,000 lb. reinforcing steel, 3 or 4 24 x 30 in. vertical lift headgates, etc. Elliott & Harmon, Bank of Commerce Bldg., Memphis, Tenn., engrs.

BIDS RECEIVED

Rein.-Con. Floor—Buffalo, N. Y.—Dept. Parks & Buildings, City Hall, Mar. 11, 6 in. rein.-con. floor in wading pool (500 ft. diam.), in Humboldt Park, from Peoples Paving Co., Inc., 85 Roma Ave., $68,900. Noted Mar. 6.

Subway Entrance—New York, N. Y.—Transit Comn., 49 Lafayette Ave., Mar. 14, additional entrance to Mott Haven Station of 7th Ave.-Lexington Ave. Rapid Transit R.R., Mott Ave. and 138th St., Bronx Boro, Agreement "CB," from Pattelli & Wilson, $15,435. Noted Mar. 13.

Tunnel—Seattle, Wash.—Bd. Pub. Wks., Mar. 7, completing concrete lined tunnel, from J. H. Tillman, Portland, Ore., driving tunnel 350 ft., $600, lining tunnel, 531 cu.yd., $100, grout 50 cu.yd. $100, driving grout holes 100 ft. $10, under Duwamish Waterway, etc., total $274,750. Noted Feb. 28.

Street Lighting System—Hawthorne, Calif.—Ornamental lighting system, West Raymond Ave. and portion Hawthorne Ave., etc., from Electric Service Co., Redondo, $29,700.

CONTRACTS AWARDED

Power and Lighting System—Annapolis, Md.—State Rds. Comn., Baltimore, electric wiring and power equipment for Severn River Bridge, near here, to E. Bauernschmidt, 1522 North Gay St., Baltimore. $16,850. Noted Mar. 6.

Terminal, etc.—Louisville, Ky.—Inland Waterways Co., 316 West Jefferson St., terminal on waterfront here, incl. 1,100 ft. retaining wall, trestle, etc., to H. Bickel Co., 443 West Garden St. Est. cost $100,000. Noted Feb. 28.

Grade Separation—Springwells, Mich.—B. P. Esper, village clk., grade separation on Schaefer Rd. on main line of Michigan Central R.R., incl. grading and paving 1,425 ft., pumping station, steel deck bridge encased in concrete, rein.-con. walls and piers, etc., to M. E. White Co., 130 North Wells St., Chicago, $389,000. Noted Mar. 6.

Retards—Missouri—State Hy. Dept., Jefferson City, two 100 ft., eight 150 ft. and eight 200 ft. current retards for Missouri River bank protection project in connection with bridge at Glasgow, Federal Aid Project 217, Howard and Saline Counties, to Woods Bros. Constr. Co., Lincoln, Neb., $189,000. Noted Mar. 6.

Wharf, etc.—Alameda, Calif.—Alaska Packers Assn., Wells Fargo Bldg., San Francisco, soon takes bids wharf, 500 to 1,000 ft. long, foot of Grand Ave., here. F. G. White, Ferry Bldg., San Francisco, engr. for wharves. P. L. Bush, 101 Calif. St., San Francisco, engr. for buildings. Piling contract let to St. Helens Creosoting Co., Matson Bldg., San Francisco. Total cost $1,000,000.

Material and Equipment

PROPOSED WORK

Street Sweeper—Huntsville, Ala.—City Council authorized mayor and city clerk to spend $7,000 for motor driven street sweeper.

Tractor, etc.—Herkimer, N. Y.—Bd. Village Trustees plans to purchase tractor and snow plow. $5,000.

BIDS DESIRED

Asphalt, etc.—Holyoke, Mass.—Mar. 25, by Bd. Pub. Wks., asphalt for penetration, cement, coal, cold patch, curbing, expansion joint, pitch, reinforcing rods, road oil, tar for penetration and trap rock for 1924 season. G. F. Stone, asst. clk. This corrects report in Mar. 6 issue.

Bituminous Material—Albany, N. Y.—Mar. 28, by A. W. Brandt, comr. highways, bituminous material "A" and "T," Contrs. 1 to 7 inclusive, f.o.b. railroad cars at destination for use by State Dept. Pub. Wks. Bureau Highways; adv. E. N.-R. Mar. 20.

Mixers, etc.—Buffalo, N. Y.—See "Industrial Works."

Dump Trucks—Long Island City—Mar. 25, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., two 7½ ton motor dump trucks to Bureau Highways.

Electric Cranes—Sharon, Pa.—Westinghouse Electric & Mfg. Co., East Pittsburgh, in market for one 75 ton, one 50 ton, one 30 ton, four 15 ton, three 5 ton and two 3 ton electric cranes for plant, here.

Patch Material and Stone—Towson, Md.—See "Streets and Roads."

Crane—Wash., D. C.—Southern Ry., Southern Bldg., in market for 10 on crane.

Cement—Milwaukee, Wis.—Mar. 24, by Central Bd. Purchases, City Hall, 20,000 bbl. cement.

Stone Crusher—Platteville, Wis.—Apr. 3, by J. J. Stephenson, city clk., one stone crusher having 10 x 20 in. opening, 20 ft. elevator, 15- to 25-ton per hour, with and without screen.

Reinforcing Bars and Spirals—Minnesota—Apr. 7, by Hennepin Co. (Minneapolis), 800 tons reinforcing bars and 78 tons spirals for Fort Snelling-Mendota Bridge. Walter H. Wheeler, 1112 Metropolitan Life Bldg., Minneapolis, engr. Noted Mar. 6 under "Bridges."

Paving Materials—St. Paul, Minn.—Mar. 25, by H. W. Austin, city purch. agt., 6,700 bbl. portland cement, 3,976 sq.yd. brick, 5,080 cu.yd. crushed rock or gravel, 3,169 cu.yd. concrete sand, 388 tons asphalt, 388 tons limestone dust, etc. G. M. Shepard, city engr.

Road Machines—Grand Forks, N. D.—Apr. 2, by Grand Forks Co., 6 road maintenance machines, for either 2 or 4 horses, 6-8 ft. blades, etc.

Refined Tar—Clayton, Mo.—Mar. 26, Clayton Co., 100,000 gal. refined tar for use on roads during 1924. $11,500. H. Jablonsky, Court House, engr

Cast Steel Castings, etc.—St. Louis, Mo.—Mar. 31, by G. E. Scott, purch. agt. for Missouri-Kansas-Texas R.R., 1520 Ry. Exch. Bldg., 150 tons miscellaneous cast steel castings and 87 tons locomotive and car bolsters and side frames to be furnished as needed during 2nd quarter of 1924.

Tractors—San Antonio, Tex.—Mar. 31, by A. McCloskey, judge Bexar Co., two 10-ton tractors, caterpillar or track layer types, for use in precincts 1 and 4. W. S. Kendall, aud.

Fire Hydrants—Redondo Beach, Calif.—City plans to vote on $10,000 bonds for fire hydrants.

BIDS RECEIVED

Paving Block, etc.—Buffalo, N. Y.—Commissioner Pub. Wks., Mar. 7, from B. F. Spire, 24 Colonial Circle, paving stone $10 per ton, dressed block stone $3.50 per yd., crosswalk stone $2 per yd., curbing $1.25 per ft.; from Buffalo Crushed Stone Co., 1048 Ellicott Sq., crushed stone, etc., at city yard $2.58 per cu.yd., macadam streets $2.05 per cu.yd., our plant $1.50 per cu.yd., any street $2.40 per cu.yd., (a) grits weight 2,800 lb. per cu.yd. $0.95, (b) fine sand weight 2,500 lb. per cu.yd., $1.10 net ton, (c) gravel weight 3,200 lb. per cu. yd., $0.85 per net ton, delivering to city yard in truck load lots, (a) $1.35 (b) $1.50 (c) $1.25; 1st Dist. (a) $1.35 (b) $1.50 (c) $1.25; 2nd Dist. (a) $1.50 (b) $1.65 (c) $1.40; 3rd Dist. (a) $1.65 (b) $1.80 (c) $1.55; 4th Dist. (a) $1.80 (b) $1.95 (c) $1.70; 5th Dist. (a) $1.95 (b) $2.10 (c) $1.85, 2% discount allowed if paid within 10 days from date of bill; from Holloway Sand Co., 75 Andrews Bldg., (a) gravel weight 3,200 lb. per cu.yd. $0.83 per net ton, (b) coarse sand weight 2,800 lb. per cu.yd. $0.93 per net ton, delivered to city yard by truck (a) $1.23 per net ton (b) $1.32 per net ton; 1st Zone (a) $1.22 (b) $1.32; 2nd Zone (a) $1.37 (b) $1.47; 3rd Zone (a) $1.52 (b) $1.62; 4th Zone (a) $1.67 (b) $1.77; 5th Zone (a) $1.82 (b) $1.92; from L. Rupp, 42 Haven St., grading unpaved streets, opening gutters, rounding roadway, rolling and surfacing with hard material, etc., (a) $0.65 per cu.yd. (b) $0.25 per cu.yd. (c) $0.75 per cu.yd. (d) $0.10 per lin.ft.; from Eclipse Paving Co., laying sidewalks $0.1418 per ft., extra strength $0.24 per ft.; from L. S. Chamber, 30 West Northrup St., sidewalk approaches $0.26 per ft. Noted Feb. 28.

Gravel—Louisiana—State Hy. Dept., Reymond Bldg., Baton Rouge, furnishing 12,004 cu.yd. washed gravel delivered at Many, and 3,981 cu.yd. washed gravel delivered at Boleyn Spur, from Rapides Gravel Co., Alexandria, $2.97 and $2.56 respectively.

Road Oil—Manitowoc, Wis.—For 60,000 gal. road oil, from Amer.-Mexican Refining Co., 11 South La Salle St., Chicago, $0.598 per gal.

CONTRACTS AWARDED

Steam Roller—West New Brighton, N. Y.—J. A. Lynch, pres. Richmond Boro, Boro Hall, St. George, New Brighton, one 10 ton 3 wheel steam roller equipped with steam pressure scarifier, at store yard of Bureau of Highways, Dubois Ave., here, to Galion Iron Wks. & Mfg. Co., 596 Bway., New York City, $4,820. Noted Feb. 14.

Markers—Wisconsin—State Hy. Comn., Madison, metal highway markers, number plates, mile numbers, etc., to Special Mchy. & Mfg. Co., 1919 St. Paul St., Milwaukee, approximately $40,000. Noted Feb. 7.

Road Tar—La Crosse, Wis.—La Crosse Co., 200,000 gal. road tar, to Barrett Co., 214 West Monroe St., Chicago; about 300,000 gal. to Amer. Tar Products Co., 208 South La Salle St., Chicago. Noted Feb. 21.

Lumber, Steel, etc.—Algona, Ia.—Kossuth Co. 40,000 lb. reinforcing steel, to Pittsburgh-Des Moines Steel Co., Tuttle and South West 10th St., Des Moines, $1,210; 7,000 ft. 12 in. corrugated culvert pipe, to Ft. Dodge Culvert & Steel Co., Ft. Dodge, $4,795; 500 ft. 15 in. corrugated culvert pipe, to Independence Corrugated Culvert Co., Independence, $445. Noted Feb. 28.

Bridge Lumber—Guthrie Center, Ia.—City, 172,800 ft. bridge lumber and 6,000 ft. yellow pine piling to Standard Bridge Co., 1302 City Natl. Bank Bldg., Omaha, Neb., $37.40 per m. and $0.44 per ft. respectively.

Paving Materials—Minneapolis, Minn.—For 3½-in. creosoted wood block, 23,000 sq.yd. to Midland Creosoting Co., 2436 Bway., Toledo, O., $2,395 per sq.yd., 25,000 sq.yd. to Indiana Wood Preserving Co., 111 West Washington St., Chicago, $2.51 per sq.yd. and 25,000 sq.yd. at $2.52, all prices f.o.b. Minneapolis; 1,200 tons asphalt, to New Orleans Refining Co., Maison Blanche Annex, New Orleans, La., $21.09 per ton. Noted Mar. 6.

Road Oil—Minneapolis, Minn.—For 1,750,000 gal. road oil, to Roxanna Petroleum Co., Arcade Bldg., St. Louis, Mo., $0.0611 per gal. Noted Feb. 28.

Ladders, Fir, Gate Valves, etc.—St. Paul, Minn.—H. W. Austin, city purch. agt., furnishing and delivering 9,067 lb. miscellaneous w.i. and c.i. ladders, etc., to St. Paul Fdry. Co., Como Ave. and Mackubin St., $710; 2,000 pieces 2 x 8-16 No. 1 fir and 500 pieces 2 x 4-16, to Thompson Yards, 2694 University Ave., $37.25 and $37.75 per M., respectively; 500 pieces 4 x 4-16, 300 pieces 3 x 8-16, and 500 pieces 1 x 6-16, to Burns Lumber Co., Atwater Ave. and Arundel St., $44, $45 and $38 respectively; 2 horizontal swing type check valves for Water Dept., 2 vertical spur-geared hand-operated gate valves and 2 vertical hydraulic gate valves, all 30-in., to Michigan Valve & Fdry. Co., Amer. Trust Bldg., Detroit, Mich., $6,588. Noted Feb. 14.

Concrete Culvert Pipe—Pierre, S. D.—State Hy. Dept., furnishing rein.-con. culvert pipe to Canton Block & Tile Co., Canton, 4,472.5 ft. 15 in. $0.75, 12,042.5 ft. 18 in. $0.98, 2,035 ft. 24 in. $1.36, to South Dakota Concrete Products Co., Watertown, 4,175 ft. 15 in. $0.79, 12,200 ft. 18 in. $1.05, 3,620 ft. 24 in. $1.46, 702.5 ft. 30 in. $2.07.

Road Oil—Independence, Mo.—Jackson Co., 2 m.g. road oil, to Eureka Petroleum Co., Gloyd Bldg., Kansas City, $0.045 per gal.

Asphaltic Cement, etc.—St. Louis, Mo.—G. H. Oetting, supply comr., City Hall, 1,200 tons asphaltic cement for Street Dept., to New Orleans Refining Co., Maison Blanche Annex, New Orleans, La., $18.20 per ton, f.o.b. St. Louis; 500,000 gal. more or less road oil, to R. J. Brown Petroleum Co., Boatmens Bank Bldg., $0.05 per gal., f.o.b. St. Louis. Noted Feb. 28.

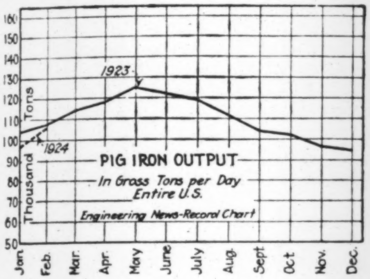
CONSTRUCTION NEWS

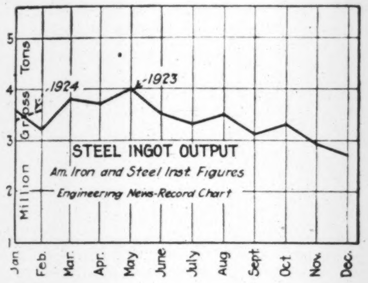
Engineering News-Record, March 27, 1924

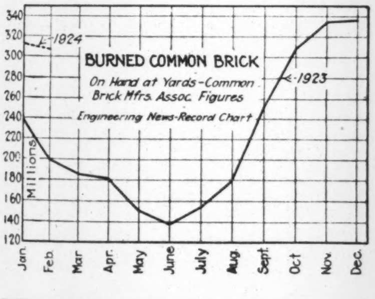
The Construction Barometer

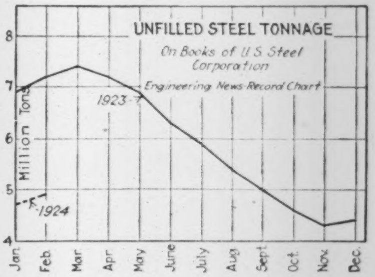
Gain in Private Construction—Production of Basic Materials Slower—No Actual Weakness in Price Situation

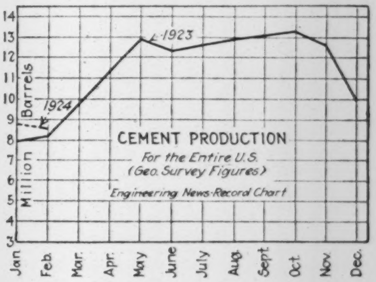
THE gain in value of contracts awarded during the last week, as published in *Engineering News-Record*, was due mainly to increased letting of private work. The accompanying table shows the trend during the last three weeks. There was also a substantial gain in private building construction of the commercial type, valued at $150,000 or over. Despite the increasing building demand, production is slowing down as shown by the charts. No actual weakness, however, exists in the present price situation, although buyers are able to obtain price concessions in most of the basic materials.

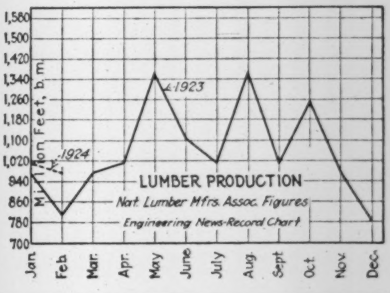












Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Mar. 6	18,660,000	15,917,000	34,577,000
Mar. 13	18,513,000	13,398,000	31,911,000
Mar. 20	17,126,000	31,125,000	48,251,000
3 Weeks	$54,299,000	$60,440,000	$114,739,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

Week Ended	No.	Public Work	No.	Private Work
Mar. 6	12	5,300,000	36	9,438,000
Mar. 13	10	4,251,000	35	11,575,000
Mar. 20	13	4,152,000	62	24,070,000
3 weeks	35	$13,703,000	133	$45,083,000

NUMBER OF LARGE JOBS NOW OUT FOR BIDS

Week Ended	Private	All Buildings	Public		
			Streets and Roads	Waterworks and Sewers	All Public
Mar. 6	45	70	80	35	229
Mar. 13	41	64	71	40	227
Mar. 20	40	64	81	47	256

NO ACTUAL WEAKNESS IN PRESENT PRICE SITUATION

	Quoted on Mar. 27 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.30 @2.50	$2.40 @2.50	Mar. 13
Cement, Chi. net bbl.	2 20	2.10	Jan. 24
Pine, N. Y. m. ft.	61.00	65.00	Mar. 13
Fir, San Fran., m. ft.	36.00	38.00	Jan. 24
Common labor, hr.	.55	.54	Feb. 28

PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Mar. 28	New York, N. Y.	Mar. 20
Mar. 28	Roseland, N. J.	Mar. 27
Mar. 31	Barberton, O.	Mar. 13
Mar. 31	Chatham, Va.	Mar. 20
Mar. 31	Port Colborne, Ont.	Mar. 20
Mar. 31	Minoqua, Wis.	Mar. 27
Mar. 31	White Fish Bay, Wis.	Mar. 27
Apr. 1	Appleton, Wis.	Mar. 27
Apr. 1	Port Tampa, Fla.	Mar. 27
Apr. 2	Sanitorium, N. C.	Mar. 20
Apr. 2	Dunkirk, N. Y. Adv. Mar. 20 and 27.	Mar. 20
Apr. 2	Cleveland, O.	Mar. 27
Apr. 4	Patton, Pa. Adv. Mar. 20 and 27.	Mar. 20
Apr. 5	Grimsby, Ont.	Mar. 27
Apr. 7	Metropolis, Ill.	Mar. 27
Apr. 9	Port Washington, N. Y. Adv. Mar. 27.	Mar. 27
Apr. 14	**Downington, Pa.** **Adv. Mar. 27.**	**Mar. 27**
Apr. 15	**Jamestown, N. Y.**	**Mar. 27**
Apr. 21	**Buffalo, N. Y.** **Adv. Mar. 27.**	**Mar. 27**

SEWERS

Bids Close		See Eng. News-Record
Mar. 28	**Sharon, Pa.**	**Mar. 20**
Mar. 31	**Detroit, Mich.**	**Mar. 27**
Apr. 1	**Toledo, O.**	**Mar. 6**
Apr. 1	**Erie, Pa.**	**Mar. 20**
Apr. 1	**Upper Darby (branch Phila. P. O.), Pa.**	**Mar. 27**
Apr. 2	**Sayreville, N. J.**	**Mar. 20**
Apr. 2	**Butte, Mont.**	**Mar. 20**
Apr. 2	**Cleveland, O.**	**Mar. 27**
Apr. 3	**Cheyenne, Wyo.**	**Mar. 27**
Apr. 5	**Pottstown, Pa.** **Adv. Mar. 13 to 27.**	**Mar. 13**
Apr. 5	**Beloit, Wis.**	**Mar. 27**
Apr. 7	Euclid, O.	Mar. 27
Apr. 8	Springfield, Mass.	Mar. 13
Apr. 8	South Bend, Ind. Adv. Mar. 27.	Mar. 27
Apr. 10	Akron, O.	Mar. 27
Apr. 10	South Chicago Heights (Chicago Heights P. O.), Ill. Adv. Mar. 27.	Mar. 27
Apr. 11	Mercer, Pa.	Mar. 27
Apr. 15	Elizabethtown, Pa. Adv. Mar. 20.	Mar. 20
Apr. 15	Grand Rapids, Mich.	Mar. 27
Apr. 15	Marion, O. Adv. Mar. 27.	Mar. 27
Apr. 23	Longmeadow, Mass. Adv. Mar. 27.	Mar. 27

WASTE DISPOSAL

Bids Close		See Eng. News-Record
Apr. 9	East Chester (Grey Court P. O.), N. Y. Adv. Mar. 20 and 27.	Mar. 20

BRIDGES

Bids Close		See Eng. News-Record
Mar. 31	Alabama	Mar. 6
Mar. 31	Vancouver, B. C.	Mar. 13

Bids Close		See Eng. News-Record
Mar. 31	Rochelle Park, N. J. Adv. Mar. 13 and 20.	Mar. 13
Mar 31	Pine Bluff, Ark.	Mar. 20
Apr. 1	Clarksville, Tenn.	Mar. 13
Apr. 1	Pennsylvania	Mar. 13
Apr. 1	Kansas City, Kan.	Mar. 20
Apr. 1	Athens, Ga.	Mar. 27
Apr. 1	Grand Island, Neb.	Mar. 27
Apr. 3	Iola, Kan.	Mar. 20
Apr. 4	Tennessee	Mar. 27
Apr. 7	Alabama	Mar. 13
Apr. 7	Sacramento, Calif.	Mar. 13
Apr. 7	California	Mar. 20
Apr. 7	Chehalis, Wash.	Mar. 20
Apr. 7	Alton, Calif	Mar. 27
Apr. 8	West Virginia	Mar. 13
Apr. 9	Nevada	Mar. 27
Apr. 9	Akron, O.	Mar. 27
Apr. 9	Osborne, Kan.	Mar. 27
Apr. 10	Greenwood, S. C.	Mar. 27
Apr. 11	Le Roy, N. Y.	Mar. 27
Apr. 14	Eufaula, Ala.	Mar. 20
Apr. 15	Chamberlain, S. D.	Mar. 13
Apr. 15	Arkansas	Mar. 27
Apr. 18	Milford, O.	Mar. 27
Apr. 22	East St. Louis, Ill.	Mar. 27
May 1	**Tientsen, North China**	**Oct. 11**

RAILWAYS

Mar. 28	New York	Mar. 20
Apr. 1	Indiana	Jan. 24
Apr. 15	New York Adv. Mar. 20 and 27.	Mar. 20

EXCAVATION, DRAINAGE IRRIGATION

Mar. 31	Olivia, Minn.	Mar. 20
Mar. 31	Emmetsburg, Ia.	Mar. 20
Apr. 3	Buffalo, N. Y.	Mar. 13
Apr. 3	Vicksburg, Miss.	Mar. 27
Apr. 5	Oroville, Calif.	Mar. 27
Apr. 12	Jonesboro, Ark.	Mar. 27
Apr. 15	Rochester, N. Y. Adv. Mar. 20 and 27.	Mar. 20
Apr. 15	New York Adv. Mar. 20 and 27.	Mar. 20
May 6	Minneapolis, Minn.	Mar. 20

STREETS AND ROADS

Mar. 28	New Hampshire	Mar. 20
Mar. 29	Seaforth, Ont.	Mar. 27
Mar. 31	Pennsylvania Adv. Mar. 13 to 27.	Mar. 13
Mar. 31	Escanaba, Mich.	Mar. 13
Mar. 31	Wisconsin	Mar. 20
Mar. 31	St. Paul, Minn	Mar. 20
Mar. 31	Urbana, Ill.	Mar. 27
Mar. 31	Oelwein, Ia.	Mar. 27
Mar. 31	Storm Lake, Ia.	Mar. 27
Mar. 31	Comanche, Okla.	Mar. 27
Mar. 31	Cape Charles, Va.	Mar. 27
Apr. 1	St. Louis, Mo.	Mar. 6
Apr. 1	Lewisburg, W. Va. Adv. Mar. 13 to 27.	Mar. 13
Apr. 1	Pennsylvania Adv. Mar. 13 to 27.	Mar. 13
Apr. 1	Kentucky	Mar. 20
Apr. 1	Rolla, N. D.	Mar. 27
Apr. 1	Columbus, O.	Mar. 27
Apr. 1	Columbus, Ga.	Mar. 27
Apr. 1	Charleston, W. Va.	Mar. 27
Apr. 1	Buffalo, N. Y.	Mar. 27
Apr. 1	Ft. Worth, Tex.	Mar. 27
Apr. 2	Abbeville, La.	Mar. 13
Apr. 2	Ontario	Mar. 13
Apr. 2	Benson, N. C.	Mar. 13
Apr. 2	Mankato, Minn.	Mar. 20
Apr. 2	Michigan	Mar. 20
Apr. 2	Cando, N. D.	Mar. 27
Apr. 2	Chicago, Ill.	Mar. 27
Apr. 2	St. George, N. Y.	Mar. 27
Apr. 2	Cleveland, O.	Mar. 27
Apr. 3	Canton, S. D.	Mar. 13
Apr. 3	Iola, Kan.	Mar. 20
Apr. 3	Brooklyn, N. Y.	Mar. 27
Apr. 3	Ashley, N. D.	Mar. 27
Apr. 3	Louisiana	Mar. 27
Apr. 3	Michigan	Mar. 27
Apr. 3	Tacoma, Wash.	Mar. 27
Apr. 3	Dayton, O.	Mar. 27
Apr. 3	Poughkeepsie, N. Y. Adv. Mar. 27.	Mar. 27
Apr. 3	Milwaukee, Wis.	Mar. 27
Apr. 3	Charleston, W. Va.	Mar. 27
Apr. 3	Italy, Tex.	Mar. 27
Apr. 3	Wyoming	Mar. 27
Apr. 4	Atchinson, Kan.	Mar. 20
Apr. 4	Mantorville, Minn.	Mar. 20
Apr. 4	Cherryville, N. C.	Mar. 20
Apr. 4	Tennessee	Mar. 20
Apr. 4	New York Adv. Mar. 20 and 27.	Mar. 20
Apr. 4	Winchester, Ind.	Mar. 20
Apr. 4	Fond du Lac, Wis.	Mar. 27
Apr. 4	Milwaukee, Wis.	Mar. 27
Apr. 4	Illinois	Mar. 27
Apr. 5	Idaho	Mar. 27
Apr. 5	Hudson, Wis.	Mar. 27
Apr. 5	Denison, Tex.	Mar. 27
Apr. 7	Alabama	Mar. 13
Apr. 7	Pennsylvania Adv. Mar. 20 and 27.	Mar. 20
Apr. 7	Elbow Lake, Minn.	Mar. 20
Apr. 7	White Plains, N. Y. Adv. Mar. 20 and 27.	Mar. 20
Apr. 7	Michigan	Mar. 20
Apr. 7	Princeton, N. J.	Mar. 20
Apr. 7	California	Mar. 20
Apr. 7	New Jersey Adv. Mar. 27.	Mar. 27
Apr. 7	Euclid, O.	Mar. 27
Apr. 8	Summersville, Va.	Mar. 6
Apr. 8	Paterson, N. J.	Mar. 20
Apr. 8	Milton, Fla.	Mar. 20
Apr. 8	Wabash, Ind.	Mar. 20
Apr. 8	Salem, N. J. Adv. Mar. 20 and 27.	Mar. 20
Apr. 8	Pennsylvania Adv. Mar. 20 and 27.	Mar. 20
Apr. 8	Geneva, N. Y. Adv. Mar. 27.	Mar. 27
Apr. 8	Kerrville, Tex.	Mar. 27
Apr. 8	Michigan	Mar. 27
Apr. 8	Breckenridge, Minn.	Mar. 27
Apr. 8	Washington	Mar. 27
Apr. 9	Fargo, N. D.	Mar. 27
Apr. 9	Delaware	Mar. 20
Apr. 9	Freehold, N. J. Adv. Mar. 20 and 27.	Mar. 20
Apr. 9	Fort Myers, Fla.	Mar. 27
Apr. 9	Lisbon, N. D.	Mar. 27
Apr. 9	Decatur, Tex.	Mar. 27
Apr. 9	Michigan	Mar. 27
Apr. 10	Woodbury, N. J. Adv. Mar. 27.	Mar. 27
Apr. 10	Port Gibson, Miss.	Mar. 13
Apr. 10	Michigan	Mar. 27
Apr. 11	Bexley (Columbus P. O.), O.	Mar. 27
Apr. 14	St. Albans, W. Va.	Mar. 20
Apr. 14	New Jersey Adv. Mar. 27.	Mar. 27
Apr. 15	Tonawanda, N. Y. Adv. Mar. 20 and 27.	Mar. 20
Apr. 15	Pottsville, Pa. Adv. Mar. 27.	Mar. 27
Apr. 15	Bay City, Tex.	Mar. 27
Apr. 15	West Virginia Adv. Mar. 27.	Mar. 27
Apr. 15	New Mexico	Mar. 27
Apr. 15	St. James, Minn.	Mar. 27
Apr. 17	West Virginia Adv. Mar. 27.	Mar. 27
Apr. 24	Topeka, Kan.	Mar. 27
Apr. 25	St. Louis, Mo.	Mar. 27
May 1	Duluth, Minn.	Mar. 20

INDUSTRIAL WORKS

Mar. 31	Louisville, Ky.	Mar. 13
Apr. 2	Morris Plains, N. J.	Mar. 13
Apr. 7	Point Grey, B. C.	Mar. 27
Apr. 7	Essondale, B. C.	Mar. 27
Apr. 15	Somerset, Pa.	Mar. 20
Apr. 17	Buffalo, N. Y. Adv. Mar. 20 and 27.	Mar. 27
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Mar. 28	North Plainfield (Watchung P. O.), N. J.	Mar. 20
Mar. 31	Wilson, N. C.	Mar. 13
Mar. 31	Columbus, O.	Mar. 20
Mar. 31	Hopkins, Minn.	Mar. 20
Mar. 31	Phila., Pa.	Mar. 27
Mar. 31	Detroit, Mich.	Mar. 27
Apr. 1	Duluth, Minn.	Feb. 7
Apr. 1	Atlantic City, N. J.	Feb. 7
Apr. 1	Brainerd, Minn.	Feb. 28
Apr. 1	Oshkosh, Wis.	Mar. 13
Apr. 1	Akron, O.	Mar. 13
Apr. 1	Emporia, Kan.	Mar. 20
Apr. 1	Memphis, Tenn.	Mar. 20
Apr. 1	Alpena, Mich.	Mar. 27
Apr. 1	Racine, Wis.	Mar. 27
Apr. 1	Canton, N. Y.	Mar. 27
Apr. 3	Paso Robles, Calif.	Mar. 20
Apr. 3	Marshall, Tex.	Mar. 20
Apr. 3	Detroit, Mich.	Mar. 27
Apr. 4	Flint, Mich.	Mar. 27
Apr. 4	Buffalo, N. Y.	Mar. 27
Apr. 4	Dolgeville, N. Y.	Mar. 27
Apr. 5	Lebanon, Ky.	Mar. 20
Apr. 5	Parma (Cleveland P. O.), O.	Mar. 27
Apr. 7	Whitewater, Wis.	Mar. 13
Apr. 8	New York, N. Y.	Mar. 13
Apr. 8	Brooklyn, N. Y.	Mar. 13
Apr. 8	Astoria (Long Island City P. O.), N. Y.	Mar. 13
Apr. 8	Brooklyn, N. Y.	Mar. 20
Apr. 8	Windber, Pa.	Mar. 27
Apr. 8	Minneapolis, Minn.	Mar. 27
Apr. 9	Beatrice, Neb.	Mar. 20
Apr. 9	Buffalo, N. Y.	Mar. 20
Apr. 9	Dunkirk, N. Y.	Mar. 27
Apr. 10	Le Roy, N. Y.	Mar. 27
Apr. 10	Steubenville, O.	Mar. 27
Apr. 15	Somerset, Pa.	Mar. 20
Apr. 15	Woodbury, N. J.	Mar. 27
Apr. 16	Denver, Colo.	Mar. 27
Apr. 19	New Orleans, La.	Mar. 27
May 1	Youngstown, O.	Feb. 7

FEDERAL GOVERNMENT WORK

Mar. 28	Dredging — Providence, R. I.	Feb. 28
Mar. 28	Plumbing System—Wash., D. C.	Mar. 13
Mar. 31	Fuel Oil Pump, etc.—Memphis, Tenn. Adv. Mar. 20 and 27.	Mar. 20
Apr. 1	Pumps, etc.—Tobyhanna, Pa.	Mar. 20
Apr. 2	Roads—Phoenix, Ariz.	Mar. 6
Apr. 4	Post Office—Orange, Tex.	Mar. 13
Apr. 4	Dredging—New York, N. Y.	Mar. 13
Apr. 7	Power Houses—Cincinnati, O. Adv. Mar. 20 and 27.	Mar. 20
Apr. 7	Oil Burning Furnaces — Memphis, Tenn. Adv. Mar. 27.	Mar. 27
Apr. 8	Cement—Louisville, Ky. Adv. Mar. 13 to 27.	Mar. 13
Apr. 12	Dredging — Providence, R. I. Adv. Mar. 13 to 27.	Mar. 13
Apr. 14	Dredging—New York, N. Y.	Mar. 27
Apr. 14	Sewers—Poplar, Mont.	Mar. 27
Apr. 14	Stone—Wilmington, Del.	Mar. 27
Apr. 15	Post Office — Hastings, Mich. Adv. Mar. 20 and 27.	Mar. 20
Apr. 18	Riprap—Detroit, Mich. Adv. Mar. 20 and 27.	Mar. 20
Apr. 19	Excavating—Wilmington, Del. Adv. Mar. 20 and 27.	Mar. 20
Apr. 22	Steel Gates — Florence, Ala. Adv. Mar. 13 to 27.	Mar. 13
Apr. 22	Post Office—Water Valley, Miss. Adv. Mar. 27.	Mar. 27
Apr. 23	Ammunition Depot—Puget Sound, Wash. Adv. Mar. 27.	Mar. 27
Apr. 25	Lock—Fords Ferry, Ky. Adv. Mar. 27.	Mar. 27
Apr. 29	Walls—Fords Ferry, Ky.	Mar. 27

UNCLASSIFIED

Apr. 1	Electric Light Line—North Carolina	Mar. 20
Apr. 1	Electric Light Line—North Carolina	Mar. 27
Apr. 2	Fire Alarm System—New York, N. Y.	Mar. 27
Apr. 2	Fire Alarm System—Phila., Pa.	Mar. 27
Apr. 8	Electric Light System — Phila., Pa. Adv. Mar. 27.	Mar. 27
Apr. 30	**Headworks—Wellington, New Zealand**	**Dec. 13**

MATERIAL AND EQUIPMENT

Mar. 28	Bituminous Material—Albany, N. Y. Adv. Mar. 20 and 27.	Mar. 20
Mar. 31	Cast Steel Castings, etc.—St. Louis, Mo.	Mar. 20
Mar. 31	Road Graders—St. Paul, Minn.	Mar. 27
Apr. 1	Pipe—Dallas, Tex.	Mar. 27
Apr. 1	Grader—Huron, S. D.	Mar. 27
Apr. 1	Scrapers, Graders, etc. — Washburn, N. D.	Mar. 27
Apr. 1	Road Oil, etc.—St. Paul, Minn.	Mar. 27
Apr. 2	Road Machines—Grand Forks, N. D.	Mar. 20
Apr. 2	Snow and Street Sweepers — Buffalo, N. Y.	Mar. 27
Apr. 2	Asphaltic Cement, etc. — St. George, N. Y.	Mar. 27
Apr. 3	Stone Crusher—Platteville, Wis.	Mar. 20
Apr. 3	Grader—Devils Lake, N. D.	Mar. 27
Apr 4	Excavator Skimmer—Buffalo, N. Y.	Mar. 27
Apr. 4	Lighting Standards—Cleveland, O.	Mar. 27
Apr. 7	Cement, etc.—Tyler, Tex.	Mar. 27
Apr. 7	Reinforcing Bars and Spirals —Minnesota	Mar. 20
May 15	Turbine — Prince Albert, Sask. Adv. Mar. 20 and 27.	Mar. 27
Apr. 16	Power House Equipment—Tacoma, Wash.	Mar. 13
Apr. 23	Electrical Equipment — Tacoma, Wash. Adv. Mar. 27.	Mar. 27

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Springfield — Bd. Water Comrs. takes bids about Apr. 1, additions to filtration plant, doubling capacity, at Little River, $500,000. Also plans to expend $4,-

Waterworks (Continued)

000,000 for expansion of Little River water supply service, incl. additional storage reservoir, probably additional pipeline from Provin Mountain to southern end of city, also pipe line from new filter works to Provin Mountain. These projects may not be completed for several years and will not be undertaken until filtration project is almost completed. H. M. King, supt.

N. Y., Clinton—Plans extending water supply. $50,000. G. R. Taylor, village pres.

N. Y., Medina—Voted $50,000 bonds, auxiliary waterwork development. C. H. Pettis, village pres. Noted Mar. 13.

N. Y., Munnsville—Voted $37,000 bonds water supply. W. D. Fryer, village pres.

N. Y., Vernon—Voted $28,000 bonds new water system. R. E. Spaulding, village pres.

N. Y., Waverly—Takes bids in April extending water supply. $54,000 bonds voted. E. Van Nostran, village pres.

Fla., Tampa—Election Apr. 22, $100,000 bonds, extending mains. R. D. Martin, city engr. Noted Jan. 3.

Miss., Magnolia — Election Mar. 25. $30,000 bonds waterworks and distribution system.

O., Columbus—See "Streets and Roads.'

O., Steubenville—Plans repairing water system, new boilers $50,000, piping and pumping plant $10,000, pumps $25,000, softening plant $20,000, rising main $5,000, modernizing filtration plant $10,000, supply main $30,000, repairs to sedimentation basin $20,000. J. N. Chester, Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.

Ind., Evansville—Takes bids about May 1, centrifugal pump, 15 m.g. capacity. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Ill., Niles Center—Takes bids about Mar. 31, waterworks project. $125,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Paxton—Having preliminary plans prepared waterworks and distribution system, 4- and 6-in. pipe. $30,000.

Wis., Fort Atkinson—Water, Light & Gas Comn. plans 2,000 lin.ft. 6 in. water pipe, 12 kva. statis condenser, one 5 ft. generator and 4 ft. carburetor. $6,000. W. D. Leonard, mgr.

Wis., Madison — Plans c.i. mains and connections in various streets. $69,000. L. A. Smith, supt. Engineer not selected.

Wis., Milwaukee—Had plans prepared 2 mi. 6, 8 and 12 in. c.i. mains in Fernwood Dist. $15,000. J. Schwada, City Hall, engr.

Wis., Racine—Takes bids about May 1, improving waterworks. $150,000. First unit of $10,000,000 project. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Kan., Reserve—Preparing plans waterworks. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, Mo., engrs.

Minn., Winona—Plans addition to pump station, air lift equipment and new reservoir. $220,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Neb., Chadron—Plans water purifying plant. $40,000. Engineer will be selected soon.

Neb., Pender—Apr. 1, to vote on $20,000 bonds, piping water into city from spring ½ mi. away.

Mo., Huntsville—Plans to obtain water supply from Moberly, will lay 12 in. mains between 2 cities, also 4, 6 and 8 in. distribution mains, here. To exceed $15,000.

Ark., Mena—Soon takes bids extending 4- and 6-in. c.i. distribution mains, also relaying pipe line connecting pump house with standpipe, etc. $25,000.

Tex., Beaumont—Making plans and takes bids in June 12 m.g. filtration plant, buildings, piping, etc. Burns & McDonnell Eng. Co., 402 Interstate Bldg., Kansas City, Mo., engrs.

Tex., Dallas—City retained J. C. Nagle and R. A. Thompson, consult. engrs., Dallas, to supervise construction impounding reservoir on Trinity River 26 mi. northwest of here. $5,000,000 bonds recently voted for increasing city water supply. Noted Mar. 20 under "Dams."

Tex., Floydada—Voted $50,000 bonds for sewerage system incl. disposal plant and $10,000 bonds for waterworks improvements. Gantt-Baker Co., 1st Natl. Bank Bldg., Oklahoma City, Okla., engrs. Noted Feb. 28.

Tex., Weatherford—Weatherford Water & Light Co. making plans 4 in. main extensions in east portion town. $25,000. Private plans.

Okla., Cushing — Voted $407,000 bonds new earth dam, pipe line, bank protection, spillways, filter plant, basins, pumping equipment and storage basins. Black & Veatch, Mutual Bldg., Kansas City Mo., engrs. Noted Mar. 13.

Okla., Ramona — Plans election $20,000 bonds waterworks and distribution system.

Ore., Veronia — Sold $60,000 bonds for water system. Engineer not selected.

Calif., Los Angeles—See "Unclassified."

Power Development — Quebec — Quebec Legislature approved additional expenditures for water power development. Additional $500,000 provided for further development of St. Maurice River, making total of $3,000,000. Additional $950,000 provided for development of power at Lake Kenogami, making total of $2,750,000.

Ont., London—Utilities Bd. having plans prepared extending 8 in. mains in Mahaffy subdivision, $35,000. Prices wanted on material and equipment. E. V. Buchanan, Hydro Office Bldg., engr.

Ont., Sandwich—Plans 10,000 ft. 8 in. c.i. mains in Tecumseh Rd. and Partington Ave. $30,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

BIDS DESIRED

N. Y., Buffalo—Apr. 21, by Commissioner Pub. Wks., Municipal Bldg., shaft, screen well and conduits in connection with filter plant. G. C. Andrews, engr. Filtration Div., Bureau Water. Fuller & McClintock, 170 Bway., New York City, consult. engrs.; adv. E. N.-R. Mar. 27.

N. Y., Jamestown—Apr. 15, 2 m.g. concrete reservoir. L. T. Klauder, Bankers Trust Bldg., Phila., Pa., consult. engr.

N. Y., Port Washington—Apr. 9, by Bd. Water Comrs., pumping unit, tank, tower, well drilling and building construction. N. S. Hill, Jr., 112 East 19th St., New York, consult. engr.; adv. E. N.-R. Mar. 27.

N. J., Roseland—Mar. 28, at Band Assn. Hall, Freeman St., 5,000 ft. more or less 6 in. c.i. mains in Eagle Rock Ave., etc., for boro.

Pa., Downington — Apr. 14, by Boro Council, furnishing 633 tons 6, 8, 10 and 12 in. Class B, bell and spigot c.i. pipe and 7 tons c.i. specials. W. Easby, Jr., Commonwealth Trust Bldg., Phila., engr.; adv. E. N.-R. Mar. 27.

O., Cleveland—Apr. 2, by Cuyahoga Co. 13,000 ft. 6 and 8 in. c.i. mains, Impvt. 550 of Co. Sewer Dist. 5. R. F. MacDowell, Court House, engr.

Ill., Metropolis—Apr. 7, by R. Finney, city clk., 200,000 gal. concrete reservoir, brick and concrete building, 158 ft. concrete chimney, two 300 hp. water tube boilers, coal elevator and conveyor, 100,000 gal. tank on tower, 250 kva. engine and generator, 6-panel switchboard, 500 kw. generator unit condensor, heater and boiler feed pump, 700 g.p.m, heavy duty pump, 1,000 g.p.m., deep well, 23,500 ft. 4- to 10-in. pipe, etc. $140,000. W. A. Fuller Co., Railway Exch. Bldg., St. Louis, Mo., engrs. Noted Mar. 20.

Wis., Appleton—Apr. 1, by Water Comn., F. Morris, secy., 8 tons caulking lead and 25,000 lb. ⅝ in. extra strong lead pipe.

Wis., Minocqua — Mar. 31, by Village Bd., subterranean water supply, 350 g.p.m., to exceed $25,000.

Wis., White Fish Bay—Mar. 31, by W. Volkmann, village clk., 2½ mi. 6- and 8-in. c.i. mains. $20,000. T. F. Buckley, Village Hall, engr.

Ont., Grimsby—Apr. 5, by T. Allan, clk. North Grimsby Twp., furnishing 5,566 ft. 6 in. c.i. pipe with specials, 6,332 ft. 3 in. w.i. pipe and specials, valves, hydrants, also trenching, laying and backfilling above mentioned pipe. $25,000. F. N. Rutherford, St. Catharines, engr.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co., 17,000 ft. 6 and 8 in. c.i. mains, Impvt. 42, from J. B. Lynn, Caxton Bldg., $69,040. Noted Mar. 6.

Ore., Portland—For 9,000 water meters for house connections, from Gamon Meter Co., 282 South St., Newark, N. J., $64,800.

CONTRACTS AWARDED

N. Y., Lyndonville—New water supply system, to Blair & Ingham, Hilton, $90,000.

Stadium — Lewisburg, Pa. — Carrere, Shreve & Lamb, archts., 52 Vanderbilt Ave., New York City, rein.-con. stadium, for Bucknell University, to T. J. Foley Co., 429 3rd Ave., Pittsburgh, $225,000.

N. J., Wanaque—Boro Council, water distribution system and reservoir, to W. G. Fritz, 258 Valley Rd., West Orange. Noted Feb. 14.

Ky., Danville—City and Hydro-Electric Co., M. E. Taylor Bldg., Louisville, rebuilding municipal waterplant, to Cope & Fisher, Decatur, Ill. $125,000.

O., Cincinnati—C. F. Hornberger, dir. Pub. Serv., 10,000 ft. 12 in. c.i. mains in Winton and Gray Rds., etc., to Crumley, Jones & Crumley, 2301 Concord St. $45,276. Noted Feb. 28.

O., Cincinnati—Laying 4, 6, 8, 10 and 12 in. c.i. mains, to M. F. Quill & Son. 409 Gerke Bldg., $64,562. Engrs. est. $60,000.

O., Columbus—See "Streets and Roads."

Mich., Berkley—Furnishing and laying 9,870 ft. 12 in., 6,930 ft. 10 in., 41,995 ft. 8 in., 2,350 ft. 6 in. c.i. pipe, gates, hydrants, etc., to Coleman & Harding, 206 East Grand River Ave., Detroit, $170,865. Noted Mar. 6.

Wis., Manitowoc—For 8,000 ft. 6 in. and 1,500 8 in. c.i. pipe and fittings, to Natl. Cast Iron Pipe Co., 122 South Michigan Ave., Chicago.

Wis., Milwaukee — Power piping for Riverside Pumping Station, to Industrial Heating & Eng. Co., 143 Oneida St., $29,800. Noted Mar. 20.

Wis., Shorewood (Milwaukee P. O.)—For c.i. mains in 11 streets, to Wenzel & Henoch Co., 498 27th St., 2,699 ft. 6 in. $2.87 to $3.39, 2,680 ft. 8 in. $3.27 to $3.79; to Dean Constr. Co., 482 East North Ave., 1,272 ft. 6 in. $2.63 to $3.45, 2,736 ft. 12 in. $5.60 and 577 ft. 16 in. $8; to J. B. Forrestal, 256 15th St., 711 ft. 6 in. $2.80. Noted Mar. 13.

Kan., Arkansas City — Waterworks improvements, incl. 20,055 ft. 4 in. Class B pipe, 7,337 lbs. specials, 2 wells, etc., to L. A. Galleciez, End, Okla., $21,254. Noted Mar. 6.

Kan., Kansas City—Motor to operate gate valves in river pump houses, to Ludlow Valve Mfg. Co., 1416 R. A. Long Bldg., Kansas City, Mo., $12,799. Noted Feb. 14.

Neb., Norfolk—S. R. McFarland, city clk., constructing 10,162 ft., 4 in. mains, in Dists. 73-77 inclusive, to Donaldson Constr. Co., Norfolk, $15,027. Noted Mar. 13.

Mo., Festus — Water works plant and distribution system, to McEachin & McEachin, Southern Trust Bldg., Little Rock, Ark., $73,403. Noted Mar. 6 under "Sewers."

Mo., Thayer — Reservoir, piling, valves and hydrants, to W. F. Plummer, 434 East Elm St., Springfield, $44,000. Noted Feb. 7.

Okla., Nowata—Filter, motor driven centrifugal pumps, storage reservoir and main extensions, to Sherman Machine Co., 18 East Main S., Oklahoma City, $68,251. Noted Feb. 28

Okla., Oklahoma City—Main extensions, dam, gates, bank protection and drain lines, to Smith Bros. Inc., Dallas, Tex., and W. E. Callahan Constr. Co., Great Southern Life Bldg., Dallas, Tex. Total $793,675. Noted Mar. 13.

Okla., Woodward — Four pumps, 1,275 g.p.m. against 200 ft. head, 1,250 g.p.m. against 175 ft. head, 1,275 g.p.m. against 175 ft. head and 1,325 g.p.m. against 190 ft. head, to Layne & Bowler, Chelsea Ave., Memphis, Tenn., $11,700. Noted Mar. 6.

Brazil—Forteleaza, Clara—General contract 3 m.g. filter plant here, to C. A. D. Bayley, Interstate Bank Bldg., New Orleans, La. Cost $1,500,000. Equipment to International Filter Co., 333 West 25th Pl., Chicago, Ill., $27,000.

Sewers

PROPOSED WORK

Fla., Tampa—Apr. 22, $750,000 bonds, extending sanitary and storm sewers. R. D. Martin, city engr. Noted Jan. 3.

La., Lake Providence—Apr. 1, $85,000 bonds for storm and sanitary sewers.

O., Akron—Plans storm sewers in Massillon and Ira Aves. $100,000.

O., Columbus—See "Streets and Roads."

Ind., Gary—Plans sewage settling tanks, $300,000; sewage pumping station $210,000; storm sewers $250,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Mich., Dearborn—Having plans prepared 9,247 ft. 12-36 in. vitr. crock, concrete and brick storm water sewers. Hubbell, Hartgering & Roth, 2348 Penobscot Bldg., Detroit, engrs.

Mich., Detroit—Having plans prepared experimental sewage disposal plant (sedimentation process and screens) at outlet of Lonyo Rd. into Baby Creek. $80,000. G. Jerome, city engr.

Sewers (Continued)

Mich., Detroit — Dept. Pub. Wks., had plans prepared 4,289 ft. of 12 to 20 in. vitr. crock storm sewer in Nottingham Ave., 3,227 ft. 12-18 in. in Audubon Ave., 3,030 ft. 12-18 in. Lateral 3977, 1,348 ft. 10 and 15 in. Lateral 4088, 4,920 ft. 12-20 in. Lateral 4094, 1,584 ft. 10 and 12 in. Lateral 4096, and 849 ft. 12-20 in. Lateral 4099. G. Jerome, city engr.

Mich., Grand Rapids—Takes bids about Apr. 15, 7 ft. storm sewer in Fulton St. $45,000. M. P. Adams, Grand Rapids, engr.

Ill., Niles Center—Takes bids about Apr. 14, sewer in Main St. $500,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs. Noted Dec. 13.

Ill., Park Ridge—Plans new sewerage system. $100,000. Consoer Eng. Co., 140 South Dearborn St., Chicago, engrs.

Ill., Wheaton—Plans sanitary sewers and disposal plant. $300,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Wis., Kenosha—Plans sewers in outlying territory. $25,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Wis., New London—Had plans prepared 3,000 ft. 18- to 56-in. vitr. storm and sanitary sewer in Oshkosh St., to exceed $25,000. H. R. Albert, Court House, Green Bay, engr.

Ia., Des Moines—Soon takes bids Beaver Ave. Sewer System, 5 mi. pipe line and pumping plant. $110,000. K. C. Kostberg, city engr.

Kan., Kansas City—Plans to purchase 18 flood sewer pumps. $180,000. G. T. Darby, City Hall, purch. agt. Noted Nov. 8.

Neb., Louisville—Plans sewerage system. $40,000. Prince-Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs.

Mo., Sullivan—Election Apr. 1 $45,000 bonds sanitary sewers and disposal plant. Alexander Eng. Co., 517 Woodruff Bldg., Springfield, engrs. Noted Feb. 7.

Tex., Houston—Election Apr. 26, $250,000 bonds for storm sewers, $200,000 bonds sanitary sewers. J. C. McVea, city engr.

Okla., Cushing—Voted $98,000 bonds outfall sewer and disposal plant. Black & Veatch, Mutual Bldg., Kansas City, Mo., engrs. Noted Mar. 13.

Okla., Lawton—Defeated $85,000 bonds outfall sewer and disposal plant. W. V. Montin, city engr. Noted Mar. 13.

Colo., Denver—Plans sewers in outlying districts, to exceed $25,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Calif., Burbank—Having plans prepared sewerage system, incl. disposal plant by farm method. To exceed $25,000. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, engrs.

Calif., San Anselmo—See "Streets and Roads."

BIDS DESIRED

Mass., Longmeadow—Apr. 23, at Town Hall, Bark Haul Rd. Outfall to Connecticut River. C. Euson, chn. Water and Sewer Comrs.; adv. E. N.-R. Mar. 27.

Pa., Mercer—Apr. 11, by Boro Council, 2 sewage treatment plants and 1,000 ft. 10 in. sewers. $25,000. J. M. Rice, Oliver Bldg., Pittsburgh, consult. engr. Noted Jan. 3.

Pa., Upper Darby (branch Phila. P. O.) —Apr. 1, by Comn. Upper Darby Twp., Long Lane and Garret Rd., constructing Cobbs St. outfall sewer from 69th to 60th Sts., 17,400 ft. long, in 4 sections. A. F. Damon, Municipal Bldg., chn. Bureau Pub. Wks.

O., Akron—Apr. 10, by Bd. Control, ¾ mi. Wooster Ave. trunk sewer, also Willow Run trunk sewer, (9½ ft. diam). $200,000.

O., Cleveland—Apr. 2, by Cuyahoga Co., 22,000 ft. 8- to 48-in. vitr. sewers in Miles Rd. Impvt. 501, Sewer Dist. 5. R. F. MacDowell, Court House, engr.

O., Cleveland—See "Streets and Roads."

O., Euclid—Apr. 7, storm and sanitary sewers. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs. Noted Mar. 13.

O., Marion—Apr. 15, at office of O. A. Benedict, dir. Pub. Serv., main sanitary sewer, Contr. C-B and Contr. D. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.; adv. E. N.-R. Mar. 27.

O., New Philadelphia — Apr. 3, by Director Pub. Serv., 3,500 ft. sanitary sewers and 3,800 ft. 6 in. lateral sewers in Bway. and High St., 10-16 ft. depth. $30,000. G. E. Arnold, city engr.

Ind., South Bend—Apr. 8, by Dept. Pub. Wks., River Park Sewer System 3. $375,000; adv. E. N.-R. Mar. 27.

Mich., Detroit—Mar. 31, by Dept. Pub. Wks., Six Mile Rd. Sewer, Sect. 9, 1,303 ft. 6 ft. 9 in. cylinder, 1,321 ft. 6 ft. 6 in., 1,320 ft. 6 ft. 3 in., and 1,310 ft. 5 ft. 6 in. cylinder in tunnel, brick or monolithic concrete; also Seven Mile Rd. Sewer, Sect. 9, 2,860 ft. 5 ft. 6 in. and 2,408 ft. 5 ft. brick cylinder, 80 ft. 24 in. and 120 ft. 20 in. crock, in tunnel. G. Jerome, City Hall, engr.

Ill., South Chicago Heights (Chicago Heights P. O.)—Apr. 10, by Bd. Local Impvts., at office of E. C. Hansen, village clk., 2808 Jackson Ave., vitr. tile sanitary sewers. A. L. Fox, Commercial Bank Bldg., Chicago Heights, engr.; adv. E. N.-R. Mar. 27.

Wis., Beloit—Apr. 5, by G. E. Heebink, city engr., 20,350 ft. 8- to 24-in. sewers in various streets.

Ia., Oelwein—See "Streets and Roads."

Wyo., Cheyenne—Apr. 3, at office C. R. Bailey, city clk., 14,360 ft. 8 in. and 682 ft. 10 in. vitr. sanitary sewers. C. D. Shaver, city engr.

BIDS RECEIVED

Conn., Hartford—Bd. Contract & Supply, Municipal Bldg., Mar 18, Granby St. system, Sect. A, 734 ft. 36-in. sewer and 625 ft. tunnel, from Louis Jacques Constr. Co., 59 Carlton Ave., Bridgeport, $40,553; Sect. B, 3,205 ft. 18- and. 24-in. sewer, trunk line to Burnham St., from Berardino Silvestri, 249 Otis St., $36,182; Sect. C, branch sewer in streets east of Granby St., etc., from J. E. Driscoll, 499 Prospect St., Torrington, $27,541. Noted Mar. 6.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Mar. 19, from Nazzarro & Querriero, sewers in Bedford Ave. 82% engrs. est. ($11,561), 53rd St. 82% ($7,422), West 9th St. 83% ($6,946), New York Ave. 86% ($5,498), Quenton Rd. 86.49% ($2,678), 12th Ave. 96% ($1,502); C. F. Vacharas, 645 40th St., West 9th St. 88.7% ($5,229), Beadel St. 86% ($450), Albany Ave. 91% ($3,539), 82nd St. 87% ($2,521), 4th Ave. 107% ($1,869); Tomassetti & Co., Inc., 1133 60th St., Montgomery St. 95% ($4,139), Riverdale Ave. 99% ($15,257); Manmill Constr. Co., 2035 Douglass St., Riverdale Ave. 89% ($1.723); Tozzi Contg. Co., in 7th Ave. 88.74% ($1,650); J. F. Colgan Co., in East 95th St. 82% ($74,750). Noted Mar. 13.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, Mar. 19, temporary sewer in Price St., etc., from P. F. Connelly Co., $42,618. Noted Mar. 13.

O., Cleveland—Cuyahoga Co., Mar. 12, 29,750 ft. 8- to 36-in. vitr. sewers, Impvt. 38, from Salem & George Bros., Erie Bldg., $162,820. Noted Mar. 6.

O., East Cleveland (Cleveland P. O.)—For (a) segmental block (b) rein.-con. sewers in Hayden Ave., from Manson Co., Engineers Bldg., Cleveland, (a) $110,000; River Constr. Co., 2402 Mapleside Rd., Cleveland, (b) $115,000. Noted Mar. 6.

Ill., Chicago—For Elmwood Park outfall sewer, from Amer. Sewer & Drain Constr. Co., Kenilworth St. and Central Park Ave., $314,755.

CONTRACTS AWARDED

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Rosedale Ave., to Golfin Realty Corp., $46,931; in Dewey and Wilson Aves., to C. W. MacDonald, $63,477 and $123,470 respectively; in Cauldwell Ave., to A. Gregorio & Co., $17,582; in Leland Ave., to Hanratty Contg. Corp., $21,395. Noted Mar. 6.

O., Columbus—See "Streets and Roads."

O., Lima—Intercepting sewer, Contr. B, to Haddad-Kairal Constr. Co., Cleveland, $315,912. Noted Feb. 7.

O., Toledo—Lucas Co. 9,405 ft. 6- to 15-in. v.s.p. in Sewer 84, Old Orchards Addition, 2nd extension, to Peters Bros., Spitzer Bldg., $24,839, engrs. est. $25,310; 15,298 ft. 6- to 15-in. v.s.p. in Sewer 89, Broadmoor and Central Gardens, to J. N. Bick, Nasby Bldg., $34,699, engrs. est. $35,790. Noted Feb. 21.

Ia., Oelwein—Imhoff tanks, sludge beds, pumping station and equipment, to J. A. Dunkel Co., Webster City, $39,336. Noted Feb. 28.

Neb., Benkleman—Vitr. clay sewers, to C. L. Hanson, Charles City, Ia., $35,910.

Mo., Festus—Sewerage system and disposal plant, to McEachin & McEachin, Southern Trust Bldg., Little Rock, Ark., $66.247. Noted Mar. 6.

Tex., Kerrville—Sewer system and disposal plant, to Elder Constr. Co., 235 Moore Bldg., San Antonio, $78,000.

Waste Disposal

PROPOSED WORK

Fla., Tampa—Election Apr. 22, $30,000 bonds, garbage incinerator. R. D. Martin, city engr. Noted Jan. 3.

Bridges

PROPOSED WORK

Fla., Tampa—Apr. 22, $250,000 bonds, for bridge on Fortune St., $325,000 for bridge on Carew St. and $325,000 for bridge on Cass St. R. D. Martin, city engr.

Fla., Tampa—See "Streets and Roads."

Ky., Dayton—Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond, Va., plans steel bridge, here, 400 tons structural steel. To exceed $50,000. H. Frazier, ch. engr.

O., Old Fort—Seneca Co. (Tiffin) plans steel bridge over Sandusky River, on Tiffin-Fremont Rd., here. $100,000.

O., Rocky River—City, Cuyahoga Co. (Cleveland), and New York, Chicago & St. Louis R.R., Prospect Ave. and East 2nd St., Cleveland, having plans prepared bridge, steel superstructure, concrete substructure, 72 ft. wide, over Blount Rd., here. $262,600. E. E. Hart, Columbia Bldg., Cleveland, engr.

Wis., Crandon—See "Streets and Roads."

Neb., Beaver City — Furnas Co., c/o County Clerk, takes bids in April one 20 x 70 ft. pony truss bridge on Beaver City-Arapahoe Rd., Federal Aid Project 30, incl. 66 cu.yd. mass and 27.6 cu.yd. arch concrete, 7,328 lb. reinforcing bars, 1,658 lb. structural steel, etc. $40,000. R. L. Cochran, Lincoln, state engr.

Tex., Claredon—Donley Co. making plans 312 ft. bridge across Salt Fork of Brazos River, one 70 ft. steel truss and eight 30 ft. I beam spans. $25,000. C. L. Hasie, Box 168, Memphis, engr.

Tex., La Grange—Fayette Co. making plans 1,250 ft. bridge across Brazos River on State Highway 3-B, four 184 ft. steel truss and fourteen 37 ft. concrete girder spans. $275,000. R. E. Shiller, co. engr.

Okla., Ralston — Pawnee Co., Pawnee, election Apr. 8, $200,000 bonds, 3 steel truss bridges across Arkansas River, here. W. C. Burnham, Capitol Bldg., Oklahoma City, engr.

Wash., Seattle—Voted $1,500,000 bonds for West Spokane St. Bridge and $500,000 for Montlake-Stadium Bridge. J. D. Blackwell, city engr. Noted Jan. 31.

Calif., Los Angeles—City, Los Angeles Co., Union Pacific Ry., 610 South Main St. and Atchison, Topeka and Santa Fe Ry., Kerckhoff Bldg., had plans approved by State R.R. Comn., bridge across Los Angeles River at 9th St. $855,425. This is first of 6 new bridges, 9th, Aliso, Macy, 1st, 4th and 7th Sts., to be approved by the Comn. Macy St. bridge will be considered May 20. Noted July 12.

Calif., Stockton—San Joaquin Co. having preliminary plans prepared bridge near Disappointment Slough. $35,000. F. E. Quail, co. surv.

Que., Sherbrooke—Canadian Pacific Ry., Windsor St., Montreal, submitted plans to City Council for enlarging Galt St. viaduct. $28,000.

BIDS DESIRED

N. Y., Le Roy—Apr. 11, by Town Bd., rein.-con. bridge over Oatka Creek. $80,000. C. A. Chapman, town clk. Noted Dec. 27.

S. C., Greenwood—Apr. 10, by Greenwood Co. Hy. Comn., rein.-con. and steel bridge over Saluda River, between Laurens and Greenwood Counties on State Route 7, Federal Aid Project 233, 993 ft. rein.-con. and steel bridge of 1,200 ft., steel span and 34 rein.-con. spans containing 1,660 cu.yd. dry and 629.6 cu.yd. wet excav., 1,719 cu.yd. concrete, 235,000 lb. structural and 236,760 lb. reinforcing steel, 1,980 sq.yd. paving, etc. C. H. Moorefield, 1626 Main St., Columbia, engrs.

Ga., Athens—Apr. 1, by Comrs. Clarke Co., 150 ft. concrete bridge, 34 ft. wide. To exceed $25,000. J. W. Barnet, city engr.

Fla., Fort Myers — See "Streets and Roads."

Tennessee—Apr. 4, by Dept. Hys & Pub. Wks., Nashville, four 40 ft. rein.-con. slab spans and piers over Sulphur Fork Creek, one 40 ft. rein.-con. span over Wartrace Creek, State Aid Project 158, Robertson Co.; four 40 ft. rein.-con. spans, concrete

Bridges (Continued)

floor, piers and abutments at Sta. 96-30, Federal Aid Project 82, between Clinton and Knox Co. line, Anderson Co. J. G. Creveling, comr.

O., Akron—Apr. 9, by S. Porter, clk. Summit Co., 60 ft. concrete beam bridge, 20 ft., on Richfield-Hudson Rd., $12,000; 66 ft. steel girder bridge, 22 ft., on Cleveland-East Liverpool Rd., $14,600; 70 ft. concrete arch bridge, 20 ft., on Cleveland-East Liverpool Rd., $14,000; 60 ft. span steel girder bridge, 22 ft. roadway, on Triplett Rd. 44, $18,320. J. Weaver, Court House, engr.

O., Milford—Apr. 18, by Hamilton Co., Court House, Cincinnati, substructure for bridge, incl. 25,000 lb. reinforcing, 1,040 cu.yd. concrete, 1,000 lin.ft. concrete piling, 1,766 sq.yd. concrete paving, etc., $28,300, also new bridge on old site, superstructure: 260 ft. single span steel truss bridge, 30 ft. clear roadway, here, $51,700. E. A. Gast, Court House, Cincinnati, engr.

Ill., East St. Louis—Apr. 22, by Bd. Trustees East Side Levee and Sanitary Dist. 225-A, Collinsville Ave., steel bridge over Prairie du Pont diversion channel, two 101½ ft. and one 169-ft. spans, concrete piers and abutments. M. D. Baker, pres.

Ill., Urbana—See "Streets and Roads."

Kan., Osborne—Apr. 9, by E. E. Clarke, engr., Osborne, constructing Hart Hill Bridge, 120 ft. steel truss span, 18 ft. roadway, 352 yd. cement, 98,384 lb. structural steel, 2,772 ft. piling, Federal Aid Project 188, Sect. B, Osborne Co.

Neb., Grand Island—Apr. 1, by Hall Co., c/o J. E. Lyle, 4 bridges on Federal Aid Project 215, Hastings-Grand Island Rd., incl. thirteen 80 ft. low riveted trusses, 18 ft. roadways. $200,000 or more. R. L. Cochran, Lincoln, state engr.

Arkansas—Apr. 15, by Bd. Comrs. Pulaski, Saline and Garland Counties, at office State Hy. Comn., Little Rock, steel bridges on Little Rock Springs Highway, 132,000 lb. structural steel in I-beam bridges and 42,285 lb. in truss bridges, 141.63 cu.yd. concrete, 29,015 reinforcing in bridge floor. Two substructures previously awarded. A. M. Lund, Southern Trust Bldg., Little Rock, engr.

Tex., Decatur—See "Streets and Roads."

New Mexico—See "Streets and Roads."

Nevada—Apr. 9, by Dirs. Dept. Highways, Carson City, 882 ft. timber trestle bridge over Virgin River, near Bunkerville, Clark Co., Route 6, Sect. H, incl. 7,740 lin.ft. treated timber piles, 190,600 ft. timber, 3,493 sq.yd. asphaltic wearing surface, etc. G. W. Borden, state highway engr.

Calif., Alton—Apr. 7, by State Highway Comn., Sacramento, bridge across Van Duzen River, near here, (I-Hum-I-F), three 163 ft. rein.-con. arch spans and eight 30 ft. rein.-con. girder spans, incl. 2,975 cu.yd. concrete, 2,200 cu.yd. excav., 3,500 c.w.t. reinforcing, 650 lin.ft. rein.-con. piles. R. M. Morton, state highway engr.

Calif., Williams—See "Excavation, Drainage, Irrigation."

BIDS RECEIVED

Me., Sullivan—State Hy. Comn., Augusta, Mar. 19, superstructure for bridge over Taunton River between here and Hancock, four 190½ ft. spans and one 209 ft. drawspan, from Amer. Bridge Co., 30 Church St., New York City, $127,622. Noted Feb. 21.

Connecticut—State Hy. Dept., Hartford, Mar. 17, bridge over Patchogue River at Westbrook, from Holbrook Co., Westbrook, steel superstructure and concrete deck $20,580, substructure, plain concrete, $13,593. Noted Mar. 13, under "Streets and Roads."

Illinois—Bd. Pub. Wks. and Buildings, Div. of Highways, Springfield, Mar. 21, 1 girder and 3 slabs on Route 12, Sect. 2B, Lawrence Co., from Acme Engineers, Decatur, $13,723; 2 girders on Route 12-3B, Lawrence Co., from O. B. Baird & Sons, Summer, $13,223; 1 slab and 1 girder on Route 2-54B, DeWitt Co., from Harrison Bridge & Constr. Co., Decatur, $11,517. Noted Mar. 13.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, bridge over Patchogue River at Westbrook, to Holbrook Co., Westbrook, steel superstructure and concrete deck $20,580, substructure plain concrete, $13,593. Noted Mar. 13.

Pa., Phila.—Delaware River Bridge Joint Comn., Room 806 Widener Bldg., constructing cable bands, suspenders and hand ropes, Contr. 13, to Keystone State Constr. Co., 210 South 13th St., $404,850, suspended structure, Contr. 14, to Amer. Bridge Co., Widener Bldg., $2,888,000. Noted Feb. 21.

S. C., Spartanburg—Southern R.R. System, 13th St. and Pennsylvania Ave., Wash., D. C., 115 ft. concrete bridge over tracks, here, to Von Glaher Constr. Co., Spartanburg, $24,000.

Fla., West Palm Beach—Palm Beach Co., double leaf deck plate girder bascule draw span, two deck plate girder approach spans and substructions over Palm Beach Canal on Military Trail at Boynton, to D. E. O'Hara, West Palm Beach, $24,635; complete wood pile trestle, steel swing draw span bridge, over Lake Worth at Lantana, to Lantana Finance Corp., Lantana, $15,500. Noted Jan. 10.

Alabama—State Hy. Dept., Montgomery, 802.5 ft. bridge, 5 steel spans, to Gould Constr. Co., Independent Life Insurance Bldg., Nashville, Tenn., $78,385. Noted Feb. 28.

Miss., Greenwood—Le Flore Co., bridge across Yazoo River, to Riley & Bailey, Intl. Life Bldg., St. Louis, Mo., $186,224. Noted Feb. 21.

Miss., Iuka—See "Streets and Roads."

Miss., Starkville—See "Streets and Roads."

Ohio—See "Streets and Roads."

O., Huron—Wheeling & Lake Erie R.R., Huron-6th Bldg., Cleveland, steel for steel and plate girder bridge, Van Rennselaer St., here, to McClintic Marshall Co., Oliver Bldg., Pittsburgh. Engrs. est. $25,000.

Illinois—Following are contracts awarded by Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, from Jan. 1 to Mar. 15: 2 slabs on Route 12, Sect. 12B, Clay Co., to Barker & Lively, Oblong, $6,885; 3 slabs and 1 substructure for steel bridge on Route 2, Sect. 74B, Lee Co., to J. R. Stevens, Monmouth, $24,167; 2 girders, on Route 36, Sect. 18B, Pike Co., to C. T. Laird, Pittsfield, $13,351; 1 girder on Route 2, Sect. 20B, Fayette and Shelby Counties, to L. C. Kesler, Herrick, $7,308; 1 steel superstructure on Route 3, Sect. 26C, Mercer Co., to St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., $7,248. Noted Nov. 29.

Minn., St. Paul—Ramsey Co., bridge over Mississippi River on Robert St., 8 arch spans, 72 to 244 ft. long, total length about 1,086 ft. with 449 ft. approaches, 50 ft. roadway, 2 sidewalks, incl. paving between 3rd and Fillmore Sts., to Fegles Constr. Co., 706 1st Ave. N., Minneapolis, $1,621,310. Noted Mar. 13.

Kan., Concordia—Cloud Co., three 50 ft. span steel girder bridge known as Elm Creek Bridge No. 1, near Ames, to Pinnell & Medis, 1027 Clay St., Topeka, $25,133. Noted Feb. 21.

Kan., Topeka—See "Streets and Roads."

Wash., Everson—Whatcom Co. (Bellingham), steel bridge over Nooksack River, here, to F. L. Cramer, Bellingham, $35,000. Engrs. est. $36,000.

Que., St. Anne de Bellevue—A. Galipeault, minister Dept. Pub. Wks., Quebec, bridge between here and Perrot Island, superstructure to Dominion Bridge Co., Lachine, $123,500, substructure and approaches to Dufresne Constr. Co., 436 Pie IX Ave., Montreal, $294,492. Noted Jan. 31.

Dams

PROPOSED WORK

Quebec—Quebec Streams Comn., Montreal, takes bids in April, storage dam at outlet of Lac Sorcier, 30 mi. north of St. Paulin, to form 3,903,000,000 cu.ft. storage reservoir, Algonquin Power Co. plans 20,000 hp. hydro electric plant at St. Paulin.

Railways

PROPOSED WORK

New York—New York Central R.R., Grand Central Terminal, New York City, having surveys made cut-off from Selkirk to South Schenectady, double tracks, junction at New Scotland. G. W. Kittredge, ch. engr.

BIDS DESIRED

New York—Bay Pond, Inc., Utica, taking bids 10 mi. standard guage railroad in Adirondack Mountains to connect Bay Pond and New York Central R.R. To exceed $75,000. Address J. H. McDonald, Utica, vice pres. and genl. mgr.

BIDS RECEIVED

Calif., San Diego—See "Unclassified under Pier."

CONTRACTS AWARDED

British Columbia—British Columbia Electric Ry., 425 Carroll St., Vancouver, clearing right of way and constructing 5 mi. logging railroad to site of new Alousette Lake power house and dam, to J. W. Stewart & Barber, 739 Hastings St. W., Vancouver, $150,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Mass., Holyoke—Holyoke Water Power Co. plans dredging channel along west bank of Connecticut River, from power plant to point near Boston & Main R.R. bridge at Riverside. Deposits taken from river bed will be used to build up portion of river bank.

Neb., Norfolk—Soon takes bids 80,000 cu.yd. drag line excav. $25,000. H. H. Tracy, city engr.

BIDS DESIRED

Miss., Vicksburg—Apr. 3, by W. G. Paston, pres. Warren Co., Levee Dist., dredging Muddy Bayou, digging channel through old bayou 1 mi. long, from Eagle Lake to Steele's Bayou, if done dragline bottom to be 10 ft. wide with 10 ft. berm, 65,000 cu. yd., if done floater dredge bottom 13 ft. wide and side slopes 1¾ to 1, 55,000 cu.yd. J. S. Allen, Greenville, engr.

Ark., Jonesboro—Apr. 12, by Comrs. D. D. 27, at office Cobb & Lee, Jonesboro, ditches, incl. 365,569 cu.yd. excav., in Craighead Co. J. F. Price, secy. Drainage Bd.

Calif., Oroville—Apr. 5, by W. J. Monro, secy. Oroville-Wyandotte Irrigation Dist., 4,000 lin.ft. riveted slip joint pipe and fittings.

Calif., Williams—Dirs. Williams Irrigation Dist. taking bids 13 mile canal to connect with Glenn-Colusa Irrigation system, incl. bridges, siphons, checks, gates, headwalls, etc. F. H. Tibbetts, Alaska Commercial Bldg., San Francisco, consult. engr. Noted Jan. 17.

BIDS RECEIVED

Wis., Milwaukee—Dredging rivers, etc., 116,000 cu.yd., from Great Lakes Dredge & Dock Co., 216 West Water St., $0.439 per cu.yd. Noted Mar. 13.

CONTRACTS AWARDED

N. Y., Glens Falls—R. K. Fuller, comr. Canals & Waterways, Albany, Mar. 11, repairing Glens Falls, Feeder-Champlain, here, Contr. M-1, to W. M. Bronk, Hudson Falls, $24,477. Noted Feb. 14.

N. J., Jersey City—Mosquito Extermination Comn., Bergen and Sip Aves., new drainage ditches on salt marsh meadows situate, lying and being within Hudson Co., to J. D. Manahan, Englewood, cleaning clear meadows $0.0325 per lin. ft., cleaning stump meadows $0.12, cleaning old ditches $0.045. Noted Feb. 28.

O., Cleveland—For 170,000 yd. dredging in Cuyahoga River, to Great Lakes Dredge & Dock Co., Williamson Bldg., $61,000. Noted Mar. 20.

Mo., Gallatin—South Daviess Co. D. D., 2,200,000 cu.yd. main ditch, 428,000 cu.yd. laterals and cut-off ditches and 1,400 cu. yd. embankment, to L. E. Sternberg, Creston, Ia., $180,903. Noted Mar. 6.

Streets and Roads

PROPOSED WORK

Mass., Holyoke—Plans to issue $200,000 bonds for permanent roads.

N. Y., Dundee—Voted $25,000 bonds paving various streets. C. Anderson, village pres.

N. Y., Fairport—R. S. Fuller, comr. Canals & Waterways, Albany, received no bids Mar. 11, widening roadway of West Ave. approach on lift bridge at Main St., here, Contr. 216. Noted Feb. 14.

N. Y., Ilion—Bd. Village Trustees making plans paving Railroad Ave. $25,000. A. Wood, village engr.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., rejected bids Mar. 13, grading, curbing, laying sidewalks and crosswalks on Worthen St. Noted Mar. 20.

N. Y., New York Mills—Voted $100,000 bonds concrete paving Main St. R. J. Healey, village pres.

N. Y., Yorkville—Voted $60,000 bonds paving Inman Pl., Oatley, Coventry, Bunker and Trinity Aves. P. Scheidlman, village pres.

N. J., Hamburg—Sussex Co. (Newton) plans concrete paving Hopatcong Blvd., also improve North Church-Hamburg Rd., here. $127,000. H. Snook, Newton, engr.

Streets and Roads (Continued)

Pa., New Castle—Takes bids in spring repaving ½ mi. Croton Ave. from Crawford Ave. to Cascade St. $40,000 to $50,000. M. R. Miller, City Bldg., engr.

W. Va., Clarksburg—Harrison Co. election Apr. 8, $90,000 bonds, improving roads.

Fla., Bartow — Polk Co. voted $30,000 bonds asphalt paving 3 mi. Rds. 11 and 12; $25,000, 2½ mi. Rd. 9; $28,000, 2.8 mi. Rd. 8; $120,000, 12 mi. Rd. 10; $50,000, 5.25 mi. Rd. 6; $100,000, 10.25 mi. Rd. 5; $90,000, 10 mi. Rds. 4 and 7; $62,500, 6.25 mi. Rd. 3; $50,000, 5 mi. Rd. 2; $60,000, 6⅜ mi. Rd. 1. Lakeland-Kathleen, all foregoing 9 ft. wide, in Special Rd. and Bridge Dist. 3. W. L. Boyde, co. engr.

Fla., Fort Lauderdale — Broward Co., election Apr. 8, $50,000 bonds, hard surfacing roads. F. A. Bryan, clk.

Fla., Fort Meade—Plans election $23,000 bonds, ⅓ cost of improving streets. Property owners to pay $46,000. E. L. Wade, clk.

Fla., Tampa—Election Apr. 22, $111,000 bonds, opening and widening Lafayette St., also constructing viaduct over Seaboard Air Line Ry. tracks. R. D. Martin, city engr. Noted Jan. 3.

Ala., Tuscaloosa—Tuscaloosa Co. to vote on $575,000 bonds for roads.

Miss., Greenwood—Voted $96,000 bonds brick paving Church, George, Washington, Henderson, Cotton, Johnson, Mississippi, Le Flore, Walthall and Front Sts., also First Alley.

Tenn., Pulaski—Plans paving 1st, 2nd and 3rd Sts. $132,000. B. H. Klyce, 1st and 4th Natl. Bank Bldg., Nashville, engr.

Ky., Whitesburg—Letcher Co. voted $210,000 bonds for roads. Noted Jan. 10.

O., Akron—S. Porter, clk. Summit Co., takes bids later part of April grading and graveling 3,700 sy.qd. Botzum Wyoga 100, $16,000, 4,200 sq.yd. Bath Stowe Rd. 48, Sect. E, $17,000; grading and paving 12,900 sq.yd. Robinson Ave., rein.-con. or bituminous concrete, $52,000, 1.5 mi. Barberton-Springfield Rd. 14, Sect. C, 15,400 sq.yd. rein.-con. of 14,400 sq.yd. asphaltic concrete, $67,000, 11,750 sq.yd. Flickinger Rd., asphaltic concrete or macadam, $50,000, 2.58 mi. Richfield Hudson Rd. 19, 16 ft., 24,750 sq.yd. 2 in. asphaltic concrete, 26,500 sq.yd. bituminous macadam, or 26,500 sq.yd. concrete, $130,000, 4.12 mi. Cleveland-East Liverpool Rd. 12, 16 ft., 36,800 sq.yd. 2 in. bituminous concrete or 39,200 sq.yd. bituminous macadam, $150,000. J. Weaver, Court House, engr.

O., Akron—Summit Co. takes bids this spring improving 4.5 mi. Cleveland-East Liverpool Intercounty Highway, 20 ft., $150,000 or more, 9 mi. Kenmore-Mogadore Co. Highway, Barberton-Springfield Co. Highway, Sanitorium Rd., and Hammonds Corners-Ira Rd., 20 ft., $355,000, all brick; 3 mi. Robinson Ave. Co. Highway and Norton Ave. Rd., 20 ft., $130,000; 3 mi. Richfield-Hudson Co. Highway, $20 ft., $100,000-$120,000. J. Weaver, Court House, engr.

O., Cambridge—Takes bids in spring paving North 5th St., Stewart and Beatty Aves. $88,000.

O., Canton—Stark Co. plans improving ¾ to 1 mi. Navarre-West Lebanon Rd., 18 ft., probably macadam. $60,000. A. M. Wise, Court House, engr.

O., Columbus—Making plans grading, laying necessary water services, sewer connections and paving 2,092 ft. Mound St., 36 ft., brick $31,708, asphalt $25,616; 952 ft. alley north of Reinhard Ave. and alley west of Lorain Ave., 15 ft., brick $6,014, concrete $5,392; 158 ft. alley north of Sycamore St., 20 ft., brick $1,190, concrete $1,045; 285 ft. alley north of Tappan St., 15.42 ft., brick $1,746, concrete $1,545; 1,176 ft. alley west of St. Clair Ave. and alley north of Dakota Ave., 16 ft., brick $8,441, concrete $7,521; 332 ft. 2nd alley west of Kimball Pl., 14 ft., brick $2,054, concrete $1,838; 794 ft. Indianola Ave., 40 ft., brick $9,043, asphalt $6,705. R. H. Simpson, city engr.

O., Dover—Plans paving 6th St., $31,000, also takes bids in spring paving ¾ mi. 4th St., 30 ft., $75,000.

O., Lisbon—Columbiana Co. plans improving 2 mi. East Palestine-East Liverpool Rd., 18 ft. $100,000. L. C. Kirk, Lisbon, engr.

O., Steubenville — Plans paving South St., brick $53,000, asphalt with granite block $62,355, asphalt with hillside block $56,475. C. N. Teaff, Steubenville, engr.

Mich., Detroit — Having plans prepared paving with sheet asphalt 6,200 sq.yd. Florence Ave. from Fairfield to Livernois Aves. $33,910, and 3,800 sq.yd. from 12th St. to Bayless Ave. $21,890, 8,900 sq.yd. Fairfield Ave. from Fenkell to Puritan Aves. $45,760, and 3,200 sq.yd. from Puritan to Florence Aves. $17,570, 8,300 sq.yd. State Fair Ave. $45,980, 4,400 sq.yd. Barton Ave. $24,380, 6,000 sq.yd Sparta Ave. $33,650, 3,500 sq.yd. Wisconsin Ave. $17,880, 950 sq.yd. Shady Lane $4,730, paving 8,680 sq.yd. 4 alleys with one course concrete $22,225. G. Jerome, city engr.

Mich., Monroe — Had plans prepared grading and paving 10,010 sq.yd. East Front St., 7,390 sq.yd. West 6th St., and 4,321 sq.yd. West 5th St., one course 8 in. concrete. $65,000. F. M. Kressbach, city clk.

Ill., Chicago—Plans concrete paving 146,000 sq.yd. various streets. $1,000,000.

Ill., Galesburg — Plans paving West North St., brick, asphalt filler, cement concrete base, cement concrete curbs and gutters. $28,053. A. L. Richey, City Hall, engr.

Ill., Vandalia—Soon takes bids grading and paving National Trail Rd., 8,250 sq.yd. 7-in. concrete. $27,650. A. H. Beard, 616 Title Guaranty Bldg., St. Louis, Mo., engr.

Wis., Jefferson—Jefferson Co. voted to grade and gravel surface Trunk Highway 107, Town Lake Mills, and Waterloo, $20,000, County Line Rd., Town Sullivan, $4,000, Welsh Rd., Town Ixonia, $11,000, Aliceton Rd., Town Watertown, $12,000; widening grade Palmyra-Rome Rd., Town Palmyra, $500; constructing Town Hall Bridge, Farmington $1,600, Busseyville Bridge 1, Town Sumner, $6,000, Hausz Bridge, Town Koshkonong $2,500. R. D. Royce, comr.

Wis., La Crosse—La Crosse Co. voted to macadam surface Trunk Highway 21, Town Hamilton, $17,384, Mindero-Holmen Rd., Town Farmington, $22,354. J. Hintgen, comr.

Ia., Davenport—Plans grading, curbing and about 6 mi. paving, bitulithic or sheet asphalt on concrete, $234,658; 1.5 mi. Division St., rein.-con., $55,091. C. J. Stephenson, city engr.

Ia., Riverside—Plans paving about 12 blocks. $40,000. E. E. Furman, clk.

Ia., Wellman — Plans paving, etc., 10 blocks. $40,000. H. E. Doud, clk.

Kan., Dodge City—Ford Co. soon takes bids grading and sand clay surfacing 4.405 mi. Federal Aid Project 221, Sect. A, 18 ft. J. W. Thornburg, co. engr.

Kan., Kansas City—Wyandotte Co. soon takes bids grading and 1 course concrete surfacing 1.73 mi. road, 16 ft. Former bids rejected. Noted Feb. 14.

Kan., Leavenworth — Leavenworth Co. preparing plans bituminous filled brick paving 3.8 mi. Fort to Fort Highway, Federal Aid Project 234. L. C. Clark, Leavenworth, engr. Noted Dec. 27.

Kan., Leavenworth—Leavenworth Co. soon takes bids surfacing 3.201 mi. Federal Aid Project 234, Sect. A, 24 and 30 ft., brick on concrete; 0.625 mi. Federal Aid Project 234, Sect. B, 24 ft., bituminous filled brick on 5-in. concrete. L. C. Clark, co. engr.

Neb., Beaver City — Furnas Co. soon takes bids gravel surfacing 4.59 mi. Federal Aid Project 67A, Cambridge-Holbrook Rd., 53,546 sq.yd. 4 in. gravel. R. L. Cochran, Lincoln, state engr.

Neb., Bennington — Plans to pave 10 blocks, average width 40 ft. $40,000. Engineer not selected.

Neb., Omaha—Soon takes bids paving and curbing 27th and 28th Aves., 18th, 25th, 44th, 29th, B, Corby, Parker, 15th, Wright, 33rd, Maple, Lafayette, S, Y, Seward, 20th, 17th, 39th, 58th, 21st, 52nd and 29th Sts., also 2 alleys; paving Mid City Ave., Corby, 16th, Binney, 62nd, Evans, 58th and Cuming Sts. $200,000. H. Beal, city engr.

S. D., Sioux Falls—Plans to pave 34,896 sq.yd. various streets. $90,000. W. C. Leyse, city aud.

Mo., Excelsior Springs—Soon takes bids grading and rein.-con. surfacing 15 blocks Thompson, Bway., Elizabeth, North Main, Excelsior, Marietta and Wildwood Sts., average width 30 ft. $40,000-$45,000. E. E. Parsons, city engr.

Mo., Fornfelt—Election Apr. 1, $25,000 bonds, 3,500 ft. street improvements.

Mo., Independence—Plans concrete paving 1 mi. Lexington Ave., 30 ft. R. H. Jones, Independence, engr.

Mo., St. Louis—Plans 11,685 sq.yd. concrete sidewalks with necessary grading in various parts of city. $41,453. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis — Making preliminary plans resurfacing Arsenal St, 4,620 sq.yd. recut granite block, 550 cu.yd. concrete, $25,000; grading, curbing and paving 1,490 sq.yd. Brannon Ave., willite, asphalt, asphaltic concrete, warrenite, Kentucky rock asphalt, cement or brick, $8,900-$11,700, 3,790 sq.yd. Davison St., warrenite, asphaltic cement, asphalt, willite or brick, $27,800-$31,300, 3,050 sq.yd. Goethe St., brick, willite, Kentucky rock asphalt, cement, asphaltic cement asphalt or warrenite, $16,400-$20,600; widening, grading, curbing and guttering, laying sidewalks and asphalt paving 525 sq.yd. Delmar Blvd., $48,000; grading, granite curbing and paving 4,130 sq.yd. Emerson St., asphalt, willite, warrenite, asphaltic concrete or brick, $29,400-$34,600, 1,240 sq.yd. Eitman St., concrete or brick on concrete, $9,900-$11,000; grading, granite curbing, guttering and paving 2,950 sq.yd. Labadie St., willite, cement, asphalt, warrenite or brick, $25,000-$28,000. W. W. Horner, city engr.

Ark., Fayetteville — Having preliminary plans prepared grading and paving 13 blocks West Spring and Hill St. Dists., 28 ft., asphalt on concrete, or concrete. $65,000. Engineer not announced.

Tex., Albany — Shackleford Co. plans grading, gravel and hard surfacing 85 mi. State Highways 1-A, 18 and 23 (16 and 18 ft. wide). $1,300,000. Noted Mar. 13.

Tex., Austin—Travis Co. making plans grading, gravel surfacing and bituminous topping 14.5 mi. State Highway 71, 16 ft. $87,000. O. Leonard, Box 256, co. engr.

Tex., Baird — Callahan Co. soon takes bids grading, surfacing with sledged stone and asphalt macadam 9.62 mi. State Highway 1, 18 ft. $256,394. T. H. Webb, co. engr.

Tex., Childress—Childress Co. defeated $750,000 bonds, road construction. J. H. Calloway, co. judge. Noted Feb. 7.

Tex., Cuero — De Witt Co. plans hard surfacing, grading and bridging 20 mi. road, 18 ft. $405,000 includes State and Federal aid. S. Kulawik, co. engr. Noted Mar. 20.

Tex., Dallas—Making plans permanent paving Beverly Ave. from Bonnie View to Lancaster Sts., miscellaneous types. $250,000. E. A. Kingsley, city engr.

Tex., Falfurrias — Brooks Co. making plans bituminous macadam paving 30 mi. State Highway 12, 18 ft., $575,000; 1 in. bituminous surfacing 10.1 mi. State Highway 16, 16 ft., $78,500. R. Harrison, co. engr.

Tex., Georgetown—Williamson Co. making plans grading, etc., 7.11 mi. State Highway 74, 24 ft. $48,690. R. A. Nichols, co. engr.

Tex., Graham—Young Co. defeated $650,000 bonds, road construction. W. H. Reeves, co. judge. Noted Feb. 14.

Tex., Houston—Election Apr. 26, $500,000 bonds, paving various streets. J. C. McVea, city engr.

Tex., Jacksboro—Jack Co. making plans grading, surfacing with sledged stone base and bituminous topping 16.9 mi. State Highway 24, 18 ft. $300,000. G. W. Johnston, co. engr.

Tex., Jourdanton—Atascosa Co. defeated $929,000 bonds highway improvements. E. D. Scott, co. judge. Noted Feb. 7.

Tex., McKinney—Collin Co. had plans prepared and soon takes bids grading and surfacing with local crushed stone and shipped gravel 5.83 mi. State Highway 39, 18 ft. $45,800. F. W. Cawthon, co. engr.

Tex., Sweetwater — Nolan Co. making survey grading and bituminous macadam surfacing 31 mi. State Highway 1, 18 ft. $875,000. J. A. Focht, co. engr. Noted Nov. 1.

Okla., Comanche—Voted $35,307 bonds grading and paving 9 blocks 3rd St., 7,200 sq.yd. concrete, 5,700 lin.ft. curbing, 2,160 cu.yd. earth and 1,195 cu.yd. rock excav. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Mar. 6.

Okla., Grandfield — Plans grading and concrete paving 8 blocks 2nd, Oak and Simpson Sts., 76 ft. $25,000. V. V. Long & Co., Colcord Bldg., Oklahoma City, engrs.

Okla., Okmulgee — Plans grading and paving East 7th St., Dist. 64, incl. 11,800 sq.yd. vertical fibre brick, 8,100 lin.ft. curbing, 3,600 cu.yd. earth excav. $70,000. T. J. Embree, Okmulgee, engr.

Okla., Pawhuska — Plans grading and paving Dists. 26 and 27, 9,200 sq.yd. concrete. $46,000. J. M. Buckley, Pawhuska, engr.

Okla., Perry—Noble Co. having surveys made grading and paving 3 mi. Oklahoma-Kansas-Texas Highway, 18 ft., 30,000 sq. yd. concrete, 20,000 cu.yd. excav. $60,000. V. B. Curl, Perry, engr.

Okla., Sapulpa—Plans grading and paving Adams St., 5,600 sq.yd. concrete 3,100 lin.ft. curbing, 1,700 cu.yd. earth excav. $28,000. F. E. Lawrence, Sapulpa, engr.

Wash., Raymond—City Council takes bids about Apr. 16, concrete paving Duryea and 3rd Sts., et al. $67,828.

Streets and Roads (Continued)

Calif., San Anselmo—Had plans prepared grading, asphaltic concrete paving and sewers in Ross, Woodland, Tunstead Aves., etc. $145,000.

Calif., San Francisco—Had plans prepared improving Ulloa St. between 15th and 17th Aves., incl. 1,079 lin.ft. concrete curb, 5,283 sq.ft. art stone walks, 6,930 sq.ft. vitr. brick and 27,606 sq.ft. asphaltic concrete; Ulloa St. between 17th and 19th Aves., incl. 24,893 sq.ft. asphaltic concrete. To exceed $25,000. M. M. O'Shaughnessy, city engr.

Ont., Stratford—Plans 60,000 sq.yd. asphalt and concrete pavements on 14 streets. $200,000. A. B. Manson, City Hall, engr.

BIDS DESIRED

N. Y., Brooklyn—Apr. 3, by E. Riegelmann, boro pres., Boro Hall, asphalt paving Ave. J, Mansfield Pl., Bay Ridge, Belmont, Thatford and 19th Aves., Bay 10th, East 40th, West 12th, 40th and 48th Sts.; grading, curbing and flagging Ave. O, Canal, Schenectady and 19th Aves.; curbing, flagging and asphalt paving Lefferts Ave.; curbing and asphalt paving Mansfield Pl.

N. Y., Buffalo—Apr. 1, by Bd. Supervs. Erie Co. City Hall, concrete paving Military Rd. Part 2, Ebenezer-West Seneca Rd., Colvin and Elmwood Aves. To exceed $75,000. G. C. Diehl, 577 Ellicott Sq., engr.

N. Y., Geneva—Apr. 8, by Bd. Pub. Serv. about 19,000 sq.yd. pavement, various types. J. W. Brennan, supt.; adv. E. N.-R. Mar. 27.

N. Y., Poughkeepsie—Apr. 3, by Bd. Pub. Wks., at Eastman Park Mansion, paving, etc., Delafield, Mill, Conklin, Grant, Harrison, Thompson, Cannon and Franklin Sts.; storm sewer in Delafield St. T. F. Lawlor, supt.; adv. E. N.-R. Mar. 27.

N. Y., St. George—Apr. 2, by J. A. Lynch, pres. Richmond Boro, Boro Hall, 93,500 gal. tar macadam binder and 93,500 gal. asphaltic macadam binder (hot application), on various streets.

New Jersey—Apr. 7, by State Hy. Dept., Trenton, rein.-con. paving Route 10, Sect. 2A, Broad Ave., in Ridgefield, Bergen Co.; Route 16, Sect. 7, Bayard Lane-Princeton, Mercer Co. A. L. Grover, secy.; adv. E. N.-R. Mar. 27.

New Jersey—Apr. 14, by State Hy. Dept., Trenton, rein.-con., paving Route 6, Sect. 13, Bridgeton to Marlboro, Cumberland Co., also Route 9, Sect. 12, Plainfield-Westfield, Union Co. A. L. Grover, secy.; adv. E. N.-R. Mar. 27.

N. J., Woodbury—Apr 10, by Bd. Freeholders Gloucester Co., concrete paving Woodbury-Blackwood Rd., Sect. 2, in Deptford and Washington Twps. W. C. Cattell, Merritt Bldg., co. engr.; adv. E. N.-R. Mar. 27.

Pa., Pottsville—Apr. 15, by City Council, paving and improving 35,000 sq.yd. streets; J. H. Strauch, city engr.; adv. E. N.-R. Mar. 27.

Va., Cape Charles—Mar. 31, by A. F. Dize, mayor, and Common Council at Council Chambers on Mason St. east of Plum St., 7,226 lin.ft. combined concrete curb and gutter, 4,856 cu.yd. earth excav., 12,817 sq.yd. pavement, sheet asphalt, asphaltic concrete, Kentucky rock, vitr. brick or rein.-con. G. H. Massey, 328 Dickson Bldg., Norfolk, engr.

West Virginia—Apr. 15, by State Rd. Comn., Charleston, highways in Clay, Fayette, Greenbrier, Monroe, Pocahontas, Wayne, Jackson, Lewis, Monongalia, Webster, Berkeley, Hardy, Mineral and Morgan Counties. E. B. Carskadon, secy.; adv. E. N.-R. Mar. 27.

West Virginia—Apr. 17, by State Rd. Comn., Charleston, highways in Nicholas, Mason, Putnam, Wyoming, Brook, Calhoun, Ohio, Barbour, Braxton, Gilmer, Preston, Hampshire, Jefferson, Pendleton and Randolph Counties. E. B. Carskadon, secy.; adv. E. N.-R. Mar. 27.

W. Va., Charleston—Apr. 1, by Kanawha Co. Court constructing roads in Union Dist.: grading and 14 ft. concrete paving 0.8 mi. Kanawha Two-Mile Branch, 14 ft., Project 134; 9 ft. concrete 1 mi. Wolf Penn Branch, Project 135; grading and paving 0.8 mi. Martins Branch, Project 136; 1 mi. Big Tyler Mountain-Cross Lanes Rd., Project 137, alternate bids on penetration macadam and concrete; concrete culvert over Tyler Creek on Lock Six Rd., Project 142. R. N. Moulton, clk. Noted Dec. 6.

W. Va., Charleston—Apr. 3, by H. C. Walker, city mgr., grading, curbing and paving 20,000 sq.yd. streets. H. L. Campbell, city engr.

Ga., Columbus—Apr. 1, by City Manager, paving Talbot Ave. $25,000. W. A. Richards, city mgr.

Fla., Fort Myers—Apr. 9, by Comrs. Lee Co., 8 mi. highway, Sect. 5, Estero to Collier Co. line, $40,000; 14 mi. Sect. 4, Fort Myers to Estero, $70,000; 10 mi. Sects. 2 and 2A, Olga to Hendry Co. line, $50,000; 6 mi. Sect. 1, Tice to Olga, and Sect. 3, Olga to Charlotte Co. line, $30,000, all foregoing hard surface paving on rock; 5 mi. Sect. 7, Crescent Beach Rd., $25,000; Sects. 6 and 6A, Pine Island Rd., incl. roads and bridges to Metlochat Bay, fill work and bridge across Metlochat Bay, also between Big and Little Pine Islands, $35,000. R. P. Ransom, Fort Myers, engr.

Louisiana—Apr. 3 (extended date), by State Hy. Dept., Reymond Bldg., Baton Rouge, 7.92 mi. State Project 393, Sect. B, Colfax-Pollock Highway, Grant Parish, and 8.35 mi. Sect. C and 7.41 mi. Sect. B, State Project 366. Winnfield-Chestnut Highway, Winn Parish. J. M. Fourmy, ch. engr. Noted Mar. 6 and 13.

O., Bexley (Columbus P. O.)—Apr. 11, by S. W. Roderick, village clk., paving 11,700 ft. Bexley Dr., Ardmore and Cassingham Rds., Elm and Roosevelt Aves., 24 ft., brick, asphalt or concrete. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs. Noted Mar. 20.

O., Cleveland—Apr. 2, paving Milverton Rd. S. E., Camden Ave. S. W., Sandusky Ave. S. E., East 130th, 137th, 135th, 139th, 143rd and 126th Sts., East 169th St. from Lake Shore Blvd. to Ozark Ave., East 169th St. from Waterloo Rd. to Ozark Ave. R. Hoffman, City Hall, engr. Noted Jan. 17.

O., Columbus—Apr. 1, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services, sewer connections and paving 735 ft. Wildwood Dr., 20 ft., asphaltic concrete, $10,686, 957 ft. Parkwood and Terrace Aves., 24 ft., brick $15,067, asphalt $13,299, 396 ft. Hibbert Ave., 20 ft., brick $6,391, asphalt $5,786, 2,870 ft. Park St. S., 40 ft., brick $13,540, asphalt $12,206; 9,712 ft. 6- to 12-in. sewer in alley east of Cleveland Ave., $20,576.

O., Dayton—Apr. 3, by Comrs. Montgomery Co. paving about 2 mi. Knecht and Cherry Drives, McCleary, Norman, Malvern, Radcliffe and Otterbein Aves., Kentucky rock asphalt, sheet asphalt or macadam. $118,500. W. O. Pease, co. surv.

O., Euclid — Apr. 7, stone or concrete sidewalks on 12 streets. To exceed $25,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

Michigan—Apr. 3, by State Hy. Dept., at dist. office Port Huron, grading and surfacing 6.649 mi. State Trunk Line Rd. 19-4, Sect. E, St. Clair Co., 32,909 cu.yd. excav., 71,160 sq.yd. concrete, asphalt or bituminous concrete, also State Trunk Line Rd. 19-4, Sects. B, C and D, St. Clair Co., 20,108 cu.yd. excav., 49,380 sq.yd. concrete, asphalt or bituminous concrete. G. C. Dillman, ch. engr.

Michigan—Apr. 8, by H. C. Flemming, resident engr. of State Hy. Dept., at dist. office Paw Paw, grading and surfacing 3.187 mi. State Trunk Line Rd. 17-14, Van Buren Co., 25,181 cu.yd. excav., 37,400 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—Apr. 9, by R. A. Beers, resident engr. of State Hy. Dept., at dist. office Marshall, grading and surfacing 0.893 mi. State Trunk Line Rd. 29-4, Calhoun Co., 13,850 sq.yd. concrete, asphalt or bituminous concrete.

Michigan—Apr. 10, by E. G. Fitts, resident engr. of State Hy. Dept., at dist. office Corunna, grading and surfacing 0.999 mi. State Trunk Line Rd. 47-5, Shiawassee Co., 14,954 sq.yd. concrete, asphalt or bituminous concrete.

Illinois — Apr. 4, by Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 43.87 mi. of 18 ft. concrete, brick or asphalt paving incl. 5.6 mi. of 9 ft. widening; grading 29.95 mi. incl. 451,265 cu.yd. excav. and 2,093 yd. concrete; 10 bridges incl. 3,046 yd. concrete. C. R. Miller, dir.

Ill., Chicago—Apr. 2, by city, concrete paving 230,000 sq.yd. various streets. $1,500,000.

Ill., Urbana—Mar. 31, by Champaign Co., paving 6.238 mi. Sect. 38-15D, Routes 13 and 20, Ogden Twp.; 11.169 mi. Sect. 41-15d, Routes 12 and 12A, Sidney and Raymond Twps.; 4.545 mi. Sect. 43-15d, Route 17, Sadorus and Tolono Twps.. 5.341 mi. Sect. 54-15d, State Route 4, Sidney and South Homer Twps., 5 rein.-con. slabs and 3 rein.-con. girders involving 936.1 cu.yd. concrete, on above routes. R. F. Fisher, co. supt. of highways.

Wis., Fond du Lac—Apr. 4, by G. Treleven, comr. Fond du Lac Co., concrete surfacing, etc. Brandon-Ripon Rd., Sect. A includes 44.320 sq.yd. concrete, 12,800 cu.yd. earth, 1,000 cu.yd. loose and 147 cu.yd. solid rock excav., etc., Sect. B, 47,220 sq.yd. concrete, 16,000 cu.yd. earth and 1,900 cu.yd. loose rock excav., etc. Wisconsin Hy. Comn., 444 Milwaukee St., Milwaukee, engrs.

Wis., Milwaukee—Apr. 3, by Dept. Pub. Wks., paving 27,865 sq.yd., concrete, vibrolithic concrete or asphaltic concrete, grading 6,755 cu.yd., curbing and guttering 10,790 lin.ft. on 14th, Harrison, Logan, 9th, 23rd and American Aves. Locust, Montana 21st and 6 other streets. $115,000. J. Schwada, City Hall, engr.

Wis., Hudson—Apr. 5, by G. R. Hosford, city clk., paving 8,956 sq.yd. various streets, rein.-con., vibrolithic, vitr brick or asphaltic concrete. L. P. Wolff. 1000 Guardian Life Bldg., St. Paul, Minn., engr.

Wis., Milwaukee—Apr. 4, by Dept. Pub. Wks., paving 3 streets, 7,297 sq.yd. asphalt. $30,000. J. Schwada, city engr.

Ia., Oelwein—Mar. 31, 61,000 sq.yd. pavement, 36,800 lin.ft. combined curb and gutter, 16,500 cu.yd. extra excav., 1,360 lin.ft. 10 to 42 in. storm sewer. Edward B. Tourtellot, Oelwein, civil engr. Noted Dec. 20.

Ia., Storm Lake—Mar. 31, by R. A. Whealen, city clk., 16,500 sq.yd. concrete paving and 13,600 lin.ft. curbing. Noted Mar. 6.

Minn., Breckenridge—Apr. 8, by P. E. Truax, aud. Wilkin Co., 4.5 mi. Job 2401, State Rd. 3, 27,132 cu.yd. excav., 15,223 cu.yd. overhaul, etc.; repair bridge of 3 beam spans; 7 mi. Job 2402, State Rd. 6, 53,454 cu.yd. excav., 168,830 cu.yd. overhaul, etc. $25,000. M. Brataas, Breckenridge, engr.

Minn., St. James—Apr. 15, by J. E. Setrum, and. Watonwan Co., Job 2401, State Rd. 15, 27,000 cu.yd. excav., 79,000 cu.yd. overhaul, 2 concrete bridges each 30-ft. span; Job 2402, State Rd. 16, 56,000 cu.yd. excav., 165,000 cu.yd. overhaul, one concrete bridge, 30-ft. span, 700 ft. 12-in. 450 ft. 24-in. and 70 ft. 36-in. culvert pipe. $30,000.

Kan., Topeka—Apr. 24, by Shawnee Co., improving 10.5 mi. Federal Aid Project 141, 105,000 cu.yd. excav., 600 cu.yd. concrete in culverts. A. C. Lagerwall, co. engr. Noted Mar. 20.

N. D., Ashley—Apr. 3, by J. Billigmeier, aud. McIntosh Co, grading 12 mi. Federal Aid Project 216, 82,662 cu.yd excav., etc $28,000.

N. D., Cando—Apr. 2, by A. T. Mooney, aud. Towner Co., grading 13.3 mi. Federal Aid Project 179, 104,804 cu.yd. excav., etc. $32,000.

N. D., Fargo—Apr. 9, paving Job 174-24, in Dist. 3, widening Front St. between Bway. and 8th St., concrete or vitr. brick. $30,000. A. R. Watkins, city aud.

N. D., Lisbon—Apr. 9, by J. A. Gray, aud. Ransom Co., grading 6 mi. Federal Aid Project 124, 42,418 cu.yd. excav., etc. $25,000.

Wyoming — Apr. 3, by State Highway Dept., Cheyenne, Federal Aid Project 50 B, 3.8 mi. grading, surfacing, etc., 24 ft., Lingle-North Rd., Goshen Co., $35,000, F. W. Seward, Torrington, engr.; Federal Aid Project 48 A, 10.4 mi., Orin Junction-East Rd., Converse Co., $120,000, C. H. Bowman, Casper, engr.; 2.2 mi. Federal Aid Project 160 A, Shoshoni-North Rd., Freemont Co., $35,000. Z. E. Sevison, State highway engr.

Mo., St. Louis—Bush-Burns Realty Co., 1105 Chestnut St., taking bids grading, laying sewers, sidewalks, etc. on 5,500 ft. Union St., 30 ft., about $200,000. Private plans.

Mo., St. Louis—Apr. 25, by Bd. Pub. Serv., 208 City Hall, grading and 7 in. concrete surfacing 1,340 sq.yd. alleys in City Block 5405, $3,720; grading and surfacing Flora Pl., 25,915 sq.yd. Kentucky rock asphalt and 19,500 sq.yd. macadam, $45,320; grading, curbing and Kentucky rock asphalt surfacing 9,940 sq.yd. Dressell and Magnolia Aves., Finkman, Klock and San Francisco Sts., $63,720. W. W. Horner, city engr.

Tex., Bay City—Apr. 15, by W. C. McNabb, judge Matagorda Co., grading and shell surfacing 8.25 mi. State Highway 60, Federal Aid Project 416, 15 ft. $72,404. E. N. Gustafson, co. engr.

Tex., Decatur—Apr. 9, by S. M. Ward, judge Wise Co., grading, crushed stone surfacing and bridging 11.09 mi. State Highway 39, State Aid Project 471, 14 ft. $120,862. H. R. Smith, co. engr.

Tex., Denison—Apr. 5, by R. G. Gresham, city secy., resurfacing Gandy St., bitulithic, sheet asphalt, asphaltic concrete or Amiesite; paving Houston St., 3 in. brick 3 in. sand cushion. C. E. Hayden, city engr.

Tex., Italy—Apr. 3, by R. G. Dohoney, mayor, paving 19,100 sq.yd. various streets, 2½ or 3 in. brick on 5 in. concrete, standard asphaltic surface on 5 in. base, 6 in. rein.-con. or 6 in. plain concrete, 9,500 cu.yd. excav., 10,600 ft. curb and gutter. $80,000. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Tex., Kerrville—Apr. 8, by L. Wallace, judge Kerr Co., grading, gravel and crushed

Streets and Roads (Continued)

stone base and bituminous topping 5.83 mi. State Highway 41, Federal Aid Project 405, 18 ft. $65,632. W. E. Simpson, Natl. Bank of Commerce Bldg., San Antonio, engr.

Okla., Comanche—Mar. 31, by L. C. Randel, city clk., grading and widening 9 blocks 3rd St., 7,200 sq.yd. concrete, 5,700 lin.ft. curbing, 2,610 cu.yd. earth and 1,195 cu.yd. rock excav. $35,307. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Mar. 20.

New Mexico—Apr. 15, by State Highway Comn., Santa Fe, Federal Aid Project 60-A, 4.787 mi. between Rowe and Fulton, San Miguel Co., 22,148 cu.yd. excav., 5,566 cu. yd. Class 1 borrow, 1,800 sta.yd. overhaul, 8,583 cu.yd. one course crushed stone surfacing, 7½ in. center, feather-edge, 80,300 lb. reinforcing, 25,545 ft. timber superstructure; Federal Aid Project 133, 1.618 mi. west of Silver City, Grant Co., 13,820 cu.yd. excav., 2,519 cu.yd. Class 1 borrow, 2,457 sta.yd. overhaul, 3,757 cu.yd. 2 course crushed stone surfacing, 12,545 lb. reinforcing; Federal Aid Project 139, 6.988 mi. south of Deming, Luna Co. (3½ mi. will be tentatively accepted and taken over by the State for maintenance), 4,690 cu.yd. Class 1 excav., 11,692 cu.yd. Class 1 borrow, 8,690 cu.yd. gravel surfacing mesa and standard types; Federal Aid Project 136, 1.979 mi., incl. 300 ft. steel span bridge over Rio Puerco on Gallup-Los Lunas Rd., Valencia Co., 9,884 cu.yd. Class 1 excav., 4,932 cu.yd. Class 1 borrow, 7,624 sta.yd. overhaul, 3,981 cu.yd. 2 course gravel surfacing, bridge, 624 cu.yd. concrete, 87,350 lb. reinforcing, 1,080 lin.ft. concrete piling, 155 tons structural steel, 1,161 cu.yd. wet excav.; Federal Aid Project 18, 19.492 mi. between Carlsbad and Lea Co. Line, Eddy Co., 19,634 cu.yd. 1 course caliche surfacing; Federal Aid Project 28 (reopened), 3.463 mi. near Fort Bayard, Grant Co., 1,185 cu.yd. gravel shoulders, 1,524 cu.yd. cement shoulders; Federal Aid Project 57, (reopened), 14.242 mi. between Acme and point 6.6 mi. northeast of Roswell, Chaves Co., reopened for 2.4 mi. gravel surfacing, 10,783 cu.yd. Class 1 excav., 1,335 cu.yd. Class 1 borrow, 3,033 cu.yd. 2 course gravel surfacing, 3,848 lb. reinforcing, bridges; 122 cu.yd. concrete, 12,708 lb. reinforcing, 14.992 ft. wooden superstructure; Federal Aid Project 137, 5.257 mi. between Portales and Delphos, Roosevelt Co., 8,996 cu.yd. Class 1 excav., 12,378 cu.yd. Class 1 borrow, 13,661 cu.yd. 12 in. caliche surfacing (2 course 6 in. each), 3,885 lb. reinforcing for box culverts, 1,679 cu.yd. concrete. J. A. French, state highway engr. Noted Mar. 13.

Idaho—Apr. 5, by Dir. of Highways, Boise, Federal Aid Project 71 and 81, Bonner Co. P. C. Oxley, Lewiston, dist. engr.

Washington—Apr. 8, by State Hy. Dept., Olympia, grading and gravel surfacing 2.11 mi. State Road 9, Uncas-Port Townsend Rd., Jefferson Co., 7.6 mi. State Road 22, Harvey-Clifford Rd., Stevens Co., 3.4 mi. State Road 5, Ajlune-Riffle Rd., Lewis Co., 3.9 mi. State Road 4, Anglin Rd., Okanogan Co.; concrete paving 4.2 mi. Anacortes Highway, Skagit Co. J. Allen, Olympia, engr.

Wash., Tacoma—Apr. 3, by R. Harrison, comr. Pub. Wks., paving Portland Ave. from Bay to 38th Sts., 15,840 sq.yd. 7-in. concrete, 8,538 lin.ft. curbing. C. E. Putnam, city engr. $74,415.

Ont., Seaforth—Mar. 29, by J. A. Wilson, clk., improving Main St., 9,830 sq.yd. asphalt pavement on concrete, 5,000 lin.ft. concrete curbing. $40,000. T. R. Patterson, Goderich, engr.

Ont., Toronto—Mar. 28, by E. A. James, engr., 57 Adelaide St. E., constructing gravel, waterbound macadam, bituminous penetration, and asphalt on concrete roads, furnishing stone, gravel, road tar, asphaltic oils, calcium chloride, etc., for Toronto & York Rds. Comn. $150,000.

BIDS RECEIVED

N. Y., Albany—Bd. Contr. & Supply, Mar. 17, curbing, laying sewers, concrete walks and repaving Western Ave., redressed granite blocks on concrete, from M. F. Dollard, 36 State St., $40,752, engrs. est. $50,000; repaving Madison Ave., from P. W. Mulderry, 5 St. Joseph Terrace, $265,761, engrs. est. $275,000; improving Lincoln Ave., from E. B. Stevenson, 376 Western Ave., $20,943, engrs. est. $25,000.

N. Y., Buffalo—Paving with **(a)** asphalt **(b)** brick **(1)** Roseville St. **(2)** Barton St. **(3)** Cambridge **(4)** Crystal Ave. **(5)** Hannah St. **(6)** Military Rd. **(7)** Rapin Pl. **(8)** Simon St. **(9)** Winspear Ave. **(10)** Weiss St., from Rock Asphalt & Constr. Corp., Morgan Bldg., **(a1)** $14,853 **(a3)** $43,199 **(a5)** $13,380 **(a10)** $11,371; H. P. Burgard Co. Fillmore Ave., **(a2)** $11,520 **(a4)** $46.879 **(a6)** $11,462 **(a7)** $12,759 **(a8)** $18,759 **(a9)** $41,256; B. F. Spire, 24 Colonial Circle, **(b3)** $47,900 **(b6)** $13,130 **(b10)** $12,837; Erie Contg. Co., Morgan Bldg., **(b4)** $49,603 **(b5)** $15,237 **(b8)** $20,867.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Mar. 17, grading, curbing, laying sidewalks and sheet asphalt paving Buchman Ave., sheet asphalt paving 42nd St., also 82nd St., from Highway Impvt. & Repair Co., $6,300, $36,430 and $8,280 respectively; curbing, laying sidewalks, etc. on Kissena Blvd., from Peace Bros., Inc., 57 North Laurence St., Flushing, $1,984; grading Winslow Pl., etc., also grading, laying sidewalks, etc., on 42nd St., from A. Pegno, 380 Freeman Ave., Astoria, $1,294 and $10,125 respectively; grading gutter space in Winslow Pl., etc., from Welsh Bros. Contg. Co., 32 Queens St., Astoria, $1,480; grading, curbing, laying sidewalks, etc. on 82nd St., and grading sidewalk space on 98th Ave., from H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., Jamaica, $4,792 and $288 respectively. Noted Mar. 13.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Mar. 24, repaving 1st Ave., granite block, from W. J. Fitzgerald, 547 West 45th St., $464,051; repairing wood block pavement in railroad area, from Casper Helbock Co., Harlem River and 150th St., $54,100. Noted Mar. 20.

N. J., Asbury Park—Paving 6,035 sq.yd. Bangs and Emory Sts., from Union Paving Co., 30th and Locust Sts., Phila., $28,460. Noted Mar. 6.

Fla., Miami—Improving Highway 213 to 223 inclusive, incl. 85,000 lin.ft. curbing, 85,000 lin.ft. guttering, 156,000 sq.yd. bituminous macadam, from T. B. McGahey Co., Miami, $351,500.

Louisiana—State Hy. Dept., Reymond Bldg., Baton Rouge, 8 mi. State Aid Project 142 B and C, Morehouse Parish, incl. approach to bridge 95 ft. long, from W. L. Wimberly, Church Point, $75,000.

Ky., Burgin—Kentucky Hydro-Electric Co., M. E. Taylor Bldg., Louisville, 4,280 ft. approaches to Kennedy Mills Bridge over Dix River, near here, from Tevis & Ingram, Danville, $25,200. Noted Mar. 6.

O., Akron—W. F. Peters, dir. Pub. Serv., Mar. 17, grading, laying sidewalks and cindering 1,800 cu.yd. Sawyer Ave., from M. Kalain and B. F. Burk, 573 Wilson St., $18,230, engrs. est. $21,736. Noted Mar. 6.

O., Cleveland—Cuyahoga Co., Mar. 19, grading, guttering and 8 in. concrete paving 10,406 sq.yd. Highland Rd. 3, from Ohio Constr. Co., Hunkin-Conkey Bldg., $43,676. Engrs. est. $48,300. Noted Mar. 13.

Indiana—State Hy. Comn., Indianapolis, Mar. 18, macadam paving 3.7 mi. and surfacing treating 17 mi. road from near Greenville to New Albany, in Floyd and Harrison Counties, from C. L. Hart, Boonville, $30,490. Noted Mar. 6.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Mar. 21, paving 18 ft. concrete, **(13.99 mi. 1-35, 36 and 37, Comb. A, Johnson, means 13.99 mi. Route 1, Sects. 35, 36 and 37, Combination A, Johnson Co.)**, 13.99 mi. 1-35, 36 and 37, Comb. A, Johnson, from C. E. Hamilton, Carbondale, $412,500; 4.5 mi. 1-7 Edwards, and 6.4 mi. 12-3 Lawrence, from H. A. Carpenter, Terre Haute, Ind., $90,348 and 147,796 respectively; 9.09 mi. 2-55 McLean and DeWitt, from McMahon Constr. Co., Rochester, Ind., $188,688; 18.08 mi. 2-68, 69 and 70, Comb. C, Marshall and LaSalle, from Powers Thompson Constr. Co., Joliet, $376,200; 12.62 mi. 3-82 and 83, Comb. 1, Morgan and Scott, and 14.06 mi. 2-71 and 72, Comb. D, LaSalle, from Henkle Constr. Co., Mason City Ia., $274,400 and $259,500 respectively; 0.55 mi. 3-44, Schuyler, and 3.58 mi. 31-9, Brown, from List & Gifford Constr. Co., 415 Ry. Exch., Kansas City, Mo., $13,647 and $91.189 respectively; 11.58 mi. 3-29, 32 and 34, Comb. G, Warren, 9.18 mi. 3-82, Morgan, and 7.5 mi. 40-4, Carroll, from Cameron & Joyce Co., Keokuk, Ia., $224,922, $211,895 and $163,633 respectively; 0.86 mi. 3-67, Monroe, from Keely Bros. Contg. Co., 2100 State St., East St. Louis, $34,438; 4.35 mi. 3-60, Madison, from Edwardsville Constr. Co., Edwardsville, $97,970; 6.82 mi. 3-59, Jersey and Madison, from Nelson Bros., Jerseyville, $147,408; 1.84 mi. 9-34, McDonough, from J. Kesl & Son, Edwardsville, $42,409; 3.8 mi. 12-24, Clinton, from O. Allenthorp Constr. Co., Casey, $67,939; 6.4 mi. 12-2, Lawrence, from J. W. Etchison Co., Casey, $145,191; 7.16 mi. 13-23, St. Clair, from H. H. Hall Constr. Co., Murphy Bldg., East St. Louis, $159,767; 9.43 mi. 26-7, Ogle and Lee, from J. J. Dunnegan Constr. Co., Shenendoah, Ia., $205,917; 6.39 mi. 46-461 Cook, from Andrew Ward & Son, Oak Glen, $192,131; 3 mi. 46-463 Cook, from G. H. Summerville, Chicago Heights, $81,399; 4.97 mi. 46-464 Cook from Prouger & Block, Blue Island, $176,109, Grading 1.67 mi. 2-54A, DeWitt, 26,650 yd. excav., from Lee Gallagher, $12,072; 1.64 mi. 26-8A, Lee, from J. B. Drew, Tampico, 24,050 yd. excav., $17,572. Noted Mar. 13.

Ill., Monticello—Paving 2 sections of State Aid Rd. 2, 10,041 sq.yd. concrete, 19,955 sq.yd. earth shoulders and 8,264 cu.yd. earth excav., from Carmme & Lyttle, Sullivan, $25,101. Noted Feb. 28.

Wis., West Allis—Paving, etc. 105,500 sq.yd. various streets, from R. Reisinger & Co., 464 Oakland Ave., Milwaukee, one course concrete $2.30 to $2.39 per sq.yd.; from Northern States Contg. Co., Hamm Bldg., St. Paul, Minn., vibrolithic concrete $2.40 per sq.yd. Noted Mar. 6.

S. D., Sioux Falls—Paving 23 blocks (a) sheet asphalt on concrete or crushed stone (b) bituminous concrete on concrete or crushed stone, (c) concrete, from Western Asphalt Paving Corp., 1st and Nebraska Sts., Sioux City, Ia., (a) $2.35 (b) $2.35 (c) $1.95. Noted Feb. 28.

Tex., Angleton—Brazos Co., grading 10.88 mi. State Highway 19, Federal Aid Project 367-B, 24 ft., from D. H. Buchanan, Temple, $31,286. Surfacming to be let later Noted Mar. 6.

Tex., Canton—Van Zandt Co. grading and gravel surfacing 7.14 mi. State Highway 15, Federal Aid Project 363-C, 9 and 18 ft., from T. F. Larkin & Co., 3927 Bowser St., Dallas, $136,047. Noted Mar. 6.

Tex., Wichita Falls—Wichita Co. grading and 1 course rein.-con. surfacing 7.43 mi. State Highway 30, Bates Sect., Federal Aid Project 432, 12,169 cu.yd. earth excav., 78,809 sq.yd. concrete, etc., from L. E. Whitham & Co., Wichita Falls, $223,289. Engrs. est. $263,000 incl. 10% for engineering and contingencies. Noted Jan. 3.

Calif., San Diego—See "Unclassified" under Pier.

Calif., Torrence—Improving Western Ave., from H. G. Feraud, 1213 Detwiler Bldg., Los Angeles, 159,400 sq.ft. grading 0.035, 159,400 sq.ft. 6 in. asphaltic concrete $0.299, 2,000 ft. curb and gutter $1.645.

CONTRACTS AWARDED

Connecticut—State Hy. Dept., Hartford, 18,040 ft. 7-in. native stone macadam on Wales Rd., and 22,000 ft. 7-in. native stone macadam on Monson Rd., in Stafford, to M. A. Gammio Constr. Co., Inc., 728 Valley St., Providence, R. I., $116,341 and $92,817 respectively; 7,745 ft. native stone waterbound macadam on Noank Groton Long Point Rd., in Groton, to J. D'Aloia, 408 Willow St., Woonsocket, R. I., $26,795, 19,923 ft. 8-in. native stone macadam on Norwich Hadlyme Rd., on Montville, and 15,720 ft. 8-in. native stone macadam on Morwich-Hadlyme Rd., in Salem, to D. Arrigoni, Middletown, $122,947 and $83,233 respectively; 21,910 ft. 7-in. waterbound macadam on Norwich-Hadlyme Rd., in Salem and East Haddam, to L. Suzio Constr. Co., State and Brook Sts., Meriden, $147,901; 21,800 ft. 8-in. rein.-con., Type B, on Boston Post Rd., in Westbrook and Old Saybrook, to F. Arrigoni & Sons, 624 Main St., Middletown, $180,606; 16,835 ft. 8-in. rein.-con. in Waterford, to Waterbury Concrete Constr. Co., 110 Grand St., Waterbury, $113,388; 11,098 ft. 8-in. rein.-con. on Boston Post Rd., in East Lyme, to Immick Co., State St., Meriden, $111,728; 18,765 ft. 7-in. native stone macadam on Stafford Union Rd., in Union, to Miller Bros. Constr. Co., Hartford, $118,434; 17,016 ft. 8-in. rein.-con., in Old Lyme, to Sperry Eng. Co., 450 Grand St., New Haven, $132,325. Noted Mar. 13.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Borough Asphalt Co., 1301 Metropolitan Ave., sheet asphalt paving, Empire Blvd. $7,208, Hopkinson Ave. $8,495, Osborn St. $5,749, Riverdale Ave. $18,699, Banker St. $20,405; to Cranford Co., 52 9th St., sheet asphalt paving Delamere Pl. $9,625, East 9th St. $9,306, Ave. L $17,165, West 8th St. $18,680, 11th Ave. $3,967, 43rd St. $8,435, 63rd St. $10,837, 68th St. $5,871, 76th St. $8,977, curbing, flagging and sheet asphalt paving 58th St. $9,199, curbing and sheet asphalt paving 81st St. $8,238; to J. Meehan & Son, 74 Cortlandt St., New York, paving with grade 1 granite Van Dam St. $12,862; to W. J. McHale Contg. Co., 1250 Jefferson St., curbing and flagging Delamere Pl. $2,887; to Interstate Contg. Co., grading, curbing and flagging Empire Blvd. $8,801, East 9th St. $4,078, 71st St. $4,239; to Galecor Contg. Co., 507 Greenwich St., New York, grading, curbing and flagging 76th St. $3,543. Noted Mar. 6.

N. Y., Gloversville—Bd. Supervs. Fulton Co. will resurface highways, by day labor, under supervision of R. Sammons, co. engr. $59,000.

N. Y., Herkimer—Bd. Supervs. Herkimer Co., concrete paving 1.16 mi. Rd. 50 in Frankfort, also 7.01 mi. Sect. 1 Rd. 7 in

Streets and Roads (Continued)

Herkimer and Fairfield, to F. M. Gallo, 207 South Bellinger St., $21,470 and $114,521 respectively, engrs. ests. $21,610 and $114,521 respectively; 1.7 mi. Rd. 47 in Russia, and Rd. 43 in Columbia, to L. Mayersohn, 89 South Man. Blvd., Albany, $25,684 and $67,373 respectively, engrs. ests. $27,394 and $72,686 respectively; 9.6 mi. Rd. 36 in Salisbury and Norway, and Rd. 46 in German, Flats, Columbia and Warren, to Newport Constr. Co., 200 North Main St., $114,467 and $74,121 respectively, engrs. ests. $145,696 and $82,149 respectively; 2.61 mi. Rd. 45 in Little Falls and Danube, to H. G. Hotchkiss, Jr., Rochester, $46,528, engrs. est. $46,765.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks and crosswalks on Randall Ave., grading, building inlets and receiving basins in Metcalf and Fenton Aves., to Hanratty Contg. Co., $20,573, $7,461 and $10,796; curbing, laying sidewalks and crosswalks on Houghton Ave., to Interstate Contg. Co., Inc., $6,876; grading, curbing, laying sidewalks, etc. on East 227th St., to L. Di Minna, $33,866; grading, curbing, laying sidewalks, etc. on East 171st St., and sheet asphalt paving Webb Ave., to Asphalt Constr. Co., 208 Bway., $45,462 and $24,341 respectively; grading, curbing, laying sidewalks, etc. on West 180th St., sheet asphalt paving Grant, Steuben and Findlay Aves., and bituminous concrete paving Elliot Pl. and Mounteden Ave., to Interboro Asphalt Co., 2306 Creston Ave., $44,947, $56,976, $15,148, $14,983, $19,943 and $70,920 respectively; granite block paving Cauldwell Ave., to Astoria Contg. Co., 169 Hunter Ave., Long Island City, $25,514. Noted Mar. 20.

Pennsylvania—State Hy. Dept., Harrisburg, 16,770 ft. Route 113, Fayette Co., to Colonial Constr. Co., Wabash Bldg., Pittsburgh, $169,288; 28,212 ft. Route 212, Tioga Co., to A. W. Hinaman, Canton, $295,921; 17,164 ft. Application 2092, Venango Co., to A. V. Baldwin, Coraopolis, $151,496. Noted Mar. 13.

Md., Baltimore—Bd. Awards, grading, curbing and paving streets listed in Constr. 250-OANA, 21,150 sq.yd. asphalt, 1,400 sq. yd. vitr. brick, to Amer. Paving Co., Montebello Ave., $91,600. Noted Mar. 20.

W. Va., Bluefield—Paving approximately 6 mi. various streets, one course concrete, to Murman Co., Knoxville, Tenn., and Bodenhamer & Tabor, Bluefield. Engrs. est. $400,000. Noted Feb. 7.

W. Va., Clarksburg—Grading, vitr. brick paving, sewering, etc. West Pike St., to P. S. Horner, Clarksburg, $31,008. Noted Mar. 6.

W. Va., Huntington—Paving with vitr. brick 11th and Thornburg St., to G. Pence, 1454 4th Ave., $41,660; 10th Ave. and 24th St., to Harrison & Dean, Walton Bldg., $35,852. Noted Feb. 7.

Fla., Lake Worth—Improving Love Ave., etc., to Greynolds & Monroe, West Palm Beach, 7,011 cu.yd. grading $6,310, 25,095 sq.yd. paving $27,354, 19,360 sq.yd. refinishing $9,680, 44,455 sq.yd. oiling $5,557, total $48,900; Lucerne St., etc., to Keystone Constr. Co., West Palm Beach, 10,256 cu.yd. grading $9,230, 42,655 sq.yd. grading $46,495, 42,655 sq.yd. oiling $5,332, etc., total $61,987.

Fla., West Palm Beach—Palm Beach Co. oiling 660,000 sq.yd. roads, ¼ gal. oil to square yard, to A. O. Greynolds, West Palm Beach, $0.055.

Ala., Anniston—Asphalt paving 2 mi. Christian Ave., Noble and East 10th St., 30 ft., to Morgan-Hill Paving Co., Woodward Bldg., Birmingham, $151,000.

Miss., Iuka—Tishomengo Co., grading, surfacing and bridging 16.886 mi. Federal Aid Project 164, 18 ft., to Bearden & Scott, Sparta, Tenn., $203,599. Noted Feb. 21.

Miss., Starkville—Oktibbeha Co. grading, gravel surfacing and bridges over 20 ft. span on 10.562 mi. Federal Aid Project 167, 18 ft., to A. L. Dumes, Copleville, Tenn., $99,393. Noted Feb. 21.

Ky., Louisville—Bd. Pub. Wks., paving 32nd St., Garland and Central Aves., etc., to K. A. Barker, Floyd and Lee Sts., $42,000. Noted Mar. 6.

Ohio—Dept. Highways & Pub. Wks., Columbus, grading, bridging and paving 3.365 mi. Sect. "E-2" Lima-Bellefontaine Rd., Allen Co., Kentucky rock asphalt, to W. Sousley, Ada, $83,686; 0.971 mi. Sect. "New Bremen," also 0.971 mi. Sect. "New Bremen" Piqua-St. Marys Rd., Auglaize Co., rein.-con., to Churchill-Enck Co., Lima, $32,685 and $22,836 respectively; 0.495 mi. Sect. "Owensville" Milford-Hillsboro Rd., Clermont Co., bituminous macadam asphalt, to Craig & Jordan, Blanchester, $10,026; 1.17 mi. Sect. "C" Youngstown-East Liverpool Rd., Columbiana Co., bituminous concrete, to General Asphalt Paving Co., 1268 Dueber Ave. S. W., Canton, $26,152; 2.68 mi. Sect. "A" Youngstown-East Liverpool Rd., Mahoning Co., bituminous macadam, tar, to C. J. Brown & Taylor, Farmdale, $59,693; 3.275 mi. Sect. "A" and 2.287 mi. Sect. "B-1" Marion-Mt. Gilead Rd., Marion Co., bituminous macadam, asphalt, to L. L. Clymer, Bluffton, $62,805 and $46,702 respectively; 6.403 mi. Sects. "C, D and E-2" Ft. Recovery-Minster Rd., Mercer Co., rein.-con., to Hinton & Smalley, Celina, $158,479; 1.045 mi. Sect. "Camion" Eaton-Hamilton Rd., brick, and 2.73 mi. Sect. "D" Eaton-Greenville Rd., plain concrete, both Preble Co., to Eldorado Paving Co., Eldorado, $40,574 and $80,826 respectively; 1 mi. Sect. "A" Portsmouth-Hillsboro Rd., Scioto Co., bituminous macadam, asphalt, to W. C. Brown, Chillicothe, $44,731; 1.56 mi. Sect. "C-1" Akron-Massillon Rd., and Sect. "A" Akron-Canal-Fulton Rd., brick, Summit Co., to Guilford-Wright Co., Akron, $82,197 and $19,735 respectively; 0.402 mi. Sect. "A" Cincinnati-Columbus Rd., Warren Co., bituminous macadam, asphalt, to Craig & Jordan, Blanchester, $4,410; Sects. "E and F" Akron-Wooster Rd., Wayne Co., brick, to Studebaker & Son, Greenville, $163,661; concrete curbing 1.85 mi. Sect. "M" Chicago-Buffalo Rd., Ashtabula Co., to C. F. Willmore, Middletown, $13,670. Noted Mar. 20.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.049 mi. Sect. "A" Akron-Cleveland Rd., Cuyahoga Co., brick, to J. L. McCormick, Ravenna, $141,973; Sect. "J" Cuyahoga Falls-Kent Rd., Summit Co., sheet asphalt, to McCort Constr. Co., Akron, $51,943. Noted Mar. 20.

O., Akron—W. F. Peters, dir. Pub. Serv. brick paving 1,25 mi. East Market St., 30 ft., to C. Olson Contg. Co., 501 Herberich Bldg., $87,103, engrs. est. $90,000; ¾ mi. Garfield St., 30 ft., to E. and W. M. McShaffrey, 574 Rhodes Ave., $28,377, engrs. est. $30,000; Tyner St., to Hollinger & Davidson, 435 South Bway., $26,837, engrs. est. $28,000. Noted Mar. 6.

O., Cincinnati — Concrete paving 9,400 sq.yd. Vineyard Pl., to Byrnes & Conway Co., 32 Bodman Bldg., $26,211.

O., Cleveland — Laying 569,000 lin.ft. stone sidewalks in southerly, northerly, westerly and West Park Sidewalk Dists., to Ohio Quarries Co., Union Trust Bldg., $151,829. Noted Mar. 13.

O., Columbus—W. H. Duffy, dir. Pub. Serv., to Gaty Constr. Co., 3720 North High St., grading, laying necessary water services, sewer connections and paving 204 ft. alley north of 14th Ave., 20 ft., $1,400, 332 ft. alley north of Linwood Ave., 20 ft., $2,204, both concrete; to R. J. Dienst, 480 South 5th St., 376 ft. alley west of Wagner St., 20 ft., concrete, $2,586; to Cleveland Trinidad Paving Co., Grand Theater Bldg., 1,858 ft. Huron Ave., 20 ft., $18,560, 905 ft. Guernsey St., 24 ft., $13,301, 1,400 ft. Olive St., 24 ft., $14,065, 1,500 ft. Roys Ave., 24 ft., $25,181, 1,500 ft. Palmetto St., 24 ft., $15,002, Westmoor Ave. $22,137, all with asphalt. Noted Mar. 13.

O., Dayton—Paving Yuncker Ave., brick, to L. A. Marshall, 302 Ludlow Bldg., $39,954; Delaware and Herman Aves., sheet asphalt, to Republic Asphalt Paving Co., 801 Schwind Bldg., $20,710 and $10,411 respectively; Purcell Ave., brick, to E. A. Smith, 702 Commercial Bldg., $27,470. Noted Mar 13.

O., Newark—Resurfacing 0.5 mi. Granville St., 40 ft., to T. D. Keyes & Sons, Newark, $27,456. Engrs. est. $28,000. Noted Mar. 6.

O., Steubenville—Paving 4th St., natural lake asphalt, to Federal Asphalt Co., Main and D Sts., Hamilton, $60,068.

Illinois—Following are contracts awarded by Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, from Jan. 1 to Mar. 15: concrete paving (9.6 mi. 24-3 and 4, Christian means 9.6 mi. Route 24, Sects. 3 and 4, Christian Co.) to Stevens Bros., St. Paul, Minn., 9.6 mi. 24-3 and 4, Christian, $191,770; to W. C. Meneely Co., Decatur, 32 mi. 2-Div. B, Christian, Shelby and Macon, $622,910; to J. Kesl & Son, Edwardsville, 11.1 mi. 2-10 and 11, Clay, $219,000, and 8.54 mi. 9-33 McDonough, $177,615; to Sutton & Moore, Canton, 2.83 mi. 31-19, Fulton, $61,742; to Cameron, Joyce & Co., Keokuk, Ia., 5.61 mi. 9-45 Peoria, $13,983, and 5.04 mi. 9-26 Hancock, $109,599; to L. S. Kuhn, Bloomington, 6.3 mi. 2-63, Woodford, $131,137; to Northern Illinois Supply Co., Rockford, 0.78 mi. 19-88A, Cook, $16,797; to Mautz & Oren & C. J. Moritz, Inc., Effingham, 26.44 mi. 2-Div. A, Christian, Shelby and Fayette, $575,948; to A. J. Parrish, Paris, 15.61 mi. 1-22, 23 and 24, Crawford and Clark, $309,021; to R. F. Conway Co., 133 West Washington St., Chicago, 25.14 mi. 2-Div. C, LaSalle and Lee, and 22.14 mi. 18-A, Bureau, $926,000; to Indiana Road Paving Co., Rochester, Ind., 3.45 mi. 16-16, Christian, $79,296; to Capitol Constr. Co., 1207 Cherry St., Des Moines, Ia., 15.52 mi. 12-30, 31, 32, A-1, St. Clair, $339,500; to Cast Stone Constr. Co., Eau Claire, Wis., 12.07 mi. 8-20 and 21, Iroquois, $243,389; to C. W. Clark Co. 511 Terre Haute Trust Bldg, Terre Haute, Ind., 5.97 mi. 16-1, Edgar, $96,632, and 7.31 mi. 16-2, Edgar, $147,259. Grading to M. Frazier, Louisville, 0.62 mi. 12-10A, Clay, $3,568; to E. P. Olson, 2901 Monterey St., St. Joseph, Mo., 2.24 mi. 3-40A, McDonough, $11,703, 4.08 mi. 3-41A, McDonough, $47,407, 1.99 mi. 3-42A, Schuyler, $32,915; to M. Edwards McGuire, Indianapolis, Ind., 2.1 mi. 2-20A, Fayette and Shelby, $8,671; to Frazier Davis Constr. Co., Arcade Bldg., St. Louis, Mo., 0.47 mi. 12-30A, St. Clair, $9,126; to Gaines Bros. Co., Fairland, Okla., 3.98 mi. 16-20A, Montgomery, $30,485. Noted Nov. 1 and 29, and Feb. 21.

Ill., Bloomington — Paving Allen St., 11,211 sq.yd. brick on concrete, to Ward & Bros. Co., Bloomington, $42,000; 750 lin. ft. 6-in. water main in Jackson St., to J. P. Lowry, Bloomington, $2,400; 338.5 ft. 12-in. vitr. sewer in Bissell St., to W. Sprague, $618. Engrs. est. $45,000.

Ill., Edwardsville — Grading and concrete paving 7,300 ft. various streets, to A. Fahrig, Edwardsville, $75,000; sidewalks to G. R. Hytru, Edwardsville, $3,900. Engrs. est. $75,000.

Ill., Peoria—Richwood Twp., grading and surfacing with 6-in. concrete 11,842 ft. Prospect Ave., 18 ft., to B. P. Walters, Peoria, $47,309. Noted Mar. 6.

Ill., Rockford—Winnebago Co., paving 3.9323 mi. Sect. X-15d, State Aid 14, 18 ft. wide, portland cement concrete, to G. Welch, Beloit, Wis., $91,212. Engrs. est. $91,628.

Wis., Elkhorn—Walworth Co., concrete surfacing, etc., Walworth-Darien Rd. Sects. A and B, also Big Foot-Walworth Rd., to P. T. Fess, 1840 Yahara Pl., Madison, $130,854, $8,295 and $57,897 respectively.

Wis., Fond du Lac—Fond du Lac Co., concrete surfacing, etc., Waupun-Brandon Rd., State Trunk Highway 29, to Morris Martin Constr. Co., Berlin, $84,043; Fond du Lac-Calumetville Rd., State Trunk Highway 55, to Jorgenson Constr. Co., Denmark, $86,946. Noted Mar. 6.

Wis., Kenosha—Paving various streets, 33,700 sq.yd. asphalt and 22,900 sq.yd. asphaltic concrete, to H. J. Glover & Son, Holland, Mich., $121,029 and $75,577 respectively; 40,400 sq.yd. rein.-con., to Brennan & Bounsell, 709 Exch. St., Kenosha, $130,231.

Wis., Juneau—Dodge Co. Hy. Comn., grading and concrete surfacing Project A, Oconomowoc-Mayville Rd., Projects E and F, Mayville-Woodland Rd., to P. C. Koreck, 1000 Humboldt Pl., Milwaukee, 16,353 cu. yd. earth excav. $0.80, 36,248 cu.yd. earth excav. $0.60, 33,506 sq.yd. concrete $1.22, 93,947 sq.yd. concrete $1.32, etc., total $261,912; Project B, Oconomowoc-Mayville Rd., to J. F. Bloomer, Appleton, 31,832 cu. yd. earth excav. $0.70, 116,689 sq.yd. concrete $1.08, etc., total $214,008; Project D, Oconomowoc-Mayville Rd., to Lampert Constr. Co., 104 Main St., Oshkosh, 15,294 cu.yd. earth excav. $0.81, 67,892 sq.yd. concrete $1.23, etc., total $128,140; Project G, Hustisford-Horicon Rd., to Milwaukee General Constr. Co., 856 8th Ave., Milwaukee, 10,418 cu.yd. earth excav. $0.75, 10,389 sq.yd. concrete $1.40, etc., total $108,718; Project H, Hustisford-Lebanon Rd., to Cherney Constr. Co., Francis Creek, 10,438 cu.yd. earth excav. $0.80, 35,324 sq.yd. concrete $1.25, etc., total $59,985. Noted Mar. 6.

Wis., Kilbourn—Paving, etc. Washington Ave., La Crosse and Eddy Sts., vibrolithic concrete, to O'Dea & Shafer, 1019 Oregon St., Madison, $47,575. Noted Mar. 27.

Wis., Port Washington — Ozaukee Co. concrete surfacing, etc., Brown Deer-Cedarburg Rd., Sect. A, to McGucken-Vander Heyden Co., 314 Fowler St., Milwaukee, $118,793; Sect. B, to Manitowoc Constr. Co., 826 South 8th St., Manitowoc, $56,646. Noted Mar. 6.

Wis., Racine—Racine Co. will gravel surface 23 mi. various roads, by day labor. W. A. Bechthold, Courthouse, comr.

Wis., Sheboygan—Will pave 60,000 sq. yd. Maryland, North 20th, Cooper, Union and North 7th Sts., 25 ft. concrete, concrete curbs and gutters, by day labor. C. U. Boley, City Hall, engr.

Wis., White Fish Bay—Paving various streets, vibrolithic concrete, to Froemming Bros., 1326 Humboldt Ave., Milwaukee, 21,950 sq.yd. $2.71 and 2,700 sq.yd. $2.66. Noted Mar. 13.

Ia., Iowa Falls—Improving 45 blocks, incl. 47,360 sq.yd. paving, to Dearborn Constr. Co., Waterloo, 8-in. vibrolithic concrete at $2.58 per sq.yd. and 6-in. $224 per sq.yd. Total $122,340. Noted Nov. 1.

Streets and Roads (Continued)

Kan., Pittsburg—Concrete paving to Du Bois Constr. Co., Pttsburg, $45,876.

Kan., Salina—Salina Co., sand clay surfacing 5.25 mi. Federal Aid Project 44, Sects. A and B, also fine grading and sand clay surfacing 7.015 mi. Federal Aid Project 45, Sects. C and D, to Marquette Gravel & Constr. Co., Marquette, $33,585 and $42,708 respectively.

Kan., Topeka—Grading and 20,000 sq. yd. 6 in. slab concrete alley paving, to Ritchie & Ramsey, 1809 West 8th St., $51,318; 40 ft. rein.-con. girder bridge on Wagner St., also street railway paving Kansas Ave., to F. Luttjohann, 2101 Kansas Ave., $10,662 and $8,977 respectively.

Kan., Wichita — Improving various streets, to Globe Constr. Co., 1069 North Water St., 31,685 sq.yd. concrete paving $1.49, 470 sq.yd. concrete $1.90, 9,185 cu.yd. excav. $0.70; to Lefever Bros., Wichita, 5,394 lin.ft. combined curbing and guttering $0.77; to F. C. Kensler, 1558 South Water St., 1,080 lin.ft. combined curbing and guttering $0.76, 1,660 lin.ft. $0.74; to G. W. Brauch, 244 South Erie St., 3,681 lin.ft. combined curbing and guttering $0.78; to H. T. Ritchie Paving Co., Wichita, 1,926 sq.yd. sheet asphalt $2.58, 3,053 sq.yd. asphalt $2.18, 1,114 sq.yd. asphalt $1.49, 1,360 lin.ft. combined curbing and guttering $0.78, 23,828 sq.yd. asphaltic concrete $2.36, 1,660 sq.yd. asphaltic concrete $2.34, 1,305 sq.yd. asphaltic concrete $2.46, 867 sq.yd. asphaltic concrete $2.50, 5,920 cu.yd. excav., $0.17, 2,641 lin.ft. combined curbing and guttering $0.794, 2,666 lin.ft. combined curbing and guttering $0.78, 1,124 lin.ft. combined curbing and guttering $0.79, 5,203 lin.ft. combined curbing and guttering $0.77. Noted Mar. 6.

Tex., Beaumont—Jefferson Co., grading, concrete surfacing, etc, 7.35 mi. State Highway 40, Bates Sect., Voth Rd, Federal Aid Project 349, 16 ft., to Smith Bros., Amer. Natl. Bank Bldg., Dallas, $204,756. Engrs. est. $250,000. Noted Mar. 13.

Tex., Corsicana—Paving 12 streets, 52,000 sq.yd. brick, to Panhandle Constr. Co., Lubbock, $237,251. Noted Feb. 14.

Tex., Dallas—Paving various streets in Kessler Park, 1½ in. rock asphalt on 5 in. concrete, to Uvalde Rock Asphalt Paving Co., Insurance Bldg., $100,000.

Tex., Galveston—Raising grade in Area from 40th to 48th Sts. south of Bway., to United Dredging Co., Tremont St., $1,120,434. Noted Feb. 14.

Tex., Daingerfield—Morris Co., grading, gravel surfacing, etc., 5.08 mi. State Highway 35, Federal Aid Project 362, 12 ft., to Womack Constr. Co., Sherman, $31,816. Noted Mar. 13.

Tex., McKinney — Collin Co., rein.-con. surfacing 22,590 sq.yd. State Highway 1, Federal Aid Project 234, to Tibbetts Constr. Co., Mineral Wells, $60,088. Noted Mar. 13.

Tex., Rio Grande City—Starr Co. grading and gravel surfacing 13.19 mi. State Highway 12, Federal Aid Project 337-B, 12 ft., to W. T. Montgomery, Alamo Bank Bldg., San Antonio, $51,809; rein.-con. drainage structures on above, to Smith Starkey & Brown, Houston, $22,079. Noted Mar. 13.

Tex., Waxahachie—Ellis Co., grading and gravel surfacing 3.04 mi. State Highway 14, Federal Aid Project 384, 18 ft., to Eproson & Co., Groesbeck, $14,772; draining above, to Austin Bridge Co., 1813 Clarence St., $18,584; 6,960 cu.yd. gravel to be furnished by county. Engrs. est. $52,330. Noted Feb. 21.

Okla., Blackwell—Grading and paving 7 blocks North 7th and B Sts., 8,600 sq.yd. concrete, 3,600 lin.ft. curbing, 2,750 cu.yd. excav., to Tyler & Pethel, 928 West Blackwell St., $2.35 per sq.yd. for 6 in. concrete, etc., total $26,777. Noted Mar. 6.

Okla., Newkirk—Kay Co., grading and paving 2.52 mi. Tonkawa Rd., 26,300 sq.yd. vertical fibre brick, 19,300 cu.yd. excav., to Bert Brooks, Inc., Tonkawa, $76,110.

Okla., Norman—Grading and paving 9 blocks, Monett St., to Yates Constr. Co., Ada, 14,106 sq.yd. concrete $2.55, 5,250 lin. ft. curbing, 3,850 cu.yd. earth excav., total $48,772.

Washington—State Hy. Comn., Olympia, concrete paving 6 mi. Olympic Highway from Perry Creek west, Thurston Co., to F McLellan, Lyon Bldg., Seattle, $181,940, 4.64 mi. Olympic Highway from Grays Harbor to Thurston County line, Thurston Co., to T. M. Morgan, Everett, $172,750; grading 7.37 mi. Inland Empire Highway from Waitsburg to Dayton, Columbia and Walla Walla Counties, to Campbell Constr. Co., Sunnyside, $41,234, 6.62 mi. Olympic Highway from Queets River southeast, Grays Harbor and Jefferson Counties, to J. Rignall, Rignall, $28,679. Noted Feb. 28.

Wash., Chehalis—Concrete paving Main St. et al., to Albers Constr. Co., Chehalis, 11,000 sq.yd. concrete $2.27 per sq.yd., 10,000 cu.yd. earth excav. $0.80, total $51,039. Engrs. est. $54,000.

Wash., Seattle—Comrs. King Co., grading Hobart-Issaquah Rd., to M. Richardson, 3434 14th St. W., $25,500. Engrs. est. $25,000.

Oregon—State Hy. Dept., Salem, to J. C. Compton, McMinnville, improving 9.5 mi. Albany-Corvallis Highway, 18 ft., Benton Co., 2,000 cu.yd. new gravel base $1.75 per cu.yd., 100,800 sq.yd. concrete paving $2.04, etc., total $231,622.

Ore., Portland—To Warren Constr. Co., Park Rose St., improving East 58th St., 4,017 cu.yd. earth excav. $0.90 per cu.yd., 26,900 sq.ft. concrete sidewalk $0.18, 8,800 sq.yd. asphaltic concrete paving $1.15, etc., total $30,385, engrs. est. $34,887; to S. Simonson, Portland, improving Clinton St., 4,358 cu.yd. earth excav. $1, 8,662 sq.yd. asphaltic concrete (redressed) paving $1.30, etc., $44,732, engrs. est. $49,755; to City Paving Plant, City Hall, improving East 13th St., 4,400 cu.yd. earth excav. $1.25, 1.900 sq.ft. concrete sidewalk $0.21, 1,220 lin.ft. concrete curb $0.53, 44,860 sq.yd. asphaltic concrete paving $0.95, etc., $55,508.

California—Improving highway between south boundary Ventura Co. and Camarillo, Div. 7, Route 2, Sects. A and B, 13.5 mi. grading, 7.4 mi. concrete paving, 2.5 mi. widened with concrete shoulders, to S. Hunter, 122 Valero St., Santa Barbara, $319,145, engrs. est. $369,002. Noted Mar. 20.

Industrial Works

PROPOSED WORK

R. I., Providence—Factory—S. P. Harris Co., 97 Dyer St., had plans prepared by Perry & Whipple, Hospital Trust Bldg., 2 story, 70 x 150 ft., brick, Public St. $60,000.

N. Y., Hornell — Manufacturing — New York Central Electric Corp. plans 4 story, brick, concrete and steel, Bway. $150,000-$175,000.

N. Y., Oswego—Plant—Peoples Gas & Electric Co., 70 East 1st St., plans plant addition. $175,000-$200,000. R. F. Burnett, mgr.

N. Y., Tonawanda — Plant — Spaulding Fibre Co., Wheeler St, plans brick, concrete and steel addition. $130,000.

Fla., Clearwater—Gas Plant—City voted $150,000 bonds for gas plant and equipment. W. C. Galt, Clearwater, engr. Noted Feb. 21.

La., New Orleans—Factory—Henry Ford Motor Co., Highland Park (Detroit, P. O.), Mich. purchased 6 acres adjoining assembling plant, here, and plans new factory.

Tenn., Memphis — Mill — Cole Mfg. Co., 789 South 4th St., plans addition (first of 3 units). $40,000.

Tenn., Milan—Factory—Milan Development Co. soon takes bids cigar factory. $40,000. Amer. Cigar Co., lessee. Noted Mar. 6.

Ky., Ashland—Bakery—Ashland Bakery plans 4 story, 55 x 60 ft. bakery. $40,000.

Ill., Melrose Park—Electrical Engineers Equipment Co., 710 West Madison St., Chicago, plans 1 story, rein.-con. and brick on 17-acre site, here. $150,000. Woodmansee-Davidson Eng. Co., 208 South La Salle St., Chicago, engrs.

Wis., Milwaukee — Factory — Sperry Candy Co., 171 Bway., plans to rebuild 4 story, 50 x 60 ft., brick and timber, Reed St. $45,000. Engineer and architect not selected.

Ia., Marshalltown — Factory — Fisher Governor Co. plans 2 story and basement, 60 x 80 ft. addition. Private plans.

Kan., Kansas City — Boiler Works — Darby Boiler Wks. Co., 923 North Erd St., purchased 26 acre site and plans boiler works. Private plans.

Kan., Kansas City — Factory — Fairfax Iron & Steel Co. preparing plans 1 story, 160 x 700 ft., on 1780 acre site. Private plans. Horner & Wyatt, 306 McMillian Bldg., Kansas City, Mo., engrs.

Neb., Crete—Light and Power Plant—Defeated $45,000 bonds for electric light and power plant. C. E. Beals, city clk. Noted Feb. 28.

Mo., Carthage — Tannery — Owner, c/o Chamber of Commerce, plans rein.-con. and brick buildings. $150,000. Private plans.

Tex., Ft. Worth — Repair — Lone Star Tank Co., Wichita Falls, plans steel car repair shop, Saginaw Rd. along tracks Atchison, Topeka & Santa Fe R.R., here. $75,000. Engineer and architect not announced.

Tex., Marble Falls—Mill—Marble Falls Textile Mills making plans new textile mill. $500,000. Private plans.

Calif., Los Angeles—Flour Mill—Sperry Flour Co., 141 California St., San Francisco, having plans prepared by M. C. Couchot, 234 Pine St., San Francisco, group of buildings for flour mill, Maywood Ave., here. $1,000,000.

Calif., Los Angeles—Power Plant—See "Unclassified."

Calif., Monrovia—Factory—Day & Night Solar Heater Co., 902 South Myrtle St., having plans prepared by Hamm & Grant, Ferguson Bldg, Los Angeles, 1 and 2 story, 150 x 200 ft., brick, Foothill Blvd.

Calif., Oakland—Factory—Illinois Wire & Cable Co., Sycamore, Ill., having plans prepared by W. J. Miller, 417 Market St., San Francisco, six concrete and brick factory buildings, 80th Ave., here, first unit $40,000, total $250,000.

Calif., Ontario — Power Plant — Ontario Power Co. plans 3,000 to 4,000 watt steam generating plant. G. D. Smith, genl. mgr.

Calif., Pasadena—Factory—Wickercraft Furniture Co., 403 South Raymond Ave., having plans prepared by Hamm & Grant, Ferguson Bldg., Los Angeles, 4 story, 100 x 125 ft., rein.-con. and heavy mill construction.

BIDS DESIRED

N. Y., Buffalo—Plant, etc.—Apr. 17, at office Dept. Pub. Wks., Municipal Bldg., furnishing and asphalt repair plant, 2,000 sq. yd. capacity of completed asphalt pavement, yard and road equipment for laying sheet asphalt; adv. E. N.-R. Mar. 27.

Wis., Racine—Factory—Apr. 1, by E. B. Funston Co., archts., Janes Blk., 1 story, 100 x 248 ft., brick and timber, plain foundation, De Koven Ave., for Wisconsin Metal Products Co., c/o architects. $60,000.

B. C., Essondale—Power Plant—Apr. 7, by Dept. Pub. Wks., Victoria, 50 x 50 x 140 ft. steam heat and power plant at asylum here. $200,000. J. H. Whittaker, New Westminster, archt.

B. C., Point Grey—Power Plant—Apr. 7, by Dept. Pub. Wks., Victoria, 45 x 56 x 120 ft. steam heat and power plant at University site, for University of British Columbia, 10th and Willow Sts., Vancouver. $200,000. Sharp & Thompson, 708 London Bldg., Vancouver, archts.

CONTRACTS AWARDED

R. I., Woonsocket—Factory, etc.—Dunn Worsted Co., Mill St., 2 story, 75 x 80 ft., factory and office, brick, plain foundation, Mill St., to Eastern Constr. Co., 345 North Main St. Archts. est. $40,000.

N. Y., Amsterdam—Factory—S. Sanford & Sons, Inc., 5 story, rein.-con., Shuler St., to J. J. Turner & Sons, Amsterdam. To exceed $150,000.

N. Y., New York—Plant, etc.—David Weils Son Lithographing Co., 386 Berry St., 8 story, rein.-con., brick and steel plant and office building, plain foundation, Berry St., to Commonwealth Eng. Corp., 103 Park Ave. Archts. est. $750,000.

N. Y., Rochester—Plant—Rochester Gas & Electric Co., 34 Clinton Ave. N., 3 story, 90 x 220 ft. power plant, to Ferro Concrete Constr. Co., 3rd and Elm Sts., Cincinnati. Archts. est. $200,000.

N. Y., Sherrill—Manufacturing—Oneida Community, Ltd., 1 story manufacturing building, two 2 story, 100 x 280 ft. wings, to Austin Constr. Co., 16112 Euclid Ave., Cleveland, $125,000.

Pa., Phila. — Plant — Allegheny Realty Co., 3264 North 6th St., 7 story and basement, 132 x 180 ft. and 1 story, 40 x 85 ft. brick and steel, Allegheny Ave. and B St., to Barclay & White Co., Presser Bldg.

Pa., Phila.—Mill—Rodger Hosiery Co., Stenton and Wyoming Sts., 2 story and basement, 55 x 72 x 149 ft. brick and steel, plain foundation, to R. H. Patterson & Son, 6 Queen Lane, $50,000.

W. Va., Keyser—Mill—Keyser Worsted Mills, addition to Snider Bros., Keyser, $40,000. Noted June 14.

Tenn., Chattanooga — Plant — Turnbull Cone & Mchy. Co., 2 story addition, to T. S. Mundy & Co., Chattanooga. $40,000. Noted Jan. 17.

Ky., Paducah—Bakery—City Baking Co., 122 North 2nd St., 3 story, 40 x 140 ft., to G. Lockwood, Paducah. Est. cost $40,000.

O., Cincinnati—Print Shop, etc.—Times Star Publishing Co., 6th and Walnut Sts., rein.-con. print shop and office building, Walnut St., to J. and F. Harig, 1240 Queens City Ave., $150,000.

O., Cleveland—Factory—Reese Chemical Co., 1945 East 57th St., 1 story, 37 x 140 ft., brick and steel, Frank Ave., to Lehder Constr. Co., Rose Bldg. Archts. est. $40,000.

O., Cleveland—Factory—T. Gurscher Co., 2129 West 19th St., remodeling and building 2 story, 58 x 100 ft. brick addition, West 63rd St., to Forschner Co., East 10th St. and St. Clair Ave. Archts. est. $40,000. Noted Feb. 21.

Industrial Works (Continued)

O., Cleveland—Factory—Motor Repair & Mfg. Co., c/o C. Levinson, pres., 1549 Hamilton Ave., 1 and 2 story, 60 x 100 and 20 x 60 ft., brick and steel additions, to De Hamel Constr. Co., Plymouth Bldg. Archts. est. $40,000. Noted Mar. 6.

O., Cleveland — Factory — Sanitary Tinning Co., c/o A. J. and O. C. Miller, 3753 East 93rd St., 1 story and basement, 54 x 104 ft., brick and steel, 3753 East 93rd St., masonry contract to Figilis & Tepper, 3283 East 123rd St. Archts. est. $40,000.

O., Elyria—Factory—Elyria Iron & Steel Co., 1 story, brick and steel, to A. C. Felver, 7016 Euclid Ave., Cleveland. Archts. est. $50,000. Noted Feb. 28.

O., Portsmouth—Plant—Peebles Paving Brick Co., 1 story, brick and steel, to Austin Co., 16112 Euclid Ave., Cleveland. Archts. est. $100,000.

Mich., Iron Mountain—Shipping Plant—Ford Motor Co., Highland Park (Detroit, P. O.), 1 story, 42 x 162 ft. brick and steel, plain foundation, to W. W. Oeflein, 86 Michigan Ave., Milwaukee.

Mich., River Rouge—Factory—Ford Moter Co., Highland Park, (Detroit P. O.), 1 story, 270 x 1,260 ft., rein.-con., brick and steel, plain foundation, here, to Bryant & Detwiler Co., 2336 Dime Bank Bldg., Detroit. Noted Feb. 21.

Ill., Belvidere—Factory—Sanitary Scale Co., 565 West Washington St., Chicago, 1 story and basement, brick and concrete, to E. B. Glass, Belvidere. Archts. est. $40,000.

Ill., Chicago—Factory—Florsheim Shoe Co., 450 West Adams St., 6 story, 61 x 225 ft. fireproof, 3981 Belmont St., to R. F. Wilson Co., 1851 Elston St. Archts. est. $750,000. Noted Nov. 15.

Ill., Chicago — Plant — Gulbransen, Dickenson Co., 3232 West Chicago Ave., 6 story, 100 x 145 ft. addition, fireproof, 3232 West Chicago Ave., to J. W. Snyder Co., 116 South Michigan St. Archts. est. $200,000.

Kan., Tecumseh—Plant—Illinois Light & Power Co., Peoria, Ill., will build concrete and steel plant, here, by day labor. $2,225,000. Noted Oct. 18.

Mo., St. Joseph—Plant—See "Buildings."

Mo., St. Joseph—Factory—Collier Adams Mfg. Co., 4th and Mitchell Aves., will alter and construct 3 story and basement, 94 x 139 ft., rein.-con. and brick factory addition, also lumber-sheds, 63 x 72 ft. dry kilns, 35 x 36 ft. boiler room, by day labor. $75,000. E. I. Meier, 203 Lincoln Bldg., archt. Noted Apr. 5.

Mo., St. Louis—Factory—Moore Shoe Co., 1906 Pine St., 2 story and basement, 60 x 190 ft., brick and frame, Boyle St., to L. B. Shaffner, 2704 North Kingshighway. Archts. est. $50,000.

Okla., Enid — Garage, Warehouse and Lumber Yard — Kiowa Lumber Co., 136 x 140 ft., general contract to D. C. Bass & Son, Enid. Archts. est. $40,000. Noted Mar. 6.

B. C., Vancouver—Workhouse—See "Unclassified."

Buildings

PROPOSED WORK

Conn., Hartford—Apartment—Padula & Bell, 48 Bellanger St., West Hartford, having plans prepared by J. E. Marchetti, 721 Main St., 3 story, 91 x 125 ft., brick and steel, plain foundation, Willard St., here. $175,000.

N. Y., Binghamton—High School—Bd. Educ. had plans prepared by T. I. Lacey & Son, Press Bldg.. East Junior High School, 3 story, 175 x 212 ft., brick, stone, concrete and steel, Broad Ave., Robinson and Ely Sts. $425,000-$450,000. Noted Feb. 7.

N. Y., Brooklyn—Arsenal—Adjutant General, 158 State St., Albany, soon takes bids 6 story and basement 80 x 480 ft., rein.-con., on block bounded by 2nd and 3rd Aves., 63rd and 64th Sts., here. $1,350,000.

N. Y., Buffalo—Church—St. Vincent de Pauls Parish, 15 Eastwood Pl., had plans prepared brick and stone, Main St. and Eastwood Pl. $475,000-$500,000 J. S. Hummell, pastor. Noted Aug. 23.

N. Y., Hamilton—Hotel—Building Com. Hamilton Business Mens Assn., and Amer. Hotels Corp., plan new hotel. Address T. B. Bell, pres. Business Mens Assn.

N. Y., Jamaica—Apartment—Highland & Ackroyd Realty Corp., c/o Webb & Sohn, archts. and engrs., 469 5th Ave., New York, having plans prepared brick, steel and stone, plain foundation, Hillside Ave., here. $250,000.

APPROACH PIERS—PHILADELPHIA, PENN.

Following are lowest three bids opened by Delaware River Bridge Joint Comn., Widener Bldg., Feb. 13, for Contr. No. 11, Philadelphia approach piers for bridge over Delaware River between Philadelphia and Camden, N. J., (A) Frederick Snare Corp., 114 Liberty St., New York, (awarded contract); (B) Keystone State Constr. Co., 210 South 13th St.; (C) P. T. Cox Contg. Co., 164 Nassau St., New York; Contr. No. 12, Camden approach piers, (A) H. G. Ley & Co., 716 Raymond St., (awarded contract); (B) Frederick Snare Corp.; (C) Keystone State Constr. Co. The unit bids were as follows:

Contract 11	A	B	C
650 lin.ft. test borings	$2.00	$2.50	$1.80
10,500 cu.yd. excavation to 12 ft. below future finished grade	2.00	3.50	4.75
1,000 cu.yd. excavation, 12 to 20 ft. below future finished grade	4.00	6.00	4.75
8,000 cu.yd. concrete masonry	12.50	14.00	13.75
3,000 lin.ft. reinforced concrete piles	1.50	2.20	2.00
3,000 lin.ft. driving reinforced concrete piles	.50	1.20	2.00
400 cu.yd. granite masonry coping	125.00	115.00	110.00
470 cu.yd. granite masonry, rock face ashlar	86.00	82.00	79.00
45,600 lb. reinforcing steel	.05	.06	.045
Underground structures and paving Florist Street (lump sum)	6,000.00	5,000.00	4,400.00
Extended totals	$231,000	$258,851	$265,377

Contract 12	A	B	C
650 lin.ft. test borings	$1.85	$2.00	$2.50
11,000 cu.yd. excavation to 12 ft. below future finished grade	3.10	3.50	3.50
2,000 cu.yd. excavation 12 to 20 ft. below future finished grade	4.94	5.00	6.00
9,400 cu.yd. concrete masonry	10.50	12.50	14.00
6,000 lin.ft. reinforced concrete piles	1.80	1.50	2.20
6,000 lin.ft. driving reinforced concrete piles	1.65	.50	1.20
510 cu.yd. granite masonry coping	113.00	118.80	115.00
620 cu.yd. granite masonry rock face ashlar	75.00	86.70	82.00
70,000 lb. reinforcing steel	.045	.05	.06
Extended totals	$271,863	$297,142	$317,815

BRIDGE—PHILADELPHIA, PENN.

Bids were opened Mar. 19, by Delaware River Bridge Joint Comn., Widener Bldg., for (1) cable bands, suspenders and hand ropes for bridge over Delaware River connecting Philadelphia and Camden, N. J., Contr. No. 13, (A) Keystone State Constr. Co., 210 South 13th St., (awarded contract); (B) Underpinning & Foundation Co., 342 Madison Ave., New York; (2) suspended structure for bridge, Contr. No. 14, (A) American Bridge Co., Widener Bldg., (awarded contract); (B) McClintic-Marshall Co., Pittsburgh; (C) Bethlehem Steel Co., Bethlehem. The unit bids were as follows:

	A	B	C
49,000 ft. furnishing suspender rope	$1.50	$1.40	....
105,000 ft. erecting suspender rope	.85	.60	....
840,000 lb. steel castings	.24	.27	....
94,000 lb. high tensile bolts	.25	.40	....
Hand ropes, as per plans (lump sum)	7,000.00	7,000.00	....
40,000 lb. wrought and structural steel	.15	.15	....
Painting main cables, as per plans (lump sum)	4,000.00	5,000.00	....
Extended totals	$404,850	$414,000	....

	A	B	C
11,300,000 lb. structural special steel	$0.0875	$0.093	$0.1047
9,100,000 lb. structural silicon steel	.0785	.077	.0899
16,700,000 lb. structural carbon steel	.0690	.068	.0810
60,000 lb. forged carbon steel	.12	.139	.156
50,000 lb. cast steel	.14	.133	.1651
20,000 lb. bronze	.56	.513	.5625
40,000 lb. cast iron	.18	.154	.2869
Extended totals	$2,888,000	$2,918,610	$3,393,917

FILTRATION PLANT—FAIRMONT, W. VA.

Following are lowest three bids opened by city, Feb. 11, for constructing filtration plant, (A) Rust Eng. Co., 311 Ross St., Pittsburgh, Penn., (awarded contract; Roberts Mfg. Co., Darby, Penn., subcontractors for filter equipment); (B) J. M. Didinger, Phila.; (C) Concrete Steel Bridge Co., Clarksburg. The unit bids were as follows:

	A	B	C
3,200 cu.yd. earthwork	$1.11	$1.50	$1.75
200 cu.yd. rock excavation	4.92	3.50	4.90
120 cu.yd. concrete substructure	26.60	19.00	20.30
1,280 cu.yd. concrete superstructure	27.88	30.00	31.00
10,000 sq.ft. machine surfacing concrete	.12	.1375	.10
6,800 sq.ft. granulated surfacing concrete	.04	.10	.125
205,000 lb. steel reinforcing	.0525	.065	.05
200 lin.ft. 24 in. vitrified pipe line	3.71	4.00	3.70
125 lin.ft. 12 in. vitrified pipe line	1.46	1.35	1.40
40 lin.ft. 4 in. vitrified pipe line	.60	.50	1.00
35 tons extra cast iron pipe	110.00	85.50	85.00
8 tons extra specials	200.00	180.00	165.00
Filter piping and equipment (lump sum)	38,063.00	38,800.00	38,633.00
Filter gravel and sand (lump sum)	3,360.00	3,267.00	3,600.00
Wash water pumps (lump sum)	2,363.00	3,470.00	2,510.00
Pressure pumps (lump sum)	2,625.00	2,025.00	2,430.00
Superstructure (lump sum)	24,000.00	24,000.00	25,000.00
600 lin.ft. clear water basin fence	2.00	1,650.00	4.25
Raw water pump and appurtenances (lump sum)	3,800.00	2,200.00	2,925.00
Extended totals	$137,458	$142,393	$143,694

N. Y., Johnstown — Club — Johnstown Lodge Loyal Order of Moose 1185. plans fireproof building. $175,000-$180,000.

N. Y., Johnstown—Lodge—Building Com. St. Patricks Lodge 4, F and A. M., plans brick, stone, steel and concrete, North Perry St. $150,000-$160,000. A. L. Adams, chn.

N. Y., Johnstown—Hotel—Building Com. Johnstown Business Mens Assn., plans new hotel. $200,000-$225,000. Address L. K. Maylender, Jr., chn. Engineer and architect not selected.

N. Y., New York—Garage—Shampan & Shampan, archts. and engrs., 189 Montague St., Brooklyn, preparing plans 1 story, 98 x 100 ft., rein.-con., brick and steel, plain foundation, West 41st St. near 9th Ave., here. $300,000. Owners name withheld.

N. Y., New York—Office—H. Hellman, Co, Inc., 159 West 25th St., having plans prepared by W. H. Birkmires Sons, archts. and engrs., 1133 Bway., 12 story, brick, steel and stone, plain foundation, 71 West 45th St. $500,000.

N. Y., Ogdensburg—Bank—Bd. Directors Ogdensburg Bank, soon takes bids 42 x 100 ft., brick, 32 ft. high, Ford St. $200,000. Thomas Bruce Boyd, Inc., 286 5th Ave., New York City, archts. and engrs. Noted Feb. 28.

N. Y., Penn Yan—Dormitory and Gymnasium—Keuka College for Women, having plans prepared by O. Dockstader, Elmira, rein.-con., brick and steel. $150,000-$175,000. A. H. Norton, pres.

N. Y., Schenectady—School—Bd. Educ. plans 2 story, brick and steel, plain founda-

Buildings (Continued)

tion, Bellevue St. $175,000. Engineer and architect not selected.

N. J., West New York (Branch of Weehawken)—Apartment—Montrose Morris & Son, archts. and engrs., 517 Nostrand Ave., Brooklyn, N. Y., preparing plans 8 story, brick, steel and stone, plain foundation, here, $1,000,000. Owners name withheld.

Pa., Berlin — Church — Berlin Brethern Church plans 2 story and basement, 100 x 132 ft., Main St. $150,000. Architect not seelcted.

Pa., Girardville — Church and Sunday School — St. Vincents Roman Catholic Church having plans prepared by G. C. Freeman, Liberty Bank Bldg., Reading, 2 and 3 story and basement, 50 x 150 ft. brick and steel, plain foundation. $150,000.

Pa., Phila.—Exchange—Bell Telephone Co., 19th St. and Parkway, having plans prepared by J. T. Windrim, Commonwealth Bldg., 120 x 173 ft., 16th and Jefferson Sts.

Pa., Phila.—Hospital—P. H. Johnson, archt., 1713 Sansom St., preparing revised plans for group of buildings for Penna. Mystic Shrine, 1337 Spring Garden St. Noted Jan. 31.

Pa., Phila.—Office—Independence Realty Co., c/o Ritter & Shay, archts., North Amer. Bldg., had plans prepared 8 story and basement, 85 x 125 ft. brick, stone and steel, 5th and Walnut Sts. $1,000,000.

Pa., Reading—School—School Dist. had plans prepared by F. H. Muhlenberg, archt., Ganster Bldg., 2 story and basement, 100 x 150 ft., brick and steel, plain foundation. $200,000.

Pa., Williamsport — Garage — Mead & Goodrich (Ford Agency), 350 West 3rd St., plans 3 story and basement, 110 x 200 ft. concrete, brick and steel garage, storage room, repair shop, etc., West 3rd St. $150,000.

Md., Baltimore — Church and Sunday School—St. Marks Methodist Episcopal Church, Garrison and Liberty Heights Ave., plans 1 story and basement, addition to church and Sunday School, stone, plain foundation. $150,000. J. P. Hand, pastor. Architect and engineer not selected.

Md., Baltimore — Church, etc. — Second Presbyterian Church, 2522 North Charles St., having plans prepared by E. L. Palmer, 513 North Charles St., 1 story and basement, church, community house and Sunday School, stone, St. Paul and Charlotte Rds. $200,000. R. G. Leetch, pastor.

Md., Catonsville (Baltimore, P. O.)—Ward—Spring Grove State Hospital, c/o A. P. Herring, 330 North Charles St., Baltimore, having plans prepared by H. P. Hopkins, 347 North Charles St., Baltimore, 3 story and basement, 40 x 100 ft., stone, here. $275,000.

Md., Towson — Schools — School Bd. of Baltimore Co., Courthouse, plans 3 story and basement, at Towson, $250,000; 3 story at Catonsville (Baltimore, P. O.), $250,000; both brick, plain foundations. Smith & May, Calvert Bldg., Baltimore, archts.

D. C., Wash. — School — Dist. Comrs. plans addition to Tenley School. $160,000.

Va., Lynchburg—School—Bd. Educ. having preliminary plans prepared by Heard & Chesterman, Lynchburg, 3 story, 160 x 202 ft., 13th and Floyd Sts. $225,000.

W. Va., Mannington—Schools—Defeated $200,000 bonds for schools. Noted Feb. 21.

W. Va., Wheeling—Bank and Office—Quarter Savings & Trust Co., 1601 Market St., having plans prepared by C. W. Bates, Wheeling, 10 story, 67 x 132 ft., brick and steel, 14th and Market Sts.

W. Va., Wheeling—Cold Storage—Klablitzer Packing Co., 4128 Water St., plans 6 story, 100 x 100 ft., rein.-con. addition. $175,000.

N. C., Fayetteville—Court House—Cumberland Co. having revised plans prepared by H. Barton, Greensboro, and soon takes bids court house. $475,000. Former bids rejected. $475,000. Noted Nov. 1.

N. C., Shelby—Apartment—B. F. Curtis and associates plan 6 story and basement, Dixon Pl. $200,000. Engineer and architect not announced.

Fla., St. Petersburg — Coliseum — St. Petersburg Coliseum Corp. plans coliseum, 4th Ave. North between 5th and 6th Sts. $300,000. C. F. Cullen, pres.

Fla., St. Petersburg—Theatre and Office—Floximas Co. having plans prepared by Taylor & Wakeling, St. Petersburg, 6 story, rein.-con. and steel, 1st Ave. $250,000. H. S. Chase, treas.

Fla., Tampa—Hospital and Auditorium—Election Apr. 22, $215,000 bonds for addition to hospital; also $250,000 bonds for auditorium. W. E. Duncan, city clk. Noted Jan. 3.

Ala., Florence—Bank and Office—Alabama Trust & Savings Bank having plans prepared by Alsop & Callahan, Memphis, Tenn., 3 story (ultimately 6 story) 22 x 110 ft. rein.-con., fireproof. $150,000.

La., New Orleans — Apartment — W. A. Bisso, United Fruit Bldg., plans 8 or 10 story, St. Charles and Napoleon Aves. $250,000. Architect not selected.

Tenn., Nashville—College—Scarritt College for Christian Workers plans college on 19th Ave. $500,000.

Ky., Louisville—Club—Louisville Aerie, Fraternal Order of Eagles, 812 South 2nd St., plans 2 story, mezzanine and basement, 60 x 125 ft. addition. $150,000.

Ky., Louisville—Theatre, Club and Office—J. G. Brown, Brown Hotel, plans 7 story, 65 x 125 ft., Bway. near 4th St. $1,000,000. Noted Feb. 21.

Ky., Newport—Church and Auditorium—First Baptist Church having plans prepared by O. D. Mock, M. E. Taylor Bldg., Louisville, 3 story, 100 x 120 ft., steel and stone. $175,000.

O., Cincinnati—Apartment—C. P. Taft, Times Star Bldg., plans 4 and 8 story, 100 x 300 ft., 4th St. $500,000. Garber & Woodward, 2803 Union Central Bldg., archts.

O., Cincinnati — Hospital — Bethesda Hospital, Lafayette and Middletown Aves., having plans prepared by S. Hannaford & Sons, 1024 Dixie Terminal, 7 story addition, Oak St. $600,000. Noted Sept. 6.

O., Cincinnati — Hospital — Christ Hospital, Auburn Ave., plans hospital. $200,000. Engineer and architect not selected.

O., Cleveland — Apartment — C. Kupersmith, 9232 Adams Ave., and M. Skolnik, 11720 Imperial Ave., having plans prepared by L. Skolnik, 6th-St. Clair Bldg., 2 story and basement, 76 x 142 ft., brick, Woodworth Rd. $150,000.

O., Cleveland—Commercial—Bell Mortgage & Investment Co., c/o L. A. Harris, 505 Prospect Ave., plans 3 story, brick, on 66 x 210 ft. lot, 3040 Prospect Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial—G. Koller, 724 Prospect Ave., had revised plans prepared by J. L. Cameron, 10406 Euclid Ave., 4 story, 50 x 81 ft., brick and steel addition, 633 Huron Rd. $150,000.

O., Cleveland—Commercial—I. Margolin, 2496 Derbyshire Rd., having plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 80 x 80 ft., brick and steel, 3629 Euclid Ave. $175,000.

O., Cleveland Heights (Warrensville P. O.)—Church and Sunday School—Cleveland Heights Methodist Episcopal Church, 14280 Superior Rd., Cleveland, having sketches made by Corbusier & Lenske, B. F. Keith Bldg., Cleveland, 1 story, brick, stone and steel, plain foundation, Lee Rd. and Euclid Blvd., here. $250,000.

O., Novelty — Infirmary — St. Andrews Scottish Benevolent Society, c/o R. M. Bowie, pres., 355 The Arcade, Cleveland, plans 2 story, brick, here. $200,000. Engineer and architect not selected.

O., Portsmouth—Bank—First Natl. Bank having plans prepared by Carmichael-Millspaugh, 67 East Long St., Columbus, 8 story and basement, 30 x 175 ft., brick, steel and concrete addition. $200,000.

O., Uhrichsville—Lodge—Pythian Castle Co. plans 3 story, Main and 3rd Sts. $160,000.

Mich., Detroit — Clubhouse — Standard Club, Dearborn St., Chicago, having plans prepared by A. Kahn, 1000 Marquette Bldg., 10 story and basement, 70 x 195 ft., rein.-con., brick and steel, Dearborn St., here.

Mich., Detroit—Mercantile—R. H. Marr, archt., 2631 Woodward Ave., preparing plans 7 story and basement, 80 x 100 ft. brick and steel, plain foundation, Hancock St. $200,000. Owner's name withheld.

Mich., Detroit—Theatre and Hotel—P. Gleichman, Bway. Strand Theatre, Bway. Ave., plans theatre and hotel, about 8 story, 3,600 seating capacity of theatre, and 650 rooms in hotel, rein.-con., brick and steel, plain foundation, $4,000,000.

Mich., Highland Park (Detroit, P. O.)—Library—Voted $500,000 bonds for 2 story and basement, rein.-con., brick, steel and stone, plain foundation. E. L. Tilton, 141 East 45th St., New York City, archt. Noted Jan. 3.

Miss., Meridian—Plant—R. A. Davis, J. H. Dunston and associates formerly of Southern Creosoting Plant, Slidell, La., having tentative plans prepared plant, here. $500,000.

Ill., Chicago—Hall, Store and Office—Weis, Spitz & Lindheimer, 77 West Washington St., plan 3 story, 100 x 150 ft., fireproof, Madison and Kedzie Sts. $[illegible]0,000. A. S. Alschuler, 28 East Jackson St., archt.

Ill., Chicago—Office and Storage—Lindemann & Hoverson Co., 1st and Cleveland Aves., Milwaukee, Wis., having plans prepared by P. Gerhardt, 64 West Randolph St., 6 story and basement, 100 x 1[illegible]2 ft., brick and concrete, plain foundation, Washington Blvd., here. $450,000.

Ill., Chicago—Sales and Warehouse—I. R. Warshawsky, c/o A. S. Alschuler, archt., 28 East Jackson St., plans 6 story, 60 x 116 ft., fireproof, 1919-23 South State St. $200,000.

Ill., Chicago — School — St. Constance Congregation, c/o A. Knitter, 5803 Strong St., having preliminary plans prepared by E. Brielmaier & Sons Co., 432 Bway., Milwaukee, Wis., 3 story and basement, brick and concrete, plain foundation. $150,000.

Wis., Burlington—High School—School Bd. rejected bids 2 story and basement, 180 x 240 ft., brick and tile, plain foundation. $200,000. Will revise and readvertise. Oppenhamer & Obel, Nicollet Bldg., Green Bay, archts. Noted Mar. 6.

Wis., Lancaster — High School — School Bd., F. J. Glanville, clk., having revised plans prepared by Parkinson & Dockendorff, Linker Bldg., La Crosse, and soon takes bids 2 story and basement, 90 x 132 ft., brick, tile and concrete, plain foundation. $150,000. Noted Feb. 7.

Wis., Milwaukee—Apartment and Store—M. Tullgren & Sons, archts., 425 East Water St., rejected bids 7 story, 82 x 165 ft., brick and concrete, plain foundation, West Side. $300,000. Owner's name withheld. Will readvertise. Noted Feb. 28.

Wis., Milwaukee — School — Milwaukee University School, 560 Bway., having preliminary plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., 2 story and basement (1st unit) brick, tile and concrete, plain foundation, Hartford St. $200,000.

Wis., Racine—Plant—G. Pfleger, Route 1, had plans prepared by W. J. Redden, 2819 Arlington Ave., 2 story, 40 x 50 ft., tile and concrete, plain foundation. $40,000.

Wis., Shorewood (Milwaukee P. O.)—High School—School Dist. 4, W. Sieker, clk., had plans prepared by Herbst & Kuenzli, 114 Grand Ave., 2 story and basement, (1st unit) brick, tile and concrete, plain foundation, Atwater Rd. $285,000 bonds voted. Noted Jan. 31.

Wis., Whitefish Bay — School — School Dist. 1, W. Klatte, clk., having plans prepared by M. Tullgren & Sons, 425 East Water St., 3 story and basement, brick and tile addition, plain foundation. $150,000.

Ia., Des Moines — School — Bd. Educ. voted $150,000 bonds for rebuilding Willard School. G. L. Garton, 629 3rd St., secy.

Ia., Des Moines—Store—L. Oransky & Sons having plans prepared by Sawyer & Wetrous, 401 Hippee Bldg., 6 story and basement, 66 x 132 ft., rein.-con., brick and stone, plain foundation, 5th and Walnut Sts. $500,000.

Ia., Ottumwa — Hospital — St. Josephs Hospital having preliminary plans prepared by E. Brielmaier & Sons Co., 432 Bway., Milwaukee, Wis., 4 story and basement, brick and concrete, plain foundation. $300,000. Noted Feb. 7.

Kan., Junction City — School — Election soon $500,000 bonds for school. T. Williamson & Co., 312 Central Natl. Bank, Topeka, archts.

Kan., Manhattan—High School and Gymnasium—Bd. Educ. having plans prepared by T. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 2 story and basement, 80 x 158 ft., rein.-con. and stone, gymnasium 50 x 70 ft., auditorium 60 x 80 ft. $150,000.

Kan., Parsons — High School — Voted $400,000 bonds, 3 story, rein.-con., brick and stone senior high school, Main St. T. W. Williamson & Co., 312 Central Bank Bldg., Topeka, archt. Noted Mar. 20.

Neb., Kimball—Courthouse—Kimball Co. election soon to vote on $150,000 bonds for courthouse.

Neb., Omaha—Passenger Station—Chicago, Burlington & Quincy R.R., 10th and Farnum Sts., plans to alter station 10th and Mason Sts., $150,000.

Neb., Omaha—Schools—Bd. Educ., c/o W. T. Bourke, having surveys made new grade and junior high schools. $2,250,000.

Neb., Omaha — Seminary — Theological Seminary, c/o A. S. Denise, pres. 3303 North 21st St., plans addition. $250,000. Engineer and architect not selected.

Buildings (Continued)

Neb., **Omaha**—Store—G. Brandeis, 16th and Farnum Sts., having plans prepared by E. C. Wheeler, Chicago, Ill., 10 story and basement, 66 x 132 ft., brick and stone, 16th and Douglas Sts. $250,000.

Mo., **Columbia**—City Hall—Election probably in April $250,000 bonds 3 story and basement, rein.-con., brick and stone.

Mo., **Columbia** — Church and Sunday School—First Methodist Church, plans 140 x 200 ft., brick, stone and rein.-con., 120 ft. tower. $300,000. Private plans.

Mo., **Kansas City**—Apartment Hotel—B. C. Moss, interested company now being formed, c/o E. O. Brostrom, archt., 623 Reliance Bldg., having plans prepared 11 story and basement. 135 x 150 ft., rein.-con., brick and steel. $500,000.

Mo., **St. Louis**—Club and Library—St. Louis Medical Society, 3531 Pine St., soon takes bids rein.-con., brick and stone. $275,000. A. B. Grove, 320 North 4th St., archt.

Mo. **St. Louis**—Hall—Washington University c/o Womens Building Com., Skinker and Forsythe Blvds., having preliminary plans prepared 3 story and basement, rein.-con., brick and stone, on campus. $250,000. Engineer and architect not selected.

Ark., **North Little Rock (Branch of Little Rock)**—Schools—Bd. Educ. c/o J. Matthews, Southern Trust Bldg., Little Rock, takes bids about Apr. 1, addition to high school and 4 grade schools, brick and concrete, etc. $200,000. H. R. Burke, Southern Trust Bldg., archt.

Ark., **Texarkana**—City Hall—Plans election $250,000 bonds, city hall, 3rd and Walnut Sts.

Tex., **Beaumont**—Hospital—W. B. Dunlap, c/o Livesay & Wiedeman, archts., 607 San Jacinto Life Bldg., takes bids in September, 3 story and basement. $360,000.

Tex., **Dallas** — Warehouse — Farm-Labor Union, c/o R. D. Smith, Greenville, having plans prepared by Joor Eng. Co., engrs., Sumpter Bldg., cotton warehouse, concrete, 100,000 bales capacity, here. $250,000.

Tex., **Ft. Worth**—Store—Monnig Dry Goods Co., Main St., making plans 3 story and basement, 125 x 150 ft., concrete and brick, 5th and Houston Sts. $250,000. Architect and engineer not announced.

Tex., **Port Arthur**—Office and Store—J. R Adams, c/o H. C. Maurer, archt., 950 Spruce St., Beaumont, takes bids about May 15, 6 story and basement, 140 x 144 ft., concrete and brick, 5th and Austin Sts., here. $500,000.

Tex., **Kerrville**—Hospital and School—Tylers Four States Hospital, Inc., 1025 East Crockett St., San Antonio, plans rein.-con., brick and stone, plain foundation, here. $350,000. Engineer and architect to be selected soon.

Tex., **San Antonio**—Hotel—S. L. Jeffers, 1 Bushnell Pl., having plans prepared by H. T. Phelps, Hicks Bldg., 11 story, 80 x 140 ft., rein.-con., brick and stone, plain foundation, Ave. E and 3rd St. $500,000. Noted Nov. 8.

Okla., **Bristow**—School—Bd. Educ. soon takes bids 2 story and basement, rein.-con. and brick. Former bids rejected. $150,000. L. Curran, 204 Groom Bldg., archt. Noted Jan. 24.

Okla., **Perry**—Temple—Masonic Lodge plans 3 story, 75 x 140 ft. temple, Main St. $150,000. Engineer and architect not selected.

Wash., **Seattle** — Auditorium — City defeated $750,000 bond issue for auditorium. Noted Dec. 6.

Ore., **Bend**—High School—Sold $209,000 bonds high school. Will select engineer and architect at once.

Ore., **Eugene**—Hotel—A. H. McDonald takes bids about Apr. 27, 4 story, 100 x 100 ft., 10th and Willamette Sts. $150,000-$175,000. O. W. Hossack, Worcester Bldg., Portland, archt.

Calif., **Eureka** — High School — Eureka Junior High School Dist. having plans prepared by J. J. Donovan, Tappscott Bldg., Oakland, fireproof junior high school. Voted $450,000 bonds. Noted Aug. 2.

Calif., **Los Angeles**—Store and Hotel—Walker & Eisen, archts., Pacific Finance Bldg., prepared plans 4 story and basement, brick, Hollywood Blvd. and Western Ave. $150,000. Owner's name withheld.

Calif., **Pasadena**—Lodge—Scottish Rite Cathedral Assn., c/o J. Blick, archt., Dodworth Bldg., having plans prepared, fireproof on 175 x 200 ft. site, North Madison Ave. $150,000 or more.

Calif., **Riverside**—Theatre and Store—M. E. Durfee, archt., S. Kraemer Bldg., Anaheim, prepared plans 2 and 3 story, 75 x 155 ft., fireproof, 5th and Main Sts., here. Owners name withheld.

Calif., **San Bernardino**—Courthouse—San Bernardino Co. plans to vote on $700,000 bonds for courthouse.

Calif., **Woodland**—High School—Woodland Union High School Dist. plans to vote on $250,000 bonds for fireproof high school, to replace one recently destroyed by fire. Noted Jan. 24.

Que., **Asbestos**—Church—Roman Catholic Parish plans church here. $250,000. L. Naudet, 3 Wellington St., Sherbrooke, archt.

Que., **Beauharnois**—School—Town plans 4 story school. $150,000.

Que., **Lasalle** — School — Catholic School Comrs. of Montreal, plan 4 story, brick school, here. C. Beauchamp, Montreal, archt.

Que., **Montreal**—Clubhouse—E. E. Wallace, 65 McGill College Ave., having plans prepared by G. Mitchell, 14 Phillips Pl., 4 story, rein.-con. and brick, McGill College Ave. $150,000.

Que., **St. Lambert** — Schools — School Comrs. plan two 2 story, schools. $150,000. Ross & MacDonald, Belmont St., Montreal, archts.

Ont., **London**—Exchange—See "Unclassified."

Ont., **Ottawa** — Convent — Notre Dame Convent, Gloucester St., soon takes bids rein.-con., brick and stone addition, plain foundation, Gloucester St. $200,000. Brodeur & Pilou, Natl. Bank Bldg., Rideau St., archts.

Ont., **Schreiber**—Station and Roundhouse—Canadian Pacific Ry., Windsor St., Montreal, Que., soon takes bids station and roundhouse here. $225,000. A. McConnell, North Bay, engr.

Ont., **Toronto**—Office—Imperial Life Assurance Co., 34 Victoria St., having plans prepared by Dowswell & Dolphin, 58 Wellington St., 8 story and basement, 40 x 100 ft. rein.-con., brick and steel, plain foundation, Victoria St. $300,000.

B. C., **Vancouver** — Bank — Bank of Montreal, 109 James St., Montreal, Que., having plans prepared by K. Rea, Beaver Hall Hill, Montreal, Que., and takes bids about Apr. 21, 3 and 4 story, 70 x 100 ft. rein.-con., brick and stone, Granville St. $500,000.

B. C., **Vancouver**—University—University of British Columbia, 10th and Willow Sts., having plans prepared by J. H. Whittaker, Dept. Pub. Wks., six 2 story frame and stucco buildings, $600,000.

BIDS DESIRED

N. Y., **Buffalo**—Bank and Office—Apr. 4, by A. C. Bossom, archt. and engr., 680 5th Ave., New York City, 24 story, 60 x 350 ft., brick, steel and stone, Main and Court Sts., here, for Liberty Bank. $2,000,000. Noted Dec. 6.

N. Y., **Canton**—County—Apr. 1, by St. Lawrence Co., brick, stone, concrete and steel. $150,000-$170,000. S. P. Williamson, Ogdensburg, archt.

N. Y., **Dolgeville**—School—Apr. 4, by Bd. Educ., brick, steel and stone, plain foundation, South Main St. $200,000. Tooker & Marsh, 101 Park Ave., New York City, archts. and engrs. Noted Feb. 28.

N. Y., **Dunkirk**—High School—Apr. 9, by Bd. Educ., 3 story and basement, 190 x 210 ft., rein.-con., brick and stone. $500,000. E. E. Joralemon, 482 Delaware Ave., Buffalo, archt. Noted Mar. 6.

N. Y., **Le Roy**—School—Apr. 10, by Bd. Educ., 2 story and basement, 140 x 162 ft., rein.-con., brick and stone. $255,000. Tooker & Marsh, 101 Park Ave., New York City, archts. Noted Nov. 29.

N. Y., **Long Island City**—Apartment—Peter Guthy (owner and builder), 852 Monroe St., Brooklyn, will award separate contracts 4 story, brick, steel and stone, plain foundation, Academy St., here. $250,000. L Allmendingir, 20 Palmetto St., Brooklyn, archt.

N. J., **Woodbury**—County—Apr. 15, by Bd. Freeholders Gloucester Co., 3 story, stone and rein.-con. $300,000. C. R. Peddie, 134 South 4th St., Phila., archt.

Pa., **Phila.** — Office — Mar. 31, by L. Rothschild, archt., 215 South Broad St., 10 story and basement, 60 x 100 ft., rein.-con., limestone and brick, plain foundation, Sydenham and Locust Sts., for C. Kahn, Morris Bldg. $500,000. Noted Feb. 14.

Pa., **Windber**—High School—Apr. 8, by Bd. Educ., 1428 Graham Ave., 3 story and basement, 110 x 130 ft. concrete, brick and steel, 23rd St. $175,000. H. W. Reinhold, Jr., 1513 Walnut St., Phila., archt.

La., **Monroe** — School — Ouachita Bd. Educ. taking bids and opens same Apr. 1, 3 story and basement, rein.-con. and brick, Grand St. $300,000. J. W. Smith, Monroe, archt.

La., **New Orleans**—Hospital—Apr. 19, by F. W. Evans, vice-pres. Bd. Directors Charity Hospital, Tulane and Villere Sts., 4 story, 57 x 105 ft. fireproof. Favrot & Livaudais, Hibernia Bank Bldg., archts.

O., **Cleveland**—Apartment—F. Mintz, 740 East 90th St., taking bids 3 story and basement, 53 x 130 ft., brick, 1923 East 23rd St. $150,000. M. Weis, 617 Union Bldg., archt.

O., **Parma** (Berea P. O.)—Schools—Apr. 5, by Bd. Educ., three 1 story, brick, steel and concrete additions. $197,000. C. W. Bates, 77 12th St., Wheeling, W. Va., archt. Noted Mar. 13.

O., **Steubenville**—Theatre and Store—Apr. 10, by Tri-State Amusement Co., 3 story, 80 x 100 ft., rein.-con. and brick, plain foundation. $500,000. Lieberman & Hein, 190 North State St., Chicago, engr. C. C. and E. A. Weber, 148 Ingalls Bldg., Cincinnati, archts. B. L. Batey, Steubenville, associated archt. Noted Feb. 7.

Ind., **Michigan City** — Hospital — D. X. Murphy & Bro., archts., Louisville Trust Bldg., Louisville, Ky., taking bids and open same about May 15 (extended date), 3 story addition to hospital, for St. Anthonys Hospital, here. $150,000. Noted Mar. 6.

Mich., **Alpena**—High School—Apr. 1, by G. H. Nicholson, secy. Bd. Educ., 2 story and basement, 70 x 130 ft. rein.-con., brick and steel addition, plain foundation. $150,000. Warren Holmes-Power Co., Tussing Bldg., Lansing, archts.

Mich., **Detroit** — Office — Donaldson & Meier, archts., 1314 Penobscot Bldg., taking bids and opens same about Apr. 7, 8 story and basement, 50 x 120 ft. rein.-con., brick, steel and stone, plain foundation, Washington Blvd., for M. J. Gallagher, 1230 Washington Blvd. $300,000. Noted Dec. 6.

Mich., **Detroit**—School—Mar. 31, by C. A. Gadd, business mgr. Bd. Educ., 2 story and basement, 83 x 163 ft. rein.-con., brick and steel, plain foundation, Garden Ave. $175,000. Malcomson & Higginbotham, Industrial Bank Bldg., archts.

Mich., **Detroit**—School—Apr. 3, by C. A. Gadd, business mgr. Bd. Educ., 2 story and basement, 150 x 184 ft. rein.-con, brick and steel, plain foundation, Beaumont Ave. $300,000. Malcomson & Higginbotham, Industrial Bank Bldg., archts.

Mich., **Flint**—High School—Apr. 4, by A. J. Wildanger, secy. Bd. Educ., 4 story, 65 x 150 ft., 71 x 160 ft. and 104 x 110 ft. rein.-con., brick and steel, plain foundation, Crapo Ave. $750,000. Malcomson & Higginbotham, 904 Flint P. Smith Bldg., archts.

Ill., **Chicago**—Bank—A. S. Alshuler, archt., 28 East Jackson St., taking bids 2 story, 75 x 160 ft., fireproof, Roosevelt and Halsted Sts., for Schiff T & S Bank, Roosevelt and Halsted Sts. $150,000.

Wis., **Bloomington**—School—Bd. Educ. and E. Tough, archt., Washington Bldg., Madison, taking bids 2 story, 66 x 95 ft., brick, rein.-con. and stone, plain foundation. $150,000. Noted Dec. 27.

Wis., **Green Bay**—Office and Store—Oppenhamer & Obel, archts., Nicollet Bldg., taking bids 7 story and basement, 46 x 67 ft., brick and concrete, plain foundation, Cherry St., for H. Herrick, 200 North Washington St. $150,000.

Minn., **Minneapolis** — Administration — Apr. 8, by State Bd. Control, St. Paul, 4 story and basement, rein.-con., brick, tile and stone. $500,000. C. H. Johnston, 715 Capitol Bank Bldg., St. Paul, archt.

Tex., **Dallas** — Bank — Republic Natl. Bank, Main St. and Exch. Pl., taking bids structural steel for 20 story basement and sub-basement, 96 x 100 ft., steel, concrete and brick. C. D. Hill & Co., Central Bank Bldg., archts. R. O. Jamison, Southwestern Life Bldg., engr.

Colo., **Denver**—High School—Apr. 16, by Bd. Educ., Administration Bldg., 14th and Tremont Sts., 2, 3 and 4 story and basement, 280 x 417 ft., brick, terra cotta and stone, Detroit and Colfax Aves. $1,700,000. Noted Jan. 31.

Calif., **Venice**—Schools—Trustees Venice Union High School Dist. taking bids brick additions to mechanical arts building, gymnasium and junior high school. $155,000. Russell & Alpaugh, Story Bldg., Los Angeles, archts. Noted Dec. 6.

BIDS RECEIVED

N. J., **Pensauken** (Merchantville P. O.)—High School—A. Moses, archt., Temple Bldg., Camden, general contract 2 story

Buildings (Continued)

and basement, 157 x 259 ft., Junior high school, here, from G. W. Shaver & Son, Palmyra, $299,200, for Bd. Educ. Noted Feb. 21.

Md., Baltimore — High School — Bd. Awards, Mar. 19, 3 story and basement. Gwynns Falls Park, building complete, from Sinclair & Grigg, 17th and Lindly Sts., Phila., Pa., $1,219,000; building incl. heating only, from P. C. Streett Eng. Co., 406 St. Paul St., $1,075,000; heating and ventilating from Enterprise Steam and Hot Water Heating Co., 619 West Franklin St., $135,879. Noted Mar. 6.

La., New Orleans — School — Orleans Parish School Bd., 3 story 150 x 300 ft. rein.-con. and brick, Carrolton Ave. and Belfast St., from Roupich Constr. Co., Louisiana Bldg., $319,000. Noted Mar. 6.

Ky., Louisville — Office — Commonwealth Life Insurance Bldg., 5th St., 6 story and basement, 60 x 120 ft., 5th St., from J. M. Russell, M. E. Taylor Bldg. Est. cost $150,000. (Was $250,000, plans revised.) Noted Mar. 6.

O., Newark—School—Francis De Sales School, Mar. 18, 3 story and basement, from W. Jamison, Zanesville, $107,800. Noted Mar. 6.

Ind., Hammond—Hospital—D. X. Murphy & Bro., archts., Louisville Trust Bldg., Louisville, Ky., 4 story and basement, 46 x 288 ft., here, from Larson Danielson Constr. Co., La Porte, $288,000, for Franciscan Sisters of the Poor, Hammond. Archts. est. $300,000. Noted Mar. 6.

Minn., Minneapolis—School—Bd. Educ., Mar. 17, 2 story and basement, rein.-con., brick and tile, Dartmouth and Ontario Sts., general contract from Bracker Constr. Co., 638 Builders Exch. $126,792. Noted Feb. 28.

Minn., St. Paul—School—Dept. Educ., Mar. 18, 2 story and basement, rein.-con., brick and tile, North St. Anthony Park, general contract from N. P. Franson, 630 Endicott Bldg., $120,900. Noted Mar. 13.

CONTRACTS AWARDED

Vt., Middlebury—College—Building Com. Middlebury College, 3 new college buildings, to H. P. Cummings Co., 77 Summer St., Haverhill, Mass. To exceed $250,000.

N. Y., Belleville—School—Belleville Union Academy, general contract concrete, steel, brick and tile, to N. B. Hayes, 1115 Academy St., Watertown, $100,000. Noted Mar. 15, 1923.

N. Y., Brooklyn—Hospital—Lord & Hewlett, archts., 2 West 45th St., New York, 6 story, 225 x 300 ft., brick, steel and stone addition, plain foundation, Albany and Atlantic Aves., here, to W. L. Crow Constr. Co., 103 Park Ave., New York, for St. Johns Hospital, 1531 Atlantic Ave. Archts. est. $1,700,000. Noted Feb. 14.

N. Y., Great Neck—Club House—Lakeville Golf & Country Club, brick, steel and stone, plain foundation, to H. A. Harris Co., 16 East 43rd St., New York City. Archts. est. $150,000. Noted Mar. 6.

N. Y., New York—Office—See "Industrial Works."

N. Y., Palmyra — High School — Bd. Educ., brick, steel and stone, plain foundation, to H. J. Conrath, Erie, Pa. Archts. est. $325,000; heating and plumbing, to F. J. Lawrence, 130 Pine St., Corning, $44,500. Noted Feb. 7.

N. Y., Sodus—School—Bd. Educ. general contract new school, to L. E. Genthner, 912 South Main St., East Rochester, $136,000.

N. J., Montclair—School—Bd. Educ., constructing Rand School, brick, steel and stone, plain foundation, Chestnut St., to J. S. and L. Carlson, Walnut St., $256,000. Noted Mar. 6.

N. J., Newark—Museum—City, 110 x 498 ft., brick, steel and stone, plain foundation, Washington and Plane Sts., to George A. Fuller, 949 Bway., New York City. Archts. est. $600,000. Noted Jan. 18, 1923.

Pa., Phila.—Dormitory, etc.—G. Weidener, Land Title Bldg., 1 and 2½ story, 60 x 420 ft. and 72 x 86 ft. brick dormitory and barn, plain foundation, Erdenheim, to D. W. Sperry, Heed Bldg. Archts. est. $150,000.

Pa., York — Hotel — Chamber of Commerce, 14 story and basement, 97 x 230 ft., Duke and Market Sts., to J. G. White Eng. Corp., 43 Exch. Pl., New York City, $2,500,000.

Va., Charlottesville—School—Bd. Educ., primary school, to Gooch-Williams & Co., Norfolk, $161,169.

Va., Richmond — Apartment — Stuart Circle Realty Corp., 9 story, rein.-con. and steel, Lombardy St. and Monument Ave., to Weller Constr. Co., 816 14th St., Wash., D. C., $650,000.

W. Va., Huntington—Bank and Office—Union Bank & Trust Co., 4th Ave. and 9th St., 14 story and basement, 60 x 90 ft., to G. A. Fuller Co., Fuller Bldg., New York. $500,000. Noted Feb. 14.

W. Va., Huntington—Office—Coal Exchange Building Co., 14 story and basement, 60 x 170 ft., 4th Ave. and 11th St., to Higginbotham & Jones, Chas. Natl. Bank Bldg., Charleston. $800,000. Noted Feb. 14.

Ala. Birmingham — School — St. Pauls Catholic Church, 2 story, 100 x 150 ft., brick and stone, 4th Ave., to Day & Sachs, 35th Ave and 26th St., $150,000.

La., Shreveport — Hospital — Tri-State Sanitarium, c/o T. E. Williams, 3 story, 66 x 80 ft. and 36 x 60 ft. rein.-con., brick and stone, general contract to Hinerman & Quillen, Shreveport. Noted Mar. 6.

Tenn., Memphis—Church Addition—First Methodist Church, North 2nd St. and Poplar Ave., 4 story, brick and stone, general contract to Estes-Williams & Ragsdale, Scimitor Bldg. Total est. $150,000. Noted Feb. 1.

O., Cincinnati — Office and Loft — L. Baker, 1605 Union Trust Bldg., 10 story, rein.-con. and brick, plain foundation, 9th and Sycamore Sts., to Ohio Building & Constr. Co., Burnet Ave., $1,250,000.

O., Cincinnati—Office—See "Industrial Works."

O., Cincinnati—Warehouse—Merkel Bros., Central Parkway and Jackson St., rein.-con., plain foundation, Marquis St., to Austin Co., 16112 Euclid Ave., Cleveland, $170,000.

O., Cleveland—Apartment—M. Duchon, 1077 Thornhill Dr., 3 story and basement, 37 x 145 ft., brick, East 93rd St., to Cooper & Berkowitz, 1064 Linn Dr. Archts. est. $150,000. Noted Jan. 31.

O., Cleveland—Dance Hall—I. Margolin, 2496 Derbyshire Rd., 1 story, 91 x 300 ft., brick and steel, 3629 Euclid Ave., to I. Narosny, 476 East 112nd St. Archts. est. $300,000. Noted Mar. 13.

O., Cleveland — Garage and Storage — Knutsen Motor Trucking Co., 1730 Oregon Ave., 1 story, 100 x 173 ft., brick and steel, East 21st St. and Oregon Ave., to H. K. Ferguson Co., 4900 Euclid Ave. Archts. est. $150,000.

O., Cleveland — Seminary — St. Marys Seminary, c/o J. Schrembs, bishop, 1007 Superior Ave., 3 story, brick, steel and concrete, Ansel Rd., to Schirmer-O'Hara Co., 2031 Euclid Ave. Archts. est. $850,000. Noted Mar. 20.

O., Cleveland Heights—Apartment—B. Bialosky, 2388 Ontario St., Cleveland, 3 story and basement, 52 x 132 ft., brick, 2057 Cornell Rd., here, to M. Berkoff, 3346 East 135th St., Cleveland. Archts. est. $150,000.

O., Dayton—Industrial and Store—Rubicon Realty Co., 226 South Ludlow St., 5 story and basement, 79 x 84 ft., rein.-con. and brick, plain foundation, Jefferson St., to Frank Hill Smith, Inc., Winters Bldg., $150,000.

O., Toledo—School—Bd. Educ., constructing Arlington School, 3 story and basement, rein.-con. and brick, plain foundation, Toronto Ave., to J. H. Berkebile & Sons, Bway., $324,619. Noted Mar. 20.

Mich., Bad Axe—School—Bd. Educ., 2 story and basement, rein.-con., brick and steel, plain foundation, to Spence Bros., 1 Brewer Blk., Saginaw, $150,000. Noted Feb. 14.

Mich., Clawson—School—Bd. Educ., 2 story and basement rein.-con., brick and steel, plain foundation, Washington and Phillips Aves., to N. A. Starr, Royal Oak, $150,000.

Mich., Detroit—Apartment Hotel—H. C. Duffield, 2034 Dime Bank Bldg., 11 story and basement, 85 x 110 ft. rein.-con., brick and steel, plain foundation, 2nd Blvd., to Malow-Barry Co., 2631 Woodward Ave. Archts. est. $400,000.

Mich., Detroit — Bank and Office — A. Kahn, archt., 1000 Marquette Bldg., 5 story and basement, 65 x 81 ft. rein.-con., brick and steel, plain foundation, Griswold St., to W. E. Wood & Co., 1805 Ford Bldg., for Security Trust Co., 655 Griswold St., $400,000. Noted Jan. 31.

Mich., Detroit—Club and Hotel—Webster Hall Hotel Co., c/o Halpin & Jewell, archts., 1024 Hammond Bldg., 12 story and basement, 177 x 183 ft. rein.-con., brick, stone and terra cotta, Cass Ave., to Everett Winters Co., 1024 Book Bldg., $3,500,000.

Mich., Grosse Pointe Park (mail Grosse Pointe branch Detroit, P. O.)—School—C. A. Paye, secy. Bd. Educ., 2 story and basement, 65 x 164 ft. rein.-con., brick and steel, plain foundation, Kercheval Ave., to M. A. Mahoney, 400 Penobscot Bldg., Detroit, $250,000. Noted Mar. 6.

Mich., Ypsilanti—School—W. M. Derbyshire, secy. Bd. Educ., 3 story, 140 x 160 ft., rein.-con., brick and steel, plain foundation, to Spence Bros., 1 Brewer Blk., Saginaw, $172,500. Noted Jan. 31.

Wis., Green Bay—Y. M. C. A., 510 Minahan Bldg., 4 story and basement, brick and concrete, plain foundation, to Bartelson & Ness, Manitowoc Rd., $297,354. Noted Feb. 21.

Wis., Madison—Store—J. H. Bertrand, De Forest, 2 story, 57 x 61 ft., brick, rein.-con. and stone, plain foundation, State St., here, to A. Vorndran, 1836 Ray Ave. Noted Feb. 14.

Wis., Milwaukee—Church—St. Boniface Congregation, H. Stemper, pastor, 1118 Clarke St., superstructure, 2 story, 130 x 136 ft., brick and tile, to V. Pacholski, 941 Warren Ave. Foundation previously let. Noted Mar. 6.

Wis., Milwaukee —Clubhouse — Tripoli Country Club, 596 Summit Ave., 2 story, 90 x 202 ft., brick, plain foundation, Hopkins Rd., to H. Schmitt & Son, 430 Farwell Ave. Archts. est. $150,000. Noted Feb. 7.

Kan., Baldwin City—College—Baker University, 3 story, 62 x 100 ft., brick, concrete and stone science hall, to Brewster Bros., Independence. Archts. est. $250,000. Noted Jan. 3.

Kan., Leavenworth—City Hall—City, 2 story and basement, 90 x 125 ft., rein.-con., brick and stone, general contract, to R. B. Yoakum, 515 Delaware St., $118,580. Noted Feb. 28.

Neb., Falls City — Hotel — Falls City Realty Co., c/o E. H. Towle, secy., 4 story and basement, 92 x 130 ft., brick and stone, 18th and Stone Sts., general contract to Bohrer Constr. Co., Falls City, $125,000. Noted Feb. 21.

Mo., Hannibal—School—Bd. Educ., North School, 2 story and basement, 125 x 140 ft., rein.-con., brick and stone, to Murch Bros. Constr. Co., Ry. Exch. Bldg., St. Louis, $175,898. Noted Nov. 22.

Mo., St. Joseph—Administration, Warehouse, etc.—Missouri Rubber Products Co., general contract 1 and 2 story, brick and concrete administration building, warehouse and factory unit, to E. H. Lawson Constr. Co., St. Joseph. Archts. est. $500,000.

Mo., St. Joseph — Apartment — Local syndicate, 3 story and basement, 150 x 177 ft., rein.-con., brick and stone, to Construction Service Co., 1604 South 22nd St., $300,000.

Mo., St. Louis—Apartment—Oleo Investment Co., 808 Chestnut St., 3 story and basement, 140 x 155 ft., rein.-con., brick and stone, Cabanne and Goodfellow Sts., to V. A. Chinberg, 808 Chestnut St. Archts. est. $150,000.

Tex., Brownsville—Hotel—International Amusement Co., Little Rock, Ark., 5 story, 90 x 180 ft., rein.-con., brick and stone, plain foundation, here, to E. E. Jochem, Brownsville, $450,000.

Tex., San Antonio—Church and School—Mt. Zion 1st Baptist Church, 1216 Nebraska St., 1 story, 85 x 136 ft., rein.-con., brick and stone, plain foundation, Nebraska and Hackberry Sts., to H. W. Hawkins, 133 North Mesquite St., cost plus percentage basis. Archts. est. $150,000.

Okla., Tulsa—Church—First Presbyterian Church, 7th and Boston Sts., 4 story and basement, brick, stone and rein.-con., to J. W. Vanhorn, 7th and Detroit Sts., $315,000. Noted Oct. 23.

Calif., Los Angeles—Store and Loft—D. N. and E. Walter & Co., 763 South Los Angeles Ave., 6 story and basement, 87 x 107 ft., rein.-con. and brick, 8th and Wall Sts., to H. M. Baruch, 441 I. W. Hellman Bldg., $160,000.

Que., Three Rivers — Warehouse — Canadian Pacific Ry., rein.-con. warehouse on St. Maurice St., here, to D. G. Loomis & Sons, 1112 St. Patrick St., Montreal, $150,000.

Federal Government Work

PROPOSED WORK

Pa., Pittsburgh — Dump Scows — U. S. Engineer plans to purchase 2 steel dump scows.

Ky., Uniontown—Yellow Pine—U. S. Engineer, P. O. Box 72, Louisville, in market

DRAINAGE—ST. LOUIS, MO.

Following are lowest three bids opened by city, Jan. 29, for Sect. A of River Des Peres Drainage Project, (A) Higgins-Wall-Dyer Co., International Life Bldg., (awarded contract); (B) J. J. Dunnegan, Arcade Bldg.; (C) G. G. Prendergast & Co. The unit bids were as follows:

	A	B	C
Tyler Ave. Bridge (lump sum)	$3,087.00	$6,000.00	$2,500.00
Continuing sanitary sewer (lump sum)	12,000.00	5,000.00	3,000.00
3,400 cu.yd. class A excavation	6.00	3.00	6.00
210,700 cu.yd. class B excavation	.50	.60	80
5,657 lin.ft. channel lining	22.00	32.00	27.00
5,657 lin.ft. sanitary sewer	8.60	12.00	11.00
20 cu.yd. excavation for underpinning	4.00	5.00	10.00
20 cu.yd. concrete for underpinning	25.00	25.00	40.00
510 lin.ft. 12 in. sewer pipe	.70	1.50	1.00
185 lin.ft. 15 in. sewer pipe	.90	2.00	2.00
30 lin.ft. 18 in. sewer pipe	1.25	2.50	3.00
55 lin.ft. 21 in. sewer pipe	2.00	3.00	4.00
195 lin.ft. 84 in. circular brick pipe	14.00	18.00	30.00
10 pieces 12 in. curved pipe	2.40	3.00	4.00
15 pieces 15 in. curved pipe	3.00	5.00	7.00
7 pieces 12 in. junction sanitary pipe	1.50	3.00	5.00
4 pieces 15 in. junction sanitary pipe	2.00	5.00	8.00
6,900 sq.ft. extra channel lining	.40	.50	.50
975 cu.ft. brick masonry in manholes	.80	.65	1.00
4,025 lb. cast iron manholes	08	.06	.08
455 lb. wrought iron manholes	10	.10	.10
5 M.ft. b.m. lumber left in trench	60.00	50.00	100.00
75 tons hydrated lime	30.00	25.00	25.00
Extended totals	$324,452	$408,630	$424,811

Federal Government Work (Continued)

soon for 120,000 ft. yellow pine No. 2 common for Dam 49, Ohio River.

O., Cincinnati—Dwellings—U. S. Engineer, plans permanent lock keepers dwellings at Dams 34, 36 and 38, Ohio River.

O., Cincinnati—Machinery—U. S. Engineer, Cincinnati, plans to install machinery for power houses on Dams 34, 36 and 38, Ohio River.

O., Huron — U. S. Engineer, Buffalo, N. Y., plans to replace with concrete superstructure, present 1,200 ft. timber superstructure on West Pier in Huron Harbor.

Minn., Duluth—Dump Scow—U. S. Engineer, rejected bids Feb. 28, one steel dump scow. Noted Mar. 13.

BIDS DESIRED

N. Y., New York—Dredging—Apr. 14, by U. S. Engineers, 2nd Dist. 616 Army Bldg., dredging at Shoal Harbor, Compton Creek and Keyport Harbor, N. J.

Del., Wilmington — Stone — Apr. 14, by U. S. Engineer, War Dept., Wash., D. C., furnishing 25,000 tons stone at Reedy Point.

Fla., Jacksonville—Bulkhead and Pier—U. S. Engineer, taking bids and opens same about Apr. 28, bulkhead and 300 ft. pier at dredge depot here.

Miss., Water Valley—Post Office—Apr. 22, by Treasury Dept., office of Supervising Architect, Wash., D. C., 2 story, 45 x 67 ft., here; adv. E. N.-R. Mar. 27.

Tenn., Memphis—Oil Burning Furnaces—Apr. 7, by Mississippi River Comn., 1st and 2nd Dists., Room 1006 McCall Bldg., Memphis, oil burning furnaces installations, complete; adv. E. N.-R. Mar. 27.

Ky., Fords Ferry—Lock—Apr. 25, by U. S. Engineer, P. O. Box 72, Louisville, constructing Lock 50, Ohio River, near here; adv. E. N.-R. Mar. 27.

Ky., Fords Ferry—Walls—Apr. 29, by U. S. Engineer, P. O. Box 72, Louisville, 110 x 600 ft. lock and guide walls for Ohio River dam 50, 35,000 cu.yd. concrete.

Mont., Poplar—Sewers—Apr. 14, by Dept. Interior, Office of Indian Affairs, Wash., D. C., sewer system for Fort Peck School, here.

Wash., Puget Sound—Ammunition Depot—Apr. 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., ammunition depot-subsurface magazine, here.

BIDS RECEIVED

Pa., Dubois—Post Office—Superv. Archt., Treasury Dept., Wash., D. C., constructing post office here, from W. MacDonald Constr. Co., Odd Fellows Bldg., St. Louis, Mo., $57,876. Noted Feb. 28.

Pa., Phila.—Foundations—Bureau Yards & Docks, Navy Dept., Wash., D. C., permanent foundations for frame buildings at hospital, here, from Kaufman Constr. Co., 219 North Amer. Bldg., (1) $4,337 (2) deduct $200 (3) deduct $1,900 (120 days). Noted Mar. 6.

D. C., Wash.—Excavation—Office Pub. Building and Grounds, excav. 8,200 cu.yd. earth from Meridian Hill Part, to W. F. Cush, Inc., 3rd and R Sts., Wash., $6,068.

D. C., Wash.—Reservoirs—U. S. Engineer, 250 Old Land Office Bldg., Wash., D. C., (1) 1st high reservoir (2) 2nd high reservoir, from Parsons & Hyman, Inc., Equitable Bldg., (1) $268,490 (2) $273,080, total $541,570; M. I. O'Connor, Northampton, Mass., (1) $284,956 (2) $262,813, total $547,769. Noted Feb. 21.

Va., Hampton Roads—Breakwater Pier—Spec. 4944—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to north breakwater pier, at naval operating base, from Alsop & Pierce, Newport News, Va., (1) $11,930, 90 days (2) add $0.80 deduct $0.45, (3) add $1.10, deduct $0.68. Noted Mar. 6.

Ala., Florence—Turbines—U. S. Engineer Office, Florence, furnishing 4 hydraulic turbines for Wilson Dam, from Newport News Shipbuilding & Dry Dock Co., Newport News, Va., $103,850. Noted Jan. 17.

Texas—Dredging—U. S. Engineer, Galveston, dredging Sabine-Neches Waterway, 165,000 cu.yd. excav., from Gulf Refining Co., Port Arthur, $0.395 per cu.yd. Noted Feb. 7 under "Galveston."

CONTRACTS AWARDED

Mass., Plymouth—Dredging—U. S. Engineer, 13th floor Custom House, Boston, dredging in Plymouth Harbor, here to Bay State Dredging & Constr. Co., 62 Condor St., Boston, Mass., $98,083. Noted Mar. 6.

W. Va., Huntington—Steel Boat Hull—U. S. Engineer, Huntington, steel quarter boat hull for Ohio River, to Charles War Eng. Wks., Charleston, W. Va., $10,420. Noted Jan. 31.

Ky., Owensboro—Soft Steel Bars—U. S. Engineer, P. O. Box 72, Louisville, 6,000 soft steel bars, to Woodward Wight & Co., Howard and Constance Sts., New Orleans, $2.85 per cwt.

Mo., Kansas City—Post Office—U. S. Treasury Dept., Wash., D. C., additions to post office here, 4 story and basement, two wings 67 x 74 ft. rein.-con. and stone, to Devault & Deitrich, Canton, O., $303,933. Noted Feb. 28.

Calif., Mare Island—Riprapping—Spec. 4941—Dist. Pub. Wks. Officer, Navy Yard, Mare Island, riprapping longitudinal dike, to Healy Tibbits Constr. Co., 64 Pine St., San Francisco, $1.83 per ton. Noted Feb. 28.

Unclassified

PROPOSED WORK

Park—Trenton, N. J.—City plans North Trenton Park. $40,000. Black, Burris & Fiske, 3 West Front St., archts.

Seawall and Roadway—Tampa, Fla.—Apr. 22, $250,000 bonds, for sea wall and roadway. R. D. Martin, city engr. Noted Jan. 3.

Wharves, etc.—Tampa, Fla.—Apr. 22, $75,000 bonds, for wharves and sheds; also $100,000 bonds improving fire alarm system. R. D. Martin, city engr. Noted Jan. 3.

Power Line—Wisconsin—Wisconsin Valley Electric Co., 507 Main St., Stevens Point, plans high voltage power line to Merrill, also 3 sub-stations and equipment. $80,000. Engineer not selected.

Power and Water Supply Development—Los Angeles, Calif.—Election in June $38,000,000 bonds, incl. $8,000,000 for water department, $24,000,000 development for electrical system and $6,000,000 for steam power generating plant. J. A. Griffin, city engr.

Tunnel—British Columbia—British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, takes bids about Apr. 20, boring tunnel 15 x 15 ft. x 3,361 ft. long, from Stave Lake to Alouette Lake. $500,000. J. I. Newell, c/o owners, engr.

Electric Light Lines — London, Ont. — London Suburban Hydro System, Dominion Savings Bldg., having plans prepared extending lines, 20 mi. $100,000. R. E. Hughes, c/o owner, engr.

Telephone Lines, etc.—London, Ont.—Bell Telephone Co. having plans prepared extending telephone lines and building new exchange. $600,000. C. H. Beard, mgr.

BIDS DESIRED

Fire Alarm System—New York, N. Y.—Apr. 2, by Dept. Pub. Welfare, Municipal Bldg., local fire alarm system in New York City Childrens Hospital and Schools Dist., Randalls Island. B. S. Coler, comr.

Electric Light System—Phila. Pa.—Apr. 8, by G. H. Biles, dir. Pub. Wks., and Bd. Trustees Free Library, Room 216 City Hall, electric light, power and signal system in library, Vine, 20th, Wood and 19th Sts.; adv. E. N.-R. Mar. 27.

Fire Alarm System, etc.—Phila. Pa.—Apr. 2, by S. D. Butler, dir. Dept. Pub. Safety, Room 215, City Hall, fire alarm registers and equipment $42,500, fire alarm signal boxes $15,000, fire alarm transmitters $12,500, cables for extension of fire alarm and patrol signal service $23,500, electrically operated automatic police signal system $75,000, four 415 hp. boilers, equipment for burning fuel oil (for fire room City Hall) and fuel oil equipment for 2 boilers, etc. $130,000.

Turbine—Prince Albert, Sask.—May 15, by E. F. Webb, city clk., 1,500 kw. steam turbine generator and condenser; adv. E. N.-R. Mar. 27.

BIDS RECEIVED

Sanitary Work, etc.—Binghamton, N. Y.—State Hospital Comn., Albany, Mar. 12, renewal of water line at State Hospital, here, from Suburban Eng. Co., 15 West 38th St., New York, $14,946; plumbing and sewage disposal at Plymouth Rock Farm Cottage, here, from A. Auchinachie, Binghamton, $6,400. Noted Feb. 21.

Tunnels, etc.—Sonyea, N. Y.—P. L. Lang, pres. Bd. Mgrs. Craig Colony, Mar. 11, tunnels and bridge, for Village Flora Group, School and Laundry, from C. Curry, 40 Ossian St., Dansville, $44,540; underground heating work in above, from J. W. Danforth Co., 70 Elct. St., Buffalo, Proposal 1, $52,693, Proposal 2, $41,462. Noted Feb. 28.

CONTRACTS AWARDED

Subway Entrance—New York, N. Y.—Transit Comn., 49 Lafayette Ave., additional entrance to Mott Haven Station of 7th Ave.-Lexington Ave. Rapid Transit R.R., Mott Ave. and 138th St., Bronx Boro, Agreement "CB," to Pattelli & Wilson, $15,435. Noted Mar. 20.

Grandstand, etc.—Detroit, Mich.—G. W. Dickinson, secy. mgr. Michigan State Fair Assn., 815 Farwell Bldg., rein.-con. and steel addition to grandstand and bleacher, 341 ft. long, 32 ft. high 96 ft. wide, also wall 403 ft. long, 12 ft. high, remodeling cattle barn and building addition to auto shed, brick and steel, to Bryant & Detwiler Co., 2336 Dime Bank Bldg., $150,000. Noted Jan. 31.

Material and Equipment

PROPOSED WORK

Dredges, etc.—Buffalo, N. Y.—Preparing specifications 1 sucker and 1 dipper dredges, 6 dump scows and 2 tugs. $600,000. C. E. P. Babcock, Municipal Bldg., engr.

Snow Plow, etc.—Little Falls, N. Y.—Common Council and City Eng. Dept. plan to purchase snow plow and tractor. $3,500-$4,000.

Sand Grit, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids 5,000 cu.yd. sand grit or broken stone chips. Noted Mar. 13.

Street Roller, etc.—Madison, Wis.—City, c/o P. H. Walsh, supt. streets, plans to purchase steam street roller and scarifier. Engineer not selected.

Road Oil—Racine, Wis.—Bd. Pub. Wks., J. W. Beaugrand, city engr., soon takes bids 130,000-140,000 gal. road oil having from 55 to 60 per cent asphaltic content.

Cables, etc.—Athens, Tex.—Athens Telephone Co. had plans prepared cables, wire, poles and other equipment for extensions. $100,000.

Materials and Equipment (Continued)

BIDS DESIRED

Concrete Mixer—Buffalo, N. Y.—J. Pinzhofer, 186 East Ferry St., in market small concrete mixer with gasoline motor.

Excavator Skimmer—Buffalo, N. Y.—Apr. 4, by City, City Hall, 1 traction excavator skimmer. J. H. Meahl, city comr.

Snow and Street Sweepers—Buffalo, N. Y.—Apr. 2, by W. F. Schwartz, comr. Pub. Wks., Municipal Bldg., 6 combination rotary snow and street sweepers with turbine blades; 4 swivel-head combination snow and street sweepers equipped with turbine blades and ice saws; 4 side discharge snow trailers; 4 snow loaders; one 10 ton and one 5 ton tractors.

Asphaltic Cement, etc.—St. George, N. Y.—Apr. 2, by J. A. Lynch, pres. Richmond Boro, 225 tons asphaltic cement, 900 cu. yd. asphalt sand, and 1,425 cu.yd. broken stone screenings 12-12, at asphalt plant of Bureau of Highway, north side of Richmond Terrace near Taylor St.; 100,000 gal. bituminous road surfacing material, tar, for cold application, in tank cars at any railroad station; 1,600 cu.yd. 1½ in. and 450 cu.yd. ¾ in. broken stone, 8-8, 450 cu.yd. broken stone screenings, 8-8, also 1,050 cu.yd. pea gravel in Dist. 1; 3,400 cu.yd. 1½ in. and 70 cu.yd. ¾ in. broken stone, 8-8, 100 cu.yd. broken stone screenings, 8-8, also 1,450 cu.yd. pea gravel, in Dist. 2; 2,700 cu.yd. 1½ in. and 90 cu.yd. ¾ in. broken stone, 8-8, 50 cu. yd. broken stone screenings, 8-8, also 1,500 cu.yd. pea gravel in Dist. 3.

Bituminous Materials, etc.—Phila., Pa.—Mar. 28, by E. J. Lafferty, purch. agt., Room 312, City Hall, 400,000 gal. bituminous materials, Class 176; 320 items of steam fitters, materials and plumbers' supplies, Class 175; 45 tons gravel Class 179; 4 Fordson tractors, Class 181.

Lighting Standards—Cleveland, O.—Apr. 4, 900 white way lighting standards.

Dump Bodies—Ligonier, Ind.—Highway Iron Products Co. in market for 20 dump bodies for trucks.

Road Oil, etc.—St. Paul, Minn.—Apr. 1, by H. W. Austin, purch. agt., furnishing 700,000 gal. road oil for Dept. Pub. Wks., 10,000 gal. road oil for Dept. Parks, Play grounds and Public Buildings, 8,578 lb checkered steel floor plates and 12,649 in. structural steel and castings for Water Dept. G. M. Shepard, city engr.

Grader—Huron, S. D.—Apr. 1, by A. J. Holbrock, aud. Beadle Co., 1 elevating grader.

Grader—Devils Lake, N. D.—Apr. 3, by J. A. Kramer and Ramsay Co., one elevating grader with engine hitch and rigid disc plow and carrier, 40 ft. wide, 18 ft. long.

Scrapers and Graders, etc.—Washburn, N. D.—Apr. 1, by McLean Co., furnishing six 9 ft. drag scrapers, six 5 ft. extra heavy fresnos, 6 patrol graders, 2,664 lin. ft. 12-24 in. corrugated metal culverts.

Pipe—Dallas, Tex.—Apr. 1, by City Com., 200 tons 6 in. and 80 tons 10 in. Class B c.i. pipe, 50 tons Class D fittings, 18 tons pig lead. E. A. Kingsley, city engr.

Roller—Dallas, Tex.—Taking bids one 4 ton roller with maintenance trailer. E. A. Kingsley, city engr.

Cement, etc.—Tyler, Tex.—Apr. 7, by Comrs. Smith Co., 7,500 bbl. cement, 5,000 cu.yd. crushed stone or gravel, 3,000 cu. yd. sand for concrete. $35,000. D. K. Caldwell, co. engr.

Electrical Equipment—Tacoma, Wash.—Apr. 23, at office I. S. Davisson, comr. of light and water, electrical equipment for Cushman Power Project; adv. E. N.-R. Mar. 27.

BIDS RECEIVED

Concrete Mixer—East Cambridge (Boston P O.) Mass.—Eastern Cast Stone Co., 9 Binney St., in market for concrete mixer, 10 cu.ft.

Coal Tar Material—Cincinnati, O.—Mar. 27, at office of E. Von Bargen, city purch. agt., City Hall, 200 tons coal tar road binding material to Street & Sewer Repair Dept.

Road Graders—St. Paul, Minn.—Mar. 31, by G. J. Ries, aud. Ramsey Co., one 12-ft. heavy dirt road grader and one 8-ft. road grader with roller bearings. P. N. Coates, 900 Guardian Life Bldg., co. surv.

Pipe—Glendale, Calif.—City, (1) 18,000 ft. 4 in. (2) 18,000 ft. 6 in. (3) 12,000 ft. 8 in. (4) 7,000 ft. 12 in. Class B c.i. pipe (5) 50 tons Class D c.i. fittings, from T. Haverty Co., 8th and Maple St., Los Angeles (1) $57.86 ton (2) $56.[illegible] (3) $55.56 (4) $55.56; Natl. Cast Iron Pipe Co., Bartlett Bldg., Los Angeles (1) $66.26 (2) $62.26 (3) $61.26 (4) $61.26 for 12 ft. lengths and (1) $67.26 (2) $63.26 (3) $62.26 (5) $124.26 for 4 in. fittings and $114.26 for 6 and 12 in. fittings; Pacific Pipe & Supply Co., 1002 Santa Fe St., Los Angeles (bid per ft.) Belgian pipe (1) $0.54 (2) $0.922 (3) $1.322 (4) $2.294. British pipe (1) $0.53 (2) $0.8558 (3) $1,2404 (4) $2,1448, European standard pipe (1) $0.5042 (2) $0.8140 (3) $1.1743 (4) $2,0376 (5) $105 ton; United States Cast Iron Pipe & Fdry. Co., Wright-Callendar Bldg., Los Angeles (bids per ft.) (1) $0.7324 (2) $1.0573 (3) $1.5081 (4) $2.6067 (5) $124.50 ton for 4 in. and $114.50 per ton for 6 in. fittings; Amer. Cast Iron Pipe Co., 439 East 3rd St., Los Angeles (5) $0.05 per lb. for all fittings; Grinnell Co. of the Pacific, 439 East 3rd St., Los Angeles, for Belgian pipe (bids per ton) (1) $51 (2) $57 (3) $57 (4) $57 (5) $105 for all fittings. Noted Mar. 13.

CONTRACTS AWARDED

Cement, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 10,000 bbl. Portland cement, to E. E. Buhler Co., 103 Park Ave., New York, $27,686; 7,000 cu. yd. steam ashes, to Hygrade Builders Supply Co., 6th St. and 2nd Ave., $8,680. Noted Mar. 13.

Broken Stone—Long Island City N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 21,000 cu.yd. broken stone, to McGirr Bros., Inc., 461 8th Ave., New York, $2.11 per cu.yd. Noted Mar. 13.

Rip Rap—Scotia, N. Y.—R. K. Fuller, comr. Canals & Waterways, Albany, Mar. 11, rip rap at Movable Dam 4, here, Contr. 215, to Amer. Pipe & Constr. Co., 20 Market St. ,Amsterdam, $15,957. Noted Feb. 14.

Tar, etc.—Trenton, N. J.—Mercer Co. 234,667 gal. tar and 13,000 tons slag and crushed pebbles, to T. Tobish, Amer. Mechanic Bldg., $69,505. Noted Mar. 6.

Cement—Sheboygan, Wis.—For 30,000 bbl. cement: to Hildebrand Supply Co., 711 North 15th St., Pantzer Lumber Co., Sheboygan, Roth Building Co., Sheboygan, and H. Scheels, Sheboygan, all bid $2.99. Noted Feb. 7.

OFFICIAL PROPOSALS

OFFICIAL PROPOSALS

Bids: April 14.

Road Work

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION
Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

Bids will be received at the office of the State Highway Commission, 9th floor, Broad Street Bank Building, Trenton, New Jersey, on Monday, April 14th, 1924, at the hours named below and will be opened and read immediately thereafter.

BIDS AT 12:00 NOON (STANDARD TIME)

Construction of Route No. 6, Section No. 13, Bridgeton to Marlboro, in the County of Cumberland. Estimated 67,905 sq.yds. reinforced concrete pavement; 33,380 sq. yds. Gravel Shoulders.

BIDS AT 12:10 P.M. (STANDARD TIME)

Construction of Route No. 9, Section No. 12, Plainfield-Westfield, in the County of Union. Estimated 29,505 sq.yds. reinforced concrete pavement.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each project upon application to the State Highway Department, 9th floor, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated in the 1924 specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.
A. LEE GROVER,
Secretary.

Bids: April 15.

Paving

Pottsville, Pa.

Sealed proposals will be received by the City Council of Pottsville, Pa., up to 7:00 o'clock p.m., Eastern Standard Time, of April 15, 1924, for paving and improving several streets of the City.

The work proposed consists of laying approximately thirty-five thousand (35,000) square yards of street paving on a concrete base with necessary grading, adjustment of curbs, etc., on four separate streets.

Bidders may examine the plans and obtain a printed copy of the specifications on application to the City Engineer and depositing five dollars ($5.00). The deposit money will be returned on the return of the specifications in good condition with a bona-fide proposal for the work accomplished.

The City Council reserves the right to reject any or all bids or parts of bids.

JOHN H. STRAUCH,
City Engineer.

March 24, 1924.

OFFICIAL PROPOSALS

Bids: April 10.

Road Work

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by the oard of Chosen Freeholders of the County of Gloucester for the construction of Woodbury-Blackwood Road, Section No. 2 in the Townships of Deptford and Washington in the County of Gloucester, with a cement concrete pavement, estimated amount of concrete pavement required is 27,578 square yards, and opened and read in public at Court House, Woodbury, N. J., on Thursday, April 10th, 1924, at 11.00 a.m., Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, have been filed in the office of the said engineer at Merritt Building, Woodbury, N. J, and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to The Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN,
Clerk.

WILLIAM C. CATTELL,
County Engineer.

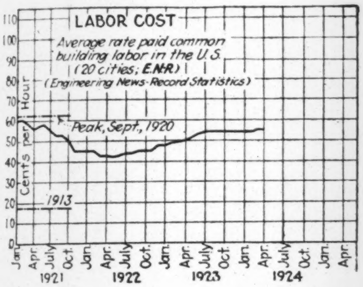
CONSTRUCTION NEWS

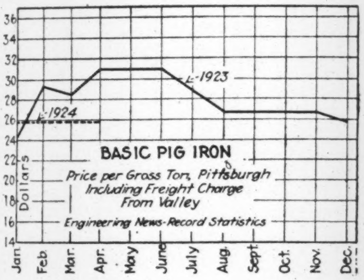
Engineering News-Record, April 3, 1924

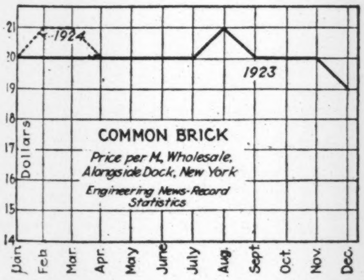
The Construction Barometer

Buying Is Slow With Price Concessions Obtainable—Danger of Price Rise Due to Limited Stocks of Materials

ALTHOUGH materials' reserves are limited, particularly in dealers' warehouses, there is little tendency to purchase for replenishment of stocks. Buying is slow and price concessions are to be met with in most of the basic materials. The lumber market is quiet and about the only steel items active at the present time are railway supplies and structural shapes. Cement and brick, however, are reported as being in better demand. Advancing labor cost is confined to the skilled trades as some unemployment in unskilled and semi-skilled labor has been reported to *Engineering News-Record* during the week. Materials stocks can not get too close to the "boards" without a revival of demand. The increased demand, however, will be immediately reflected in rising prices.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Mar. 13	$18,513,000	$13,398,000	$31,911,000
Mar. 20	17,126,000	31,125,000	48,251,000
Mar. 27	28,345,000	23,151,000	51,496,000
3 weeks	$63,984,000	$67,674,000	$131,658,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

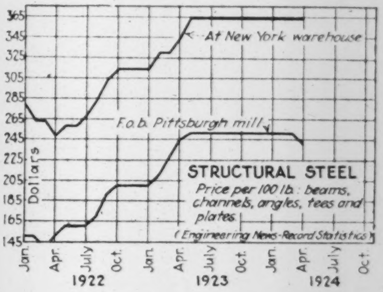
Week Ended	No.	Public Work	No.	Private Work
Mar. 13	10	4,251,000	35	11,575,000
Mar. 20	13	4,152,000	62	24,070,000
Mar. 27	15	3,416,000	33	17,317,000
3 weeks	38	$11,819,000	130	$52,962,000

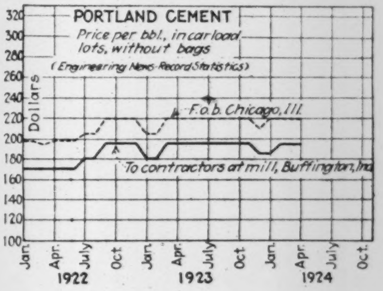
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

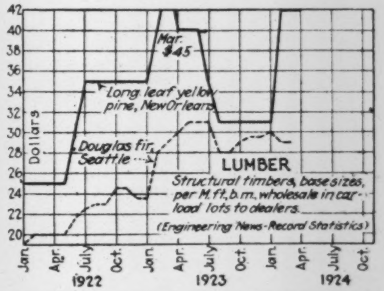
		Public			
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
Mar. 13	41	64	71	40	227
Mar. 20	40	64	81	47	256
Mar. 27	28	50	99	41	262

PRICE DECLINES PREDOMINATE

	Quoted on Apr. 3 at	Price was	On
Structurals, Pittsburgh, 100 lb......	$2.30 @2.50	$2.40 @2.50	Mar. 13
Cement, Chi. net bbl.	2.20	2.10	Jan. 24
Pine, N. Y. m. ft....	64.00	65.00	Mar. 13
Fir, San Fran., M. ft.	36.00	38.00	Jan. 24
Common labor, hr...	.55	.54	Feb. 28







Proposals will appear next week as usual

Waterworks

PROPOSED WORK

N. J., Allenhurst—Boro plans to purchase oil engine air compressor and centrifugal pump for Water Dept. $14,000. M. D. Pyle, clk. Engineer not selected.

Pa., Pottsville — Pottsville Water Co. plans 500 m.g. storage reservoir, steam operated pumping station with horizontal cross compound crank and fly wheel unit. $1,000,000.

Fla., Cocoanut Grove—Election Apr. 15, $200,000 bonds, waterworks, incl. wells, water softening plant, pumping station, machinery and distribution system. G. A. Main, Cocoanut Grove, engr.

Fla., St. Petersburg — Election May 20, $125,000 bonds, waterworks and main extensions. E. Kitchen, St. Petersburg, engr.

Ala., Birmingham—Birmingham Waterworks Co., 2114 First Ave., sold $500,000 stock for waterworks improvements: $120,000 will be used for 16-in. additional main to West End and Central Park and $40,000 for 8 concrete filters at Shades Mountain. J. C. Adams, pres.

O., Columbus—See "Streets and Roads."

Mich., Port Huron—Having plans prepared 5,000 ft. 6 and 8 in. c.i. mains, 25 m.g. turbine driven centrifugal pump, $100,000. E. R. Whitmore, City Hall, Detroit, engr.

Wis., Tigerton — Making plans waterworks, incl. small dam. $20,000. Druar & Milinowski, 600 Globe Bldg., St. Paul, Minn., engrs.

Wis., Two Rivers — Plans 2 electric pumps at pumping station. $5,000. J. Doleysh, clk. Engineer not selected.

Minn., Le Sueur—Making plans waterworks system. $25,000. J. A. Morgan, clk. R. W. Richardson, 301 Zenith Bldg., St. Paul, engr.

Minn., Wadena—Plans new waterworks system. $25,000. A. Groine, clk. Engineer not selected.

Kan., Wichita—Soon takes bids 75,000 ft. 6- and 8-in. c.i. mains and 300,000 gal. storage tank. P. L. Brockway, City Bldg., engr. Noted Sept. 27.

Neb., Hay Spring—Making plans waterworks system. $20,000. Henningson Eng. Co., 3rd floor Natl. Bank Bldg., Omaha, engrs. Noted Feb. 21.

Mo., Kennett — Voted $17,000 bonds waterworks extensions, and $18,000 bonds sanitary sewer extensions.

Tex., Floresville — Election latter part April, $40,000 bonds, reservoir, pumps, main extensions, etc. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Tex., Kemp — Having plans prepared mains, equipment, etc. $25,000. H. N. Roberts, Court House, Lubbock, engr.

Waterworks (Continued)

Ore., Seaside—Takes bids about May 26, pipe lines, reservoir, and head works. $160,000. L. C. Rogers, city engr.

Okla., Tulsa—Preparing plans concrete slope protection on banks Mohawk Reservoir. $80,000. C. Schultz, City Hall, engr.

Calif., Anaheim—Plans to vote on $110,000 bonds extending water system.

Calif., Culver City—Plans to vote on $300,000 bonds, waterworks improvements. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, consult. engrs. Noted Mar. 20.

Calif., San Bernardino—Plans to vote on $275,000 bonds for water storage project in Devils Canyon. C. E. Johnson, city engr.

Calif., Vernon (Watts P. O.)—South Los Angeles Water Co., 1109 East 63rd St., plans improvements and extensions. $150,000.

BIDS DESIRED

N. Y., Binghamton—Apr. 9, by Bd. Contr. & Supply, mains in 8 streets. $83,000. Noted Mar. 20.

N. Y., Elmira—Elmira Water Bd., City Hall, taking bids 105 tons 12 in. Class B c.i. pipe, A. W. W. A. specifications.

N. Y., Troy—Apr. 4, by Bd. Contr. & Supply, 13,000 lb. 4 in. and 20,000 lb. 6 in. B and S Class B c.i. pipe, also 22,976 lb. c.i. fittings.

N. J., Pennington—Apr. 7, by Boro Council, 1,100 lin.ft. 6 in. c.i. mains and 2 fire hydrants. $25,000. H. L. Laning, 100 South Main St., engr. Noted Jan 10.

Pa., Dubois—Apr. 15, by J. C. Weaver, city clk., extensions to intake, Contr. 1, earth and rock fill causeway Contr. 2, 12 in. pipe line Contr. 4, raising Anderson Dam Contr. 5; adv. E. N.-R. Apr. 3.

Md., Baltimore—Apr. 9, by Bd. Awards, motor-operated pumps and c.i. piping in Pumping Station 1. B. L. Crozier, City Hall, highway engr.

O., Cleveland—Apr. 11, mains in Woodland Ave., Sect. W, Contr 30 W. To exceed $100,000. A. V. Ruggles, City Hall, engr.

O., Steubenville—Apr. 7, by R. P. Price, dir. Pub. Serv., 6,746 ft. 6 and 8 in. c.i. pipe, twenty-five 6 in. single gates for fire plugs, thirty 42- to 54-in. gate valve boxes complete for 6 in. gates, etc., f.o.b. Steubenville. B. M. Smith, clk.

O., Put-in-Bay—Apr. 9, 4,335 ft. 8 in. c.i. mains.

Ill., Metropolis—Apr. 24, by A. N. Starkes, mayor, waterworks system and electric light improvements. W. A. Fuller Co., Railway Exch. Bldg., St. Louis, Mo., engrs.; adv. E. N.-R. Apr. 3. Noted Mar. 27.

Wis., Milwaukee—Apr. 7, by Central Bd. of Purchase, City Hall, 3 chlorine control machines for Riverside pumping station.

Wis., Milwaukee—Apr. 7, by Central Bd. Purchases, City Hall, 3,295 tons plain straight pipe, incl. some double spigot pieces, 338 tons lugged straight pipe, 175 tons special castings, all c.i. Class C.

Wis., West Allis—See "Sewers."

Minn., Mankato—Apr. 7, by F. W. Bates, city clk., 273 tons 6-in. c.i. pipe as follows: 1,200 lengths bell and spigot Class C in 12-ft lengths, and 80 pieces spigot and plain end Class C, in 12-ft. lengths, 6.75 tons Class D specials.

Minn., Milan—Apr. 8, waterworks system, 750 lin.ft. 6-in. and 500 lin.ft. 4-in. c.i. mains, 3 hydrants, 1,600 lb. special castings, 6 valves and boxes, 1 centrifugal pump 100 g.p.m., 35,000 gal. steel tank. $15,000. J. A. Rowat, Willmar, engr.

Minn., Rochester—Apr. 7, by Pub. Utility Bd., laying 7,000 lin.ft. mains (labor only), excavation and backfilling. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr. Noted Feb. 28.

Kan., Topeka—See "Streets and Roads."

Wyo., Casper—Apr. 14, by City Council or City Clerk, distribution reservoir, incl. 57.600 cu.yd. earth excav., 50 cu.yd. rock excav., 1,800 cu.yd. rein-con in walls, 1,985 cu.yd. rein.-con. in floor paving, 346,000 lb. reinforcing, 3,800 lin.ft. expansion joint material, 25,000 sta.yd. overhaul. $108,000. E. W. Fasset, city engr. Noted Feb. 7.

Mo., Ava—Apr. 11, by Russell & Axon, engrs., McDaniels Bldg., Springfield, 4, 6 and 8 in. c.i. and 2 in. galvanized pipe for water distribution system, here, for city. $20,000. Noted Feb. 7.

Tex., Crosbyton — S. W. Cooper, city secy., taking bids waterworks improvements. $22,000. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Tex., Ft. Worth—Apr. 8, by C. S. Snow, city secy., 2,000 miscellaneous water meters. D. L. Lewis, city engr.

Wash., Lynden—Taking bids filtration plant and 100,000 gal. steel tank. $32,000 bonds voted. Noted Dec. 6.

Calif., South Pasadena (Branch of Pasadena)—Apr. 14, by City Trustees, 7,000,000 gal. reservoir, 4 in. concrete lining throughout. Alternative bids will be taken on 6 in. concrete floor and 4 in. sidewalls. R. B. Orbison, city mgr.

BIDS RECEIVED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Mar. 27, mains in Fillmore, Island, Narrows and Williams Aves., Aves. N, P and Y, Delamere, Elmore and Kenmore Places, Banker, Douglass, Hendrickson, Herzl, Percival, Smith, 54th, 56th, 63rd, 73rd, 77th, 94th, East 12th, East 27th, East 93rd, West 6th, West 11th and West 12th Sts., etc., here, from Grippo Contg. Co., $24,300. Noted Mar. 20.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Mar. 27, mains in Washington, Wilson, 4th, 6th, 7th and 9th Aves., Chauncey, Front, 4th, Hancock, Kindred, Marion and Sherman Sts., here, from S. Gallucci, $14,000. Noted Mar. 20.

N. Y., Long Island City — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Ava Pl., Putney Rd., 6th, 13th, 33rd, 35th and 72nd Aves., Gardiner, 4th, 6th, 16th, 19th, 160th, 161st, 202nd and 203rd Sts. from Stanhy Constr. Co., $10,961. Noted Mar. 20.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Mar. 26, mains in Dickens, Dix and Mott Aves., etc., here, from G. V. Cronell, $9,460. Noted Mar. 20.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Mar. 28, mains in Blair, Crosby, Ferris and Lawton Aves., etc., from Paladino Contg. Co., 437 East 120th St., $18,739; in Britton, Bronxwood and Duncom Aves., etc., from Knight & Demicco, Inc., 448 East Tremont Ave., $12,045. Noted Mar. 20.

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Mar. 26, mains in Lookout and Pelton Aves., etc., here, from F. J. Kelly & Co., 186 Joralemon St., Brooklyn, $248,000. Noted Mar. 20.

N. J., Trenton—From Lead Lined Pipe Co., Wakefield St., Boston, Mass., lead lined couplings, about two thousand ¾ in. $0.17, three hundred 1 in. $0.22, lead lined pipe, 2,500 ft. ¾ in. $0.22, about 5,000 ft. 1 in. $0.30, lead lined nipples about 1,400 ft. ¾ x 4 in. $0.22, about 250 ft. 1 x 6 in. $0.30; from Warren-Balderston Co., Greenwood Ave., 1,500 corporation cocks $2.25 each; from Leadite Co., Land Title Bldg., Phila., about 14,000 lb. leadite $0.12; from United Lead Co. of Pennsylvania, 226 South 5th St., Phila., about 6,000 lb. pig lead $0.07 and $0.09; from J. E. Thropps Sons Co., Lewis St., 250 street valve boxes $46 each; from U. S. Cast Iron Pipe & Fdry. Co., Morris Bldg., Phila., c.i. pipe, about 50 tons 4 in. $65.25 per ton, 358 tons 6 and 10 in. $58.25, 32 tons 12 in. $58.25, 125 tons 16 in. $58.25; from Rensselaer Valve Co., Ontario St., Troy, N. Y., Cory fire hydrants: about six 4 in. $58.58, eighteen 6 in. $72.50, ten 8 in. $88.74, hub valves about eighteen 4 in. $13.34, twenty-four 6 in. $24.36, twelve 10 in. $58. Noted Mar. 13.

Pa., Phila.—Dept. Pub. Wks., Room 216 City Hall, 9,800 lin.ft. 36 and 42 in. c.i. and steel mains in Hunting Park Ave., Contr. 664, and 550 tons 24 in. c.i. mains in 12th St., Contr. 666, from J. J. McHugh, 1617 Race St., $287,845 and $67,282 respectively; 930 tons 12 in. c.i. mains in Castor, Rahn and Cottman Sts., Contr. 665 from M. and J. B. McHugh, 892 North Markoe St., $97,772; condenser shells, piping, fittings, valves, etc., at Lardners pumping station, Contr. 667, from Acme Machine Co., 316 North 17th St., $1,850. Noted Mar. 13.

O., Cleveland—Cuyahoga Co., Mar. 19, 2,850 ft. 12 in. c.i. mains, Impvt. 49, from G. H. Randals, Lorain, $15,050. Noted Mar. 13.

O., Columbus — Franklin Co. Mar. 18, from Grant-Boulton Co., 202 Central Bank Bldg., 10,260 ft. 6- to 12-in. c.i. mains, Sewer Dist. Clinton 2 (North High St. Area), Contr. 35, $33,543; from H. E. Miller, 938 South High St., 7,266 ft. 6 in. c.i. mains, Sewer Dist. Clinton 2 (Chaseland Area), Contr. 36, $12,348, 5,565 ft. 6 and 12 in. c.i. mains, Sewer Dist. Clinton 2 (Sharon Height Area), Contr. 37, $16,825, 3,075 ft. 6 in. c.i. mains, Sewer Dist. Prairie 1 (Area 2), Contr. 38, $5,468. Noted Mar. 13.

Wis., Black River Falls—Water supply, 2 well systems, 300,000 gal. per hour, from Layne & Bowler Co., 37 West Van Buren St., Chicago, $32,000. Noted Feb. 21.

Calif., San Francisco — City and San Francisco Co., pumping equipment for Pulgas plant, Hetch Hetchy Project, from De Laval Steam Turbine Co., Rialto Bldg., $5,125. Noted Mar. 13.

CONTRACTS AWARDED

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., centrifugal pumps, motors, etc., to A. J. Abels Co., Inc., Iroquois Bldg., $67,407. Noted Mar. 6.

N. Y., Silver Creek—Bd. Water Comrs., reservoir, to J. P. Morrissey, Dunkirk, $75,000. Noted Sept. 27.

Md., Baltimore—Bd. Awards, valves and hydrants to Water Dept., to A. P. Smith Mfg. Co., Norman St., East Orange, N. J., $54,117.

S. C., Newberry—System consisting of intake pumping station, 1 m.g.d. service reservoir, coagulating basin, two 500,000 gal. concrete filters and 14,000 ft. 12 in. main, to Guion & Withers, Gastonia, N. C., $112,000. Noted Mar. 6.

O., Cleveland—Cuyahoga Co., 24,000 ft. 6, 8 and 10 in. c.i. mains, Impvt. 48, to Salem & George Bros., Erie Bldg., $110,412. Noted Mar. 20.

O., Cleveland—Cuyahoga Co., 17,000 ft. 6 and 8 in. c.i. mains, Impvt. 42, to J. B. Lynn, Caxton Bldg., $69,040. Noted Mar. 27.

Wis., Phillips — Waterworks improvements, incl. 2 electric pumps, etc., to J. M. O'Neil, 608 Exch. Bank Bldg., St. Paul, Minn., $10,748; steel tank on steel tower, to Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave., Minneapolis, $7,689. Noted Mar. 6.

Mo., Kansas City—M. H. Raming, purch. agt., City Hall, additional water supply, Missouri Valley tunnel, Contr. 1, to Tibbets & Pleasant, 229 North Nogales St., Tulsa, Okla., $1,395,412; East Bottoms and Turkey Creek Tunnels, Contr. 2, to Byrne Bros. Constr. Co., 358 East 115th St., Chicago, $1,873,295. Noted Mar. 20.

Mo., Palmyra—For 100,000 gal. tank on 110 ft. tower, to Pittsburgh-Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia., $8,669; disposal plant, to E. K. Ladd, 3229 Harrison St., Kansas City, $11,000. Noted Mar. 13.

Tex., Austin—Filter building with filtered water reservoir, mixing chamber, coagulation-sedimentation basin with appurtenances, incl. pipe connecting same, to J. F. Johnson, Colorado and 12th Sts., Austin, $184,800; filter equipment, to International Filter Co., 333 West 25th Pl., Chicago, $81,930. Noted Mar. 6.

Tex., Wortham—Filter plant, to G. A. Duren, Wilson Bldg., Dallas, $15,000. Noted Feb. 28.

Calif., Vernon (Watts, P. O.)—Constructing 3 m.g., 185 x 185 ft. concrete lined reservoir, to Kinne & Westerhouse, Hellman Bldg., Los Angeles, $20,500; 100,000 gal. steel tank and 100 ft. tower, to Pittsburgh-Des Moines Steel Co., Rialto Bldg., San Francisco, $9,200. Noted Mar. 20.

Calif., Santa Cruz—Constructing Bay St. reservoir, to C. Harlowe, Jr., 378 Belmont St., Oakland. Former contract rescinded. Noted Nov. 1.

Calif., Santa Monica—Trenching, furnishing, backfilling and laying pipe, to C. Fisher, Wright-Callendar Bldg., Los Angeles, portion system using riveted steel pipe $86,338; wood stave pipe $80,584, complete system, c.i. pipe $662,495; De-Lavaud pipe $647,105 (type of pipe not decided upon). Noted Mar. 20.

Sewers

PROPOSED WORK

Fla., St. Petersburg—Election, May 20, $160,000 bonds storm sewers; $54,000 for 36 in. trunk line sanitary sewers, 1st alley south to screen plant; $8,000 pumping equipment. E. Kitchen, St. Petersburg, engr.

O., Columbus—See "Streets and Roads."

Mich., Norway—Plans 5 mi. sanitary sewers. $50,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, engrs.

Wis., Tigerton—Making plans sanitary sewers. $40,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, Minn., engrs.

Mo., Kennett—See "Waterworks."

Calif., Alhambra — Had plans prepared 1,276 lin.ft. 12 in. and 42,800 lin.ft. 8 in. vitr sewer, 1,430 wye branches, 137 manholes, 33 flush tanks, etc. T. B. Downer, city engr.

Calif., Anaheim — Had plans prepared 826 ft. 8 in. and 13,929 ft. 6 in. vitr. sewer pipe, etc.

Sewers (Continued)

Calif., Fairfax—Sanitary Dist. 1, Marin Co., having plans prepared 15 mi. lateral sewers. C. C. Kennedy, Call Bldg., San Francisco, consult. engr.

Calif., San Anselmo—Marin Co: Sanitary Dist. 1 having plans prepared 14 mi. lateral sewers, Fairfax Sect. C. C. Kennedy, Call Bldg., San Francisco, consult. engr.

Calif., Stockton — Had plans prepared 1,994 ft. 8 in concrete or vitr. pipe, 2,622 ft. 12 in. concrete or vitr. pipe encased in concrete, etc., in Charter and Harding Ways, etc. W. B. Hogan, city engr.

Ont., Toronto—Having plans prepared 2½ mi. 8-30 in. vitr. tile and concrete storm and sanitary sewers in Fleet St. $90,000. R. C. Harris, city engr.

BIDS DESIRED

R. I., Providence—Apr. 28, at office E. D. Miller, city clk., building Manton Dist. Sewer, Sect. 33. J. H. Gainor, mayor and chn.; adv. E. N.-R. Apr. 3.

N. Y., New York—Apr. 8, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in East 194th St., Edison, Harrington, Coddington, Hobart and Sedgwick Aves.

New Jersey—Apr. 11, by Union Co. Park Comn., 286 North Broad St., Elizabeth, (a) 14,000 or more lin.ft. 4 and 6 in. standard drain tile, (b) 12,000 or more lin.ft. 6- to 18-in. concrete sewer pipe (alternate b) same amount of clay sewer pipe at Warmanco Park in Elizabeth and Roselle. W. R. Tracy, engr. and secy.; adv. E. N.-R. Apr. 3.

N. J., Ventnor City—Apr. 14, by President Common Council, City Hall, 2 electric driven sewer pumps at waterworks. C. E. Reppetto, city clk.

Pa., Phila.—Apr. 16, by Dir. Pub. Wks., northeast sewerage treatment works, incl. 1 story, 27 x 42 ft. brick and steel locker building, $30,000, and 1 story, 65 x 114 ft. brick and steel heating plant, $200,000.

O., Cleveland—Apr. 10, sewers in Bellaire Rd. S. W., Cedar Ave. S. E., East Blvd., Ironwood Ave. N. E., Melville Rd., N. E., Ontario St. outlet, Parkgrove Ave. N E., Woodward Court, N. E., Harvey Ave. S. E., Kingsbury Run Sect. 1, East 139th, 185th, 187th and 188th Sts. R. Hoffman, City Hall, engr.

Wis., Milwaukee—Apr. 7, by Dept. Pub. Wks., monolithic concrete and pipe sewers. $260,000. G. Schwada, city engr.

Wis., West Allis—Apr. 11, by Bd. Pub. Wks., 11,000 ft. 8 and 10 in. sewers, also 10,000 ft. 6 and 10 in. watermains.

Minn., Ely—Apr. 15, rein.-con. sewage treatment plant. $35,000. A. O. Knutson, city clk.

Tex., Floydada—B. Bedford, city secy., taking bids sanitary sewerage system and disposal plant. Gantt Baker Co., 1116 Main St., Oklahoma City, Okla., engrs. Noted Feb. 28.

Tex., Lubbock—Apr. 15, by City Com., 3,400 ft. 18- to 24-in. tile, 23,300 ft. 27- to 78-in. concrete pipe. $200,000. Hawley & Roberts, Cotton Exch. Bldg., Ft. Worth, engrs. Noted Feb. 21.

Calif., Los Angeles—See "Streets and Roads."

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Mar. 25, from Kennedy & Smith, 93 Amity St., Flushing, sewer in Barclay St. $4,922, Ridgewood Ave. (b) $7,247; from J. Gallo, 203 Division St., Brooklyn, in Bleeker St. $1,374, Roanoke Ave. $18,018; from E. Muccinni, in Cooper Ave. $15,068, Whitlock Ave. $1,628, 86th Rd. $1,707, North Vine St. $5,216; from Green Contg. Co., 734 Vernon Ave., Astoria, Ridgewood Ave. (a) $8,354. Noted Mar. 20.

N. J., Trenton—Mercer Co. Mar. 25, 21,000 ft. 6 in. storm water drain in Robbinsville-Yardville Rd., from Grant & Driver, 56 McKinley Ave., $29,948. Noted Mar. 13.

O., Cleveland—Cuyahoga Co. Mar. 19, 23,000 ft. 8- to 42-in. vitr. sewers, Biddulph Rd. Impvt. 50, from G. F. Randals, Lorain, $107,095. Noted Mar. 13.

O., Columbus—Franklin Co., Mar. 18, 9,000 ft. 8 and 10 in. vitr. sewers, Sewer Dist. Clinton 2 (Sharon Heights Area), Contr. 39, from H. E. Miller, 938 South High St., $20,261. Noted Mar. 13.

Ill., Chicago — Bd. Trustees, Sanitary Dist. of Chicago, 910 South Michigan Ave., Mar. 6, North Side Sewage Treatment Wks., Div. D, Subdivision B, four thousand five hundred 1-in. aeration plates, from Norton Co., Worcester, Mass., $8,145. This corrects report in Mar. 20 issue.

Mo., Carthage—For 6,227 ft. 18 and 24 in. sewers, Imhoff tank and disposal plant, etc., from V. E. Koch, 14th and Texas Sts., Joplin, $100,691; sewers only, from R. McSweeney, Springfield, $28,286. Noted Mar. 20.

Calif., Los Angeles—See "Streets and Roads."

Calif., Venice—See "Streets and Roads."

CONTRACTS AWARDED

N. C., Charlotte — Sewers in various streets, to R. T. Myers Contg. Co., Lexington, $13,714 and Boyd, Higgins & Goforth, Realty Bldg., $62,920. Noted Mar. 13.

Ky., Owensboro — City, 1 mi. concrete sewer in Frederica St., to O. W. Wilkie & Co., Owensboro.

O., Cleveland—Cuyahoga Co., 29,750 ft. 8- to 36-in. vitr. sewers, Impvt. 38, to J. B. Lynn, Caxton Bldg., $176,968. Noted Mar. 27.

O., Columbus—Franklin Co. 3,715 ft. 8- to 12-in. vitr. sewer in Sewer Dist. Clinton 2 (Chaseland Area), Contr. 33, to Gaty Constr. Co., Sandusky and Mound Sts., $29,355. Noted Mar 13.

O., Warren—Sewer in Central Parkway, to Garner Bros., Youngstown, $27,104, engrs. est. $29,366; in Niles Ave., to H. Poff, Warren, $34,213, $33,562.

Mich., Royal Oak—Sanitary sewers, Laterals 23 and 25, to R. D. Baker, Penobscot Bldg., Detroit, $33,640 and $58,120 respectively; Lateral 26 to Liberty Constr. Co., Detroit Savings Bank Bldg., Detroit, $14,666; Lateral 27, to W. Blanck Co., 827 Ford Bldg., Detroit, $10,642. Noted Mar. 20.

Wis., West Allis—Storm sewers in various streets, concrete or vitr. pipe, to F. E. Kaminski, 45th Ave. Engrs. est. $25,000. Noted Mar. 20.

Ia., Clear Lake—Sewage disposal plant, 80 x 160 ft. brick building, and 42,000 lin. ft. sanitary sewers, to Gjellafald-Chapman Constr. Co., Forest City, $104,860.

Kan., Hays—Storm sewers, 4,400 ft., to H. J. Taylor Constr. Co., Belleville, $48,570. Noted Feb. 14.

Calif., Los Angeles—See "Streets and Roads."

Calif., Pasadena—Outfall sewer, rein.-con. pipe, from sewage treatment plant at City Farm to Rio Hondo, to Heafey-Moore-McNair, 2030 High St., Oakland, $118,720. Noted Mar. 20.

Waste Disposal

BIDS DESIRED

Va., Norfolk—Apr. 5, by W. H. Taylor, dir. Pub. Wks., incinerator near Princess Anne Ave.

Bridges

PROPOSED WORK

Maine—State Hy. Comn., Augusta, plans concrete bridges as follows: Holt Stream Bridge in Norway, 20-ft. span; Passacomaway Bridge over Cape Neddick River, in York, 128-ft., 3 spans; Mile Stream Bridge in Howland, 20-ft. span; Upper Corner Bridge over Narraguagus River, at Cherryfield, 254-ft., 5 spans; Fernald Bridge over Pushaw Stream, in Alton, 67-ft., 3 spans; bridge over Barker Brook in Lisbon, 12-ft. span. P. D. Sargent, ch. engr.

Fla., Miami — Dade Co. had estimates made widening causeway, viaducts, $600,000; Snapper Creek Bridge, $30,000. H. Crabtree, Miami, engr.

Fla., St. Petersburg — Election May 20, $85,000 bonds, 5 bridges. E. Kitchen, St. Petersburg, engr.

Tenn., Nashville—City rejected bids repairing and improving bridges over Cumberland River on Sparkman and Jefferson Sts. $300,000. Freeland, Roberts & Co., Independent Life Bldg., engrs. Noted Feb. 21.

Ky., Lothair—Baker Bros., Hazard, soon takes bids steel bridge over Kentucky River, here. $25,000.

O., Cleveland—See "Unclassified."

Kan., Kansas City—City and Kansas City Terminal R.R. Co., Kansas and Adams Sts., soon take bids 1,965 ft. viaduct, concrete and steel, 36 ft. roadway, wood-block paving. $450,000. H. V. Hanna, ch. engr. railway.

Wash., Everett—Comrs. Snohomish Co., plan wood and steel span near Sultan, $25,000.

BIDS DESIRED

Connecticut—See "Streets and Roads."

N. Y., Scarsdale—Apr. 17, by Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, constructing Bronx River Parkway Dr. Bridge 28, over tracks New York Central R.R. and lake, here. J. Downer, engr. and secy.; adv. E. N.-R. Apr. 3.

Pa., Pittston—Apr. 21, by P. J. Schmidt, controller Luzerne Co., (Wilkes-Barre) 1,120 ft. rein.-con. bridge, 45 ft. wide, over Susquehanna River, here. $600,000. D. A. Keefe, Athens, consult. engr.

Ga., Macon—City and Central of Georgia R.R. Co., 233 West Broad St., Savannah, taking bids steel viaduct on 13th St. $25,000. C. K. Lawrence, ch. engr.

Alabama—Apr. 18, (extended date) by State Hy. Comn., Montgomery, bridge on Birmingham-Montgomery Rd., Federal Aid Project 100, Chilton Co., 542.6 cu.yd. Class A and 56.5 cu.yd. Class B concrete, 89,370 lb. reinforcing, etc. W. S. Keller, state highway engr. Noted Mar. 6.

Miss., Greenville — May 8, by Bd. Supervs. Washington Co., at office Chancery Clerk, 330 ft. bridge on Federal Aid Project 166, two 90 ft. and one 150 ft. steel truss spans. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Ohio—Apr. 11, by Dept. Highways and Pub. Wks., Columbus, steel bridge on Sect. "D" Youngstown-Conneaut Rd., Ashtabula Co., $6,474; steel bridge on Sect. "C" Windsor-Geneva Rd., Ashtabula Co., $7,773; concrete bridge on Sect. "D" Athens-Nelsonville Rd., Athens Co., $18,748; bridge on Sect. "F" Piqua-Sidney Rd., Miami Co., $8,534. A. V. Donaheys, dir. highways.

Ohio—See "Streets and Roads."

O., Lakewood—Apr. 23, by Cuyahoga Co., Court House, Cleveland, bridge over Rocky River, on Hilliard Rd., here. A. J. Hieber, clk. Noted Oct. 18.

Mich., Whitecloud — Apr. 10, by Bd. Newaygo Co. Rd. Comn., constructing Bridge 622403, 50 ft., concrete and steel, 118.1 cu.yd. Class A and 98.6 cu.yd. Class C concrete, 26,525 lb. steel.

Ill., Aurora—Apr. 14, by City Council, constructing Benton St. and Holbrook St. bridges. J. P. Wetz, city clk.; adv. E. N.-R. Apr. 3.

Wisconsin—See "Streets and Roads."

Wis., Eau Claire — See "Streets and Roads."

Tex., Houston — Apr. 14, by Comrs. Harris Co.; concrete trestle bridge and 2 culverts on Sims Bayou and Telephone Rd. $25,000. Howe & Wise, co. engrs. Noted Feb. 21 under "Streets and Roads."

Calif., Ventura—See "Streets and Roads."

BIDS RECEIVED

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., Mar. 27, reconstructing, renewal and protection of Elk St. viaduct over tracks of New York, Chicago & St. Louis R.R., also Elk-Abbott viaduct over tracks of Erie R.R., from Independent Bridge Co., May Bldg., Pittsburgh, Pa., $159,400 and $65,800 respectively; Van Rennselaer St. viaduct over tracks of Erie R.R., from Amer. Bridge Co., 1509 Guardian Bldg., Cleveland, O., $48,660; Fulton St. viaduct (foot bridge) over tracks of Lake Shore & Michigan Southern R.R., from E. Krumheuer, 65 Norwalk Ave., $5,988. Noted Mar. 6.

Missouri—State Hy. Dept., Jefferson City, Mar. 21, 90 ft. steel truss and four 25 ft. I-beam spans, 2 rein.-con. piers, etc., over Salt Fork Creek, Saline Co., from Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, $18,622; two 20 ft. reinforced slabs, one 60 ft. steel deck girder, eight 40 ft., one 35 ft. and two 28 ft. rein.-con. deck girder spans, etc., over Salt Fork Creek and tracks of Missouri, Kansas & Texas R.R., Howard Co., from Acme Engineers, Decatur, Ill., $48,574; three 35 ft. rein.-con. deck girder spans over Isle Du Bois Creek, and three 35 ft. rein.-con. deck girder spans over Joe Branch, St. Genevieve Co., from C. P. O'Reilley & Co., Wainright Bldg., St. Louis, $22,753. Noted Mar. 13.

CONTRACTS AWARDED

Mass., Springfield—Bridge Comn., steel work for superstructure of bridge over Connecticut River between here and West Springfield, to American Bridge Co., 30 Church St., New York City, $520,371; strengthening and replacing piers for bridge to P. T. Cox Contg. Co., 154 Nassau St., New York City, $353.818. Noted Mar. 6.

O., Cleveland — Replacing wood block floor, timbers and steel work on bridge, East 34th St., to Forschner Co., East 10th St. and St. Clair Ave., $45,000.

Illinois—See "Streets and Roads."

Wis., Reedsburg—Reedsburg Bridge, to Fifield Constr. Co., Waterloo, Ia., $38,633,

Bridges (Continued)

additional concrete masonry in substructure as on plans at no greater depth $35, additional concrete masonry in substructure, same classification, as on plans at greater depth $35, reduction of quantity of concrete from that shown on plans $15. Noted Mar. 20.

Minn., Blakely — F. Hoppenstedt, aud. Sibley Co. (Gaylord), three 140-ft. steel truss spans, concrete abutments, over Minnesota River, here, for Scott and Sibley Counties, to Pittsburgh-Des Moines Steel Co., 10th and Tuttle Sts., Des Moines, Ia., $50,800. Noted Mar. 6.

Minn., Duluth—Duluth, Missabe & Northern Ry., West 1st St., 264 ft. bridge on St. Louis Bay, here, to Mead-Morrison Co., 53 West Jackson Blvd., Chicago, $200,000.

N. D., Mason—Great Northern Ry. Co., 5th and Jackson Sts., St. Paul, Minn., will build one 70 ft. and two 40 ft. deck girder spans, concrete piers, by day labor. $30,000.

Mo., Brimson—Brimson D. D., four 140 ft. steel and concrete spans, 16 ft. roadway, and one 120 ft. steel and concrete span, 12 ft. roadway, to Pittsburgh Des Moines Steel Co., Tuttle and S. W. 10th St., Des Moines, Ia., $31,088.

Dams

PROPOSED WORK

Wis., Tigerton—See "Waterworks."

Calif., Oroville—See "Unclassified" under "Hydro-Electric Development."

BIDS DESIRED

Vt., Morrisville—See "Unclassified."

BIDS RECEIVED

Wash., Tacoma — I. S. Davisson, comr. light & water, Mar. 27, constructing Cushman Dam and appurtenant works on north fork of Skokomish River, Mason Co., from A. Guthrie & Co., Inc., Sherlock Bldg., Portland, Ore., $881,193. Noted Mar. 6.

Railways

PROPOSED WORK

New York — New York Central R.R., Grand Central Terminal, New York City, plans double track from Pulaski to Woodard, about 30 mi. To exceed $200,000. G. W. Kittredge, ch. engr.

Florida—Florida East Coast Ry., St. Augustine, plans double tracking main line from Jacksonville to Miami. H. N. Rodenbaugh, genl. mgr. W. G. Brown, engr. M. W.

Florida—City of St. Petersburg election May 20, $136,000 bonds, reconstructing street car tracks. E. Kitchen, St. Petersburg, engr.

Mississippi — Mississippi Southern R.R., Lumberton, soon takes contract laying 14 mi. standard gauge railroad from Pass Christian to Kiln, to connect with Louisville & Nashville R.R. C. L. Skatvold, Lumberton, ch. engr.

Ohio—Toledo, Bowling Green & Southern Traction Co., 196 South St. Clair St., Toledo, plans 2 mi. street railway tracks at Bowling Green. $60,000.

Arkansas—Prescott & Northwestern R.R., Prescott, soon takes bids 26 mi. extension into Nevada Co. oil fields. T. P. Meadors, secy.

Texas—Texas Rapid Transit Co., Moore Bldg., San Antonio, making plans gas electric interurban line (standard gauge) from San Antonio to Austin, via Seguin, etc., (first unit from San Antonio to Seguin). $150,000. E. G. Potter, Moore Bldg., engr.

Oklahoma—Beaver, Meade & Englewood R.R. Co., Grain Exchange Bldg., Oklahoma City, soon takes bids 39 mi. extension from Forgan to Hooker, standard 75-lb. rail on macadam and chat roadbed, etc. $559,500. C. J. Turpen, genl. agt.

California — Atchison, Topeka & Santa Fe Ry., Kerchkoff Bldg., Los Angeles, appropriated $350,000, reballasting road between Calwa and Corcoran, replacing 75 lb. with 90 lb. rails and other improvements. R. B. Ball, ch. engr. coast lines.

Calif., Loyalton—See "Industrial Work." P. W.

BIDS DESIRED

Arkansas—Apr. 10, by G. T. Weigart, genl. mgr. Batesville White Lime Co., Batesville, 36 in. gauge railroad; 600 cu. yd. rock and 22,000 cu.yd. earth excav., 624 ft. pile trestle, 1,260 lin.ft. penetration, 12,812 lin.ft. track laying, lining and surfacing. Private plans.

California—Eng. Dept. of Southern Pacific Co., 65 Market St., San Francisco, receiving bids constructing northern end of Natron-Cut Off near Klamath Falls, 15 mi. G. W. Boschke, ch. engr.

BIDS RECEIVED

New York—Transit Comn., 49 Lafayette Ave., New York, Mar. 28, installation tracks for portion of 14th St.-Eastern Line, from T. H. Reynolds Constr. Co., 50 Park Pl., New York, $22,513. Noted Mar. 20.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., St. Petersburg—Election, May 20, $25,000 bonds, enlarging drainage ditches. E. Kitchen, St. Petersburg, engr.

O., Cleveland—See "Unclassified."

Okla., Bixby — Bixby D. D. plans new drainage district in Bixby Twp. $60,000. T. M. Clonts, Muskogee, engr.

Ariz., Buckeye—Buckeye Irrigation Dist. to vote on $1,000,000 bonds for weir with concrete retaining walls, 2,800 ft. long, 8 ft. high, on Gila River, also 30 mi. of drainage ditches. C. K. Fox, I. W. Hellman Bldg., Los Angeles, consult. engr.

Calif., Long Beach—See "Unclassified."

Calif., Oroville—D. D. 200, c/o G. F. Jones, attorney, Oroville, plans to vote on $25,000 bonds, conduits, drains, sluices, water gates, embankments etc.

Calif., Richmond—See Unclassified under Park Improvements.

BIDS DESIRED

La., New Orleans — Apr. 7, by C. J. Munier, adjuster Aetna Casualty & Surety Co., 808 Whitney Bldg., completing defaulted portion Rocky Bayou D. D. canal and levee and Eden D. D. canal and levee. Original contract called for 240,000 cu.yd. on levee, and 273,000 yd. on canal in Rocky Bayou D. D. and 81,000 cu.yd. on levee and 127,000 cu.yd. on canal in Eden D. D. J. B. Williams, Yazoo City, Miss., dist. engr.

Mich., Royal Oak — Apr. 24, by C. J. Crawford, Oakland Co. drain comr., at Township Hall, Woodward Ave. and 10 Mile Rd., improving Red Run and constructing Campbell Rd. Drains. Hubbell, Hartgering & Roth, 2348 Penobscot Bldg., Detroit, engrs.; adv. E. N.-R. Apr. 3.

Neb., Norfolk—Apr. 10, by Sanitary Dist. at office J. C. Stitt, clk., Norfolk Natl. Bank Bldg., constructing Cut-off B, on North Fork of Elkhorn River, 80,000 cu.yd. drag line excav. Noted Mar. 27.

CONTRACTS AWARDED

Wis., Green Bay — Brown Co. Farm Drain, ditching and tiling in Dist. 4, Humboldt and Scott Twps., to Road Constr. Co., Wisconsin Rapids, tiling $10,825, 67,000 cu. yd. ditching $0.115 per cu.yd. Noted Mar. 13.

Tex., Waxahachie—Ellis Co. Impvt. Dist. 3, levees, sluice gates and pumping units, to Trinity Farms Constr. Co., Ennis, $62,125.

Calif., Long Beach — City, dredging in turning basin, 2,288,000 cu.yd., to United Dredging Co., Central Bldg., Los Angeles, $0.1249 per yd.; connecting channel, 1,174,000 yd., to S. F. Bridge Co., Nevada Bank Bldg., San Francisco, $0.1475 yd.; Channel 2, 1,640,000 cu.yd., to F. C. Franks Co., 260 California St., San Francisco, $0.117 yd.; Channel 3, 1,614,000 cu.yd., to Los Angeles Dredging Co. Seaside Park, Long Beach, $0.129 yd. Noted Mar. 13.

Calif., Merced—Merced Irrigation Dist., Sects. 1 and 2, Hammatt canal, 36,594 and 23,943 cu.yd. respectively, to C. L. Grubb, Modesto, earth excav. $0.13, hardpan excav. $0.13, overhaul $0.05. Noted Dec. 20.

Streets and Roads

PROPOSED WORK

N. Y., Plattsburg—Plans paving various streets. $50,000. W. E. Cross, mayor.

N. Y., Rensselaer—Making plans resurfacing 3rd Ave., East and Herrick Sts. To exceed $25,000. A. J. Kaufman, city engr.

N. Y., Tonawanda—Making plans repaving Young St. and paving Tonawanda St. To exceed $25,000. T. W. Barrally, city engr.

N. J., Trenton—Plans paving West Hanover and North Montgomery Sts. $29,800. J. E. English, City Hall, engr.

N. J., Trenton—Takes bids 1st week in May, asphalt paving various streets. $500,000. J. E. English, City Hall, engr.

Md., Baltimore—Plans paving with sheet asphalt 29th St., Lakeside, Lake and Elmley Aves., Cedardale, Edgewood, Dennison, Ellamont, Rosedale and Gordon Rds. R. K. Compton, 214 East Lexington St., chn. paving comn.

W. Va., Charleston—Kanawha Co. soon takes bids surfacing 2 mi. Campbell Creek County Rd. $25,000.

Ga., Forsyth—Voted $75,000 bonds paving streets. J. G. Webb, city clk.

Ga., Thomasville—Thomas Co. sold $50,000 bonds for roads.

Fla., St. Petersburg—Election May 20, $64,000 bonds, paving along street car line. E. Kitchen, St. Petersburg, engr.

Tennessee—Dept. Hys. & Pub. Wks., Nashville, voted $85,000 bonds, 16 mi. Waynesboro-Hardin Co. line Rd., Wayne Co., probably gravel or chert. J. G. Creveling, highway comr.

Tennessee—Dept. Hys. & Pub. Wks., Nashville, making surveys surfacing 16 mi. Savannah-Wayne Co. line Rd., 16 ft., Hardin Co., gravel or chert; improving 25 mi. Shelby Co. line-Hardeman Co. line Rd., 16 ft., Fayette Co. J. G. Creveling, comr.

Tenn., Greenville — Green Co. election soon $200,000 bonds, improving roads incl. Greenville-Washington Co. line Rd. Noted Apr. 19.

Kentucky—State Hy. Dept., Frankfort, plans grading 7.386 mi. Smithland-Eddyville Rd., 24 and 28 ft. State Project 10, Sect. B, Livingston Co., surfacing 1.13 mi. Mayfield-Paducah Rd., 20 ft., Ballard Co. J. S. Boggs, state highway engr.

Kentucky — State Hy. Dept., Frankfort, preparing plans surfacing with concrete or macadam 5.512 mi. Madisonville-Mortons Gap, 18 ft., State Project 2, Hopkins Co. J. S. Boggs, state highway engr.

Ky., Louisville — Bd. Pub. Wks. plans surfacing Kentucky St. $25,000. A. A. Kreiger, city engr.

O., Akron — W. F. Peters, dir. Pub. Serv., takes bids latter part of April, grading, curbing, laying 15,000 sq.ft. sidewalks and paving 3,990 sq.yd. Lexington Ave., vitr. brick or asphalt, $33,000; grading, laying 15,630 sq.ft. sidewalks and brick paving 4,540 sq.yd. Palmer, Hopp and Clover Sts., $38,000; grading and paving 1.500 sq.yd. Dalton St., vitr. brick or asphalt, $26,000; grading and laying 47,630 sq.ft. cement sidewalks and 10,810 cu.yd. cinders on Chittenden, Stadelman, Carlysle and Edward Sts., $40,000. E. A. Kemmler, Delaware Bldg., engr.

O., Canton—Takes bids this spring paving ¾ mi. 8th St. N. W., 30 ft., brick, $50,000-$60,000, ¼ mi. 11th St. S. W., 40 ft., asphalt, $27,500; laying sidewalks and asphalt paving ⅓ mi. 19th St., 40 ft., $75,000; improving ¼ mi. 13th St. S. W., 30 ft., $27,500. W. Sarver, City Hall, engr.

O., Carrollton — Takes bids in spring brick paving 2 mi. 4th St. N. E., 3rd St. S. E., 2nd St. N. W., and 5th St. N. W., 40 ft., $132,000. R. M. Rice, Carrollton, engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 2,366 ft. Brehl and Chase Aves., 26 ft., brick $47,547, asphalt $39,521. 1,682 ft. Powell Ave., 24 ft., brick $25,382, asphalt $20,976, 1,889 ft. alley north of Broad St., 15 ft., brick $9,731, concrete $8,589, 286 ft. alley north of 8th Ave. 18 ft., brick $2,036, concrete $1,813, 1,653 ft. Chase Ave., 24 ft., brick $24,928, asphalt $20,592, 1,870 ft. 6 and 8 in. sewer in alley north of Manhattan Ave., $4,031. R. H. Simpson, city engr.

O., Columbus — Franklin Co. making plans grading and paving 1.54 mi. Meek Rd., Sharon Twp., 18 ft., waterbound macadam, $40,650; 4,280 ft. Schreyer Pl., Clinton Twp., 24 ft., Olentangy Blvd., 30 ft., Dominion Blvd. W., Zellar Rd. and Roseway Parkway, 50 ft. with parkways in center, rein.-con., $91,254, sheet asphalt $119,587, 3 in. brick $122,037, 3½ in. brick $134,908. C. C. Lattimer, co. surv.

O., New Philadelphia—Comrs. Tuscarawas Co. take bids this spring widening 1 mi. Orrville-Northern Rd., from 14 ft. to 20 ft. $40,000. R. E. Stingel, Court House, engr.

O., Ravenna—Portage Co. takes bids in spring improving 1 mi. Kent Brady Lake Rd., Franklin Twp., 20 ft., $50,000; 1½ mi. Randolph Center Rd., 20 ft., $57,000 bonds voted.

Ind., New Albany—Bd. Pub. Wks. plans surfacing portions Spring, Market and Griffin Sts. To exceed $25,000. J. D. Mitchell, asst. city engr.

Michigan—State Hy. Dept., Lansing, rejected bids Mar. 10, grading and surfacing 5.129 mi. Federal Aid Project 127, Sect. B, and 8.482 mi. Federal Aid Project 15, B, Livingston Co., also 2.827 mi. Federal Aid Project 127, A, Oakland Co. Noted Feb. 28.

Mich., Detroit—Having plans prepared paving with 3½ in. sheet asphalt on 8 in. concrete 1,800 sq.yd. Toreey Ave. $9,630, 2,400 sq.yd. South St. $13,210, 7,300 sq.yd. Grixdale Ave. $40,310, 7,200 sq.yd. Hildale Ave. $38,880, 9,800 sq.yd. Fairfield Ave. $54,000, 5,500 sq.yd. Florence Ave. $30,990, 6,800 sq.yd. Beechwood Ave. $36,990, 4,800 sq.yd. Majestic Pl. $26,390, 7,500 sq.yd. Parkside Ave. $41,340. G. Jerome, city engr.

Streets and Roads (Continued)

Ill., Pana — Having preliminary plans prepared grading and concrete paving 5,200 ft. various streets, 28 and 30 ft. wide. $50,000. A. C. Stanfield, City Hall, engr.

Ia., Davenport—Scott Co. election Apr. 12, $1,250,000 bonds, paving roads. J. M. Malloy, co. engr.

Ia., Emmetsburg—Palo Alto Co. election Apr. 8, $800,000 bonds paving and graveling Emmetsburg-Graettinger Rd. T. E. Martin, Emmetsburg, engr.

Ia., Nevada—Soon takes bids paving 40 blocks. J. G. Dean, city engr. Noted Mar. 6.

Ia., Ottumwa—Plans paving 50 blocks, brick and concrete. $150,000. J. T. Brady, city engr.

Minn., St. Paul—Ramsey Co. plans paving 3 mi. Project 24-51, Bald Eagle Ave., from end of present paving on White Bear Rd. north and east to present Trunk Highway 1, one course concrete or asphaltic concrete. $85,000. P. N. Coates, co. surv.

Minn., Two Harbors—Rejected bids Mar. 10, paving etc., 8 blocks Wilson St. between S Ave. and 7th Ave. and Cedar St. between 5th and 7th Aves. Work will be done by day labor. $35,000. E. Carlson, clk. Noted Mar. 6.

Kan., Emporia—Soon takes bids grading and surfacing with rein.-con. or brick on concrete, with concrete curb and gutter, 22 blocks 9th Ave., East, 5th, Sylvan, 10th and 11th Sts. $75,000.

Kan., Ft. Scott—Soon takes bids bituminous macadam surfacing 7.5 mi. road, 18 ft. B. Boyle, Ft. Scott, engr.

Kan., Oskaloosa—Jefferson Co. making plans surfacing with bituminous macadam, bituminous concrete or concrete 6.5 mi. Sect. B. Williamstown-Nortonville Rd., 18 ft., Federal Aid Project 220, also 7.5 mi. Sect. A, Eidman & Marshall, Smith Bldg., Topeka, engrs.; with concrete or brick 0.539 mi. Sect. D Southwest Trail, 18 to 40 ft., Federal Aid Project 222, R. C. Ham, Oskaloosa, engr.

Kan., Wellington — Sumner Co. plans grading and surfacing with brick or concrete 2.335 mi. Belle Plain Rd., Federal Aid Project 235, Sect. A, 25,102 sq.yd. vitr. brick or concrete, 25,161 cu.yd. excav., etc. J. W. Mavity, Wellington, engr.

Neb., Omaha—Douglas Co. rejected bids paving 2.49 mi. Omaha-Elkhorn Rd., Federal Aid Project 20, vitr. brick. Will readvertise. Noted Mar. 20.

Neb., Papillion—Sarpy Co. voted $30,000 bonds to gravel roads from South Omaha city limits to Papillion Rd.

South Dakota—State Hy. Dept., Pierre, soon takes bids 14.1 mi. grading on Federal Aid Project 170, Minnehaha Co., also 13.4 mi. on Federal Aid Project 160, Brookings and Moody Counties. F. D. Hudgins, ch. engr.

Mo., Cape Girardeau—A. P. Behrens, city clk., takes bids in about 2 weeks, grading, curbing, guttering and 6 in. concrete paving 13,320 sq.yd. Harmony, Ellis, Themis and Dunklin Sts. $27,500. Former bids rejected. J. B. Heagler, City Hall, engr. Noted Mar. 6.

Mo., Moberly—Making plans paving 5 streets, various types. To exceed $25,000. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, engrs.

Mo., Poplar Bluff—Plans grading and concrete surfacing 3,100 ft. Black River Rd., 18 ft. $20,000-$25,000. E. C. Nickey, City Hall, engr.

Mo., St. Louis—Had preliminary plans prepared improving Grace Ave., 4,980 cu.yd. grading, 1,000 ft. macadam and 2,960 cu.ft. cinders $5,400, Odell Ave., 18,015 cu.yd. grading, 1,000 cu.ft. macadam and 12,400 cu.ft. cinders $19,200, Plover Ave., 7,440 cu.yd. grading, 1,000 cu.ft. macadam and 3,350 cu.ft. cinders $6,100; grading, curbing, paving, etc., 2,925 sq.yd. Hoffman Ave., concrete, vitr. brick, asphaltic concrete, warrenite, willite or sheet asphalt, $15,500-$17,700, 6,485 sq.yd. Louisville Ave., vitr. brick, warrenite, asphaltic concrete, willite or asphalt, $31,500-$36,900, 6,800 sq.yd. Macklind Ave., willite, sheet asphalt, warrenite, asphaltic concrete or vitr. brick, $36,700-$40,900, 4,150 sq.yd. Ray Ave., warrenite, asphalt, willite, asphaltic concrete, cement concrete or vitr. brick, $32,500-$38,400, 2,010 sq.yd. Tennessee Ave., warrenite, asphaltic concrete, asphalt, willite, vitr. brick or concrete, $14,000-$17,400, 8,855 sq.yd. Theodore St., vitr. brick, asphalt, asphaltic concrete, willite, warrenite or concrete, $47,100-$57,000; also concrete sidewalks on 18 various streets, $19,676. W. W. Horner, city engr.

Mo., St. Louis — Bd. Pub. Serv. soon takes bids willite paving 7,270 sq.yd. Fyler and Nashville Aves., $39,500; also grading 7,100 cu.yd. Connecticut St., $5,700. W. W. Horner, city engr.

Texas., Cameron — Milam Co. election Apr. 28, $75,000 bonds, grading and gravel surfacing 14 mi. in Rd. Dist. 10, sect. Farrier Highway 16 ft. Total cost $150,000. A. F. Mitchell, co. engr.

Tex., Angleton — Brazoria Co. making plans grading and shell surfacing 2 mi. State Highway 19, Rd. Dist. 16, 12 ft. $30,000. H. W. Munson, Jr., Angleton, engr.

Tex., Boston—Bowie Co. voted $50,000 bonds grading and surfacing on Hooks Rd. Dist., New Boston. J. V. Curnutte, New Boston, engr.

Tex., Brownwood—Brown Co. plans election, $700,000 bonds, improving various roads, county and state. R. E. Lee, co. judge.

Tex., Dallas—Had plans prepared widening, extending and paving approximately ½ mi. Orange St. from McKinney to Pacific Sts., 80 ft. $489,810. E. A. Kingsley, city engr. E. A. Woods, city plan engr.

Tex., Georgetown—Williamson Co. making plans grading, etc., 8.48 mi. Liberty Hill-Leander Rd., 24 ft. $40,500. R. A. Nichols, co. engr.

Tex., Henderson—Election soon $75,000 bonds, permanent paving 10 blocks business streets. H. N. Roberts, Box 1115, Lubbock, engr.

Tex., Laredo—Soon takes bids permanent paving various streets. $80,000. T. E. Huffman, Laredo, engr.

Tex., Sabinal — Election soon $40,000 bonds, paving 10 blocks business streets. R. P. Rainey, co. judge.

Tex., Sanderson—Terrell Co. soon takes bids graveling 12.48 mi. State Highway 3, 18 ft. $209,400. J. Stovall, Sanderson, engr. Noted Feb. 21.

Okla., McAllister—Soon takes bids grading, surfacing, etc. with rein.-con. 11 blocks Madison, Monroe, Harrison and 3rd Sts. $45,000.

Okla., Oilton—Takes bids about Apr. 15, paving Dists. 2 and 3. $25,000. Benham Eng. Co., 512 Gumble Bldg., Kansas City, Mo., engrs. Noted Mar. 20.

Okla., Oklahoma City—Plans grading and paving 4 blocks Pennsylvania Ave., 6,100 sq.yd. asphalt, 2,400 lin.ft. curbing, 2,000 cu.yd. excav. $27,000. B. M. Hart, City Hall, engr.

Okla., Tulsa—Soon takes bids concrete or granite paving slopes of Mohawk Park. $80,000. G. Schultz, City Hall, engr. Holway Eng. Co., 505 New Wright Bldg., consult. engrs.

Ore., Portland—City and Multnomah Co. plan widening 4 mi. streets, 60-80 ft., and approaches to 7 bridges over Willamette River. $987,000 bonds voted. Hedrick & Kremers, 205½ 3rd St., engrs.

California—San Joaquin (Stockton), and Sacramento Co. (Sacramento), plan road from Terminous to Rio Vista. To exceed $25,000. C. W. Deterding, Jr., surv. Sacramento Co. F. E. Quail, surv. San Joaquin Co.

Calif., Fort Bragg—Had plans prepared improving Franklin, Oak, Alder Sts., etc., incl. 209,842 sq.ft. grading, 209,842 sq.ft. 3½ in. and 209,842 sq.ft. 2 in. asphaltic concrete, 150 tons asphaltic concrete for leveling base under 2 in. pavement, concrete curbs, etc. C. C. Kennedy, Call Bldg., San Francisco, consult. engr.

Calif., Fresno—Fresno Co. having plans prepared improving highways, Rd. Impvt. Dists. 6 and 7, 4 in. asphaltic concrete, 24 ft., curbs, gutters, etc. $40,000 and about $200,000 respectively. C. P. Jensen, Cory Bldg., co. engr.

Calif., Mayfield — Plans paving various streets, 5 in. cement concrete. To exceed $25,000. C. Moser, 651 Homer Ave., Palo Alto, consult. engr. Noted Feb. 7.

Calif., Oakland—Had plans prepared improving portion West St., 72,672 sq.ft. grading, 69,523 sq.ft. 6 in. cement concrete with 2 in. Warrenite-bituminous surface; portion Redding St., 11,600 sq.ft. grading, 6,155 sq.ft. oil macadam, 2,280 sqft cement walks; portion 68th Ave, 34,910 sq.ft. grading, 18,467 sq.ft. oil macadam; having surveys made Tunnel Rd. Extension, 25 ft., oil macadam, $25,000 or more. W. W. Harmon, city engr.

Calif., Orange—Having plans prepared paving 40 blocks, Cambridge, Shaffer Sts., etc., 6 in. concrete. C. C. Bonebreak, city engr.

Calif., Oroville—See "Unclassified under Hydro-Electric Development."

Calif., Richmond—Plans improving Macdonald Ave. between 23rd and San Pablo Sts., to exceed $25,000; paving streets in Pullman Dist., to exceed $25,000. H. D. Chapman, city engr.

Calif., San Anselmo—Had plans prepared improving Woodland, Ross, Tunstead Aves., etc., incl. 382,292 sq.ft. grading, 4,126 tons asphaltic concrete base, 385,627 sq.ft. asphaltic concrete surface, 30,320 lin.ft. concrete curb, 44,893 sq.ft. concrete gutter, etc. To exceed $100,000. J. J. Jessup, town engr.

Calif., San Bruno—Plans to vote on $25,000 bonds paving various streets.

Calif., San Rafael—Supervs. Marin Co. plan to improve 10½ mi. highway between McClure Ranch and Lighthouse.

Calif., Santa Rosa — Sonoma Co. had plans prepared improving highway, Rd. Dist. Impvt. 1, grading and paving, 2 course asphaltic concrete, 18 ft., earth shoulders, etc. County will pay $58,000 of cost. R. P. Smith, Santa Rosa, engr.

Ont., Toronto—Soon takes bids grading various streets, $51,450. R. C. Harris, city engr.

BIDS DESIRED

Maine—Apr. 17, by State Hy. Comn., Augusta, bituminous macadam surfacing 3.07 mi. road in Raymond and 4.19 in Bridgton, 18 ft.; paving with bituminous macadam or gravel 3.22 mi. in Paris and Woodstock, 18 ft.; gravel surfacing 1.06 mi. in Edgecomb, 2.91 mi. in Ellsworth and Hancock, 3.42 mi. in New Sharon, 3.27 mi. in Lincoln, 2.16 mi. in Smyrna, 3.21 mi. in Easton and 2.78 mi. in Edmunds, 18 ft. P. D. Sargent, ch. engr. Noted Mar. 6.

New Hampshire—Apr. 9, by State Hy. Comn., Concord, gravel surfacing 0.53 mi. highway in Walpole and 0.56 mi. in Keene, bituminous macadam paving 0.43 mi. in Milford. F. E. Everett, Concord, engr.

R. I., Central Falls—Apr. 14, at office of Bd. of Street, Water and Sewer Comrs., City Hall, laying 7,500 sq.yd. re-cut granite block pavement on concrete, on Broad St.; adv. E. N.-R. Apr. 3.

Connecticut—Apr. 7, by State Hy. Comn., Hartford, rein.-con. paving roads in Clinton and Westbrook, Federal Aid Project 13-A, in West Haven and Darien; waterbound macadam in North Canaan and Canaan, Brookfield and Newton, and Easton; sheet asphalt in New Haven and East Hartford; bituminous macadam in Pomfret. Also concrete girder bridge over Bladen River in Seymour, concrete slab on Seymour-Oxford Rd., in Oxford, and 2 concrete slabs on Canaan-Cornwall Rd., in Canaan. J. A. Macdonald, state highway comr.; adv. E. N.-R. Apr. 3.

New York—Apr. 18, by A. W. Brandt, comr. Highways, Albany, constructing and reconstructing highways in Cattaraugus, Cayuga, Franklin, Hamilton, Jefferson, Nassau, Ontario, Orange, St. Lawrence, Schenectady, Tompkins and Washington Counties; adv. E. N.-R. Apr. 3.

N. Y., Albany—Apr. 7, by Bd. Contr. & Supply, repaving Madison St., $250,000, also curbing, laying sewers, concrete walks and repaving Western Ave., redressed granite blocks on concrete, $40,000. Former bids rejected. Noted Mar. 27.

N. Y., Brooklyn—Apr. 9, by E Riegelmann, boro pres., Boro Hall, grading, curbing and flagging Clarendon Rd.; grading sidewalks space, curbing and flagging East 8th and 80th Sts.; grading sidewalk space and laying cement sidewalks on 50th St.; cement sidewalks on 61st St.; grading to width of 60 ft. centrally located Empire Blvd.; paving West 37th St., asphalt on 6 in. concrete.

N. Y., Brooklyn—Apr. 9, by E. Riegelmann, boro pres., Boro Hall, 75,000 gal. asphaltic road oil for hot application upon streets to be designated, in amounts of not less than 1,000 gal. at any time.

N. Y., Buffalo—Apr. 8, by Bd. Supervs. Erie Co., City Hall Bldg., paving Waverly St., Harlem Ave., Amsdell and Town Line Rds., concrete and waterbound. To exceed $40,000. G. C. Diehl, Ellicott Sq. Bldg., engr.

N. Y., Gloversville—Apr. 15, by Common Council, curbing and paving various streets, 15,600 sq.yd. rein.-con. H. J. Hanmer, city engr.; adv. E. N.-R. Apr. 3.

N. Y., Letchworth Park (Portageville, P. O.)—Apr. 15, by Letchworth Park Com. of Amer. Scenic & Historic Preservation Society, at Wyoming Co. Natl. Bank, Warsaw, constructing highway here. W. J. Humphrey, chn.; adv. E. N.-R. Apr. 3.

N. Y., New Hartford—Apr. 21, paving Hillside Ave., Hartford Terrace and Pearl St. To exceed $25,000. Kemper-McLoughlin Co., Inc., Paul Bldg., Utica, engrs.

N. Y., New York—Apr. 8, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, regrading, resetting curb, relaying sidewalks and crosswalks, etc., on that portion of Bway. along the easterly side thereof 25 ft. wide, from Van Cortland Park S. to northerly boundary line of City of New York; grading, curbing, laying sidewalks and crosswalks, etc., on Tryon Ave., Worthen and Barry Sts.; grading, etc., East 156th St.; curbing and repaving Bway., sheet asphalt on concrete; adjusting curb, sidewalks and paving West 188th St. and Walton Ave., sheet asphalt on concrete, Bailey Ave. and Van Cortlandt Ave. W., bituminous concrete on cement.

Streets and Roads (Continued)

N. Y., Poughkeepsie—Apr. 10, by Bd. Pub. Wks., Eastman Park Mansion, grading, curbing, paving, etc., Reservoir Sq., Fountain Pl., Lexington and Manitou Aves., Montgomery, Cannon, South Clinton and Church Sts. T. F. Lawlor, supt.; adv. E. N.-R. Apr. 3.

New Jersey—Apr. 7, by Com. Monroe Twp., at Half Acre School House, near Union Valley, surfacing Union Valley-Gravel Hill Rd., Middlesex Co., Proposal A 21,799 sq.yd. gravel, (B) 16,194 sq.yd. gravel. Larson & Fox, 175 Smith St., Perth Amboy, civil engrs.

New Jersey—Apr. 21, by State Hy. Dept., Trenton, rein.-con. paving and curbing Route 10, Sect. 1A, Arcadian Way to Fort Lee Ferry, Bergen Co.; rein.-con. paving and 9 small span bridges on Route 12, Sect. 6, Port Colden to Stephensburg, Warren Co.; rein.-con. paving and 4 small span bridges on Route 12, Sect. 7, Stephensburg to Hackettstown, Warren Co. A. L. Grover, secy.; adv. E. N.-R. Apr. 3.

N. J., Hopatcong—Apr. 22, by Sussex Co. (Newton), concrete paving Lakeside Blvd., here. H. Snook, Newton, co. engr.; adv. E. N.-R. Apr. 3.

Pa., Phila.—Apr. 16, by G. H. Biles, dir. Pub. Wks., Room 216, City Hall, paving and curbing Delaware Ave. between Porter St. and Oregon Ave., granite blocks.

Pa., Portage—Apr. 7, by Boro. Council, paving 20,000 sq.yd. Main, Lee, Cambria, Bedford, Farran and Orchards Sts., Washington and Jefferson Aves., 4 in. vitr. brick on concrete. P. F. Campbell, boro. engr.

Md., Baltimore—Apr. 9, by Bd. Awards, paving roads, Contr. 253-OANA, 12,625 sq. yd. cement concrete; Contr. 2[illegible]1-OA, 11,400 sq.yd. asphalt. R. K. Compton, 214 East Lexington St., chn. paving comn.

West Virginia—Apr. 15, by State Rd. Comn., Charleston, constructing roads: Projects 3037-A, 130, 127-B, 3304, 3090, 136-A, 132, 3190-3202-B, 3075-C, 3278-A, 2146, 3279-A, 3221, 3148, 122-A and 3030. E. B. Carskadon, secy.; adv. E. N.-R. Apr. 3.

West Virginia—Apr. 17, by State Rd. Comn., Charleston, constructing roads: Projects 3293-A and B, 87, 2037-8, 3299, 112, 3248-B, 3251, 3165, 2063, 3184, 3017, 3111-B, 3203-E, 3272, 3186, 134, 3026-B, 3217-A, 3175-B, 3211-A. A. B. Carskadon, secy.; adv. E. N.-R. Apr. 3.

W. Va., Huntington—Apr. 10, by Bd. Comr., grading, curbing and paving Burlington, Bradley and Old Cross Rds., Kanawha and James River Turnpikes, High, Washington and Woodland Drives, Pogue, 24½, 37th, Locust, Vernon, Court, Vinson, Wayne, 26th, Chase, 4th, 5th, 6th, 17th and Marshall Sts., Washington Blvd., 11½ Alley, St. Louis and College Aves. B. Maupin, city engr.

W. Va., West Union — Apr. 14, by H. Hutson, clk. Dodge Co., grading 2 mi. Mid-[illegible] Creek Rd., 1 mi. Meathouse Fork Rd., 1½ mi. Rock Run Rd.; waterbound macadam paving 1 mi. Head of Robinson Fork Rd., McLellan Dist.

S. C., Edgefield—Apr. 9, at office Edgefield Co. Hy. Com., 10 mi. State Route 21, Federal Aid Project 240-B, incl. 43,808 cu. yd. common excav., 21,856 cu.yd. sand clay surfacing, etc. C. H. Moorefield, 1626 Main St., Columbia, engr.

S. C., Kingstree—Apr. 11, at office J. B. Mayes, engr. Williamsburg Co., 6.5 mi. State Route 411, Federal Aid Project 239, incl. 39,755 cu.yd. common excav., 16,147 cu.yd. sand clay surfacing, etc.

Alabama—Apr. 18 (extended date), by State Hy. Comn., Montgomery, grading 17.455 mi. Montgomery-Birmingham Highway, Federal Aid Project 100, Chilton Co., Project 1, surfacing alternate types: 187,250 sq.yd. Portland cement concrete, 177,500 sq.yd. warrenite bitulithic on concrete, bituminous concrete, modified Topeka pavement on concrete, sheet asphalt, vitr. brick or rock asphalt on concrete, Project 2, 66.63 acres clearing, 197,738 cu.yd. earth and 10,429 cu.yd. rock excav., 296,085 sta.yd. overhaul on excav. W. S. Keller, state highway engr. Noted Nov. 15 and Dec. 10.

Miss., Port Gibson — Apr. 10, by Bd. Supervs. Claiborne Co., grading, gravel surfacing, etc., 6.681 mi. Federal Aid 153-B, 82,981 cu.yd. common and 5,786 cu.yd. borrow excav., 47,298 cu.yd. gravel, 448.32 cu. yd. concrete, etc. Gravel to be furnished f.o.b. Port Gibson. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Louisiana—Apr. 10, (extended date) by State Hy. Dept., Reymond Bldg., Baton Rouge, 15.76 mi. State Project 366, Sects. B and C, Winn Parish. Noted Mar. 27.

Ohio—Apr. 11, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 62.729 mi roads in Athens, Auglaize, Columbiana, Coshocton, Erie, Fulton, Greene, Harrison, Holmes, Jefferson, Knox, Lake, Portage, Sandusky, Seneca, Shelby, Trumbull, Washington and Wayne Counties. A. V. Donaheys, dir. highways.

O., Columbus—Apr. 8, by W. H. Duffy, dir. Pub. Serv. widening 1,661 ft. Spring St., 3 ft. on either side and repaving same with asphalt. $36,221. R. H. Simpson, city engr.

O., New Philadelphia — Apr. 16, by Comrs. Tuscarawas Co., improving 2 mi. Fiat Rd. and Sect. 2 Newport-Gilmore Rd., 20 ft., brick, $120,000; ⅝ mi. Div. 1, Newport-Gilmore Rd., 20 ft., $50,000. R. E. Stingel, Court House, engr.

O., Canton — Taking bids curbing and paving 4,266 sq.yd. 18th St. N. W., brick or asphalt on concrete, $60,000-$75,000; improving ⅝ mi. Market Ave. S., 12,764 sq. yd. vitr. brick or asphalt on concrete, 46,750 sq.ft. concrete walks, etc., $100,000. W. A. Sarver, City Hall, engr.

Ind., Crown Point—Apr. 14, by Comrs. Lake Co., grading and gravel surfacing 7 mi. G. P. Condit Rd., 18 ft. $77,930. C. K. Wallace, Crown Point, engr.

Ind., Goshen—Apr. 8, by Comrs. Elkhart Co., grading and gravel surfacing 24,600 ft. County Rd. 8. $43,310. C. L. Kinney, Goshen, engr.

Ind., Linton—Apr. 15, by Common Council, paving H St. N., 4th St. E., and Railroad or C St. S., 16,000 sq.yd. paving, 10,500 lin.ft. combined curb and gutter. J. A. Boudousquie, city engr.

Ind., Logansport—Apr. 8, by Comrs. Cass Co., constructing Berkshire Rd. $25,000.

Ind., South Bend—Apr. 21, by Comrs. St. Joseph Co., resurfacing 4 county roads, 211,866 sq.yd. concrete. $34,483. P. R. Gillin, South Bend, engr.

Ind., Vincennes—Apr. 8, by Comrs. Knox Co. grading and graveling Fred Obermeyer Rd., 5,095 cu.yd. gravel, 6,212 cu.yd. earthwork, 2,895 cu.yd. earth excav., $26,012; concrete surfacing 15,841 sq.yd. W. H. Knowles Rd., $34,893. W. Hanlon, Vincennes, engr.

Ind., Wabash—Apr. 8, by Comrs. Wabash Co., constructing Wischel Rd. $37,500.

Michigan—Apr. 5, by State Hy. Dept., at office Bay Co. Rd. Comn., Bay City, grading and concrete surfacing 1.939 mi. Beaver Rd., also 1.975 mi. road in Fraser and Kawkawlin Twps.

Michigan—Apr. 5, by State Hy. Dept., at office Bd. Rd. Comrs. Saginaw Co., Saginaw, grading and surfacing 4.98 mi. Assessment Dist. Rd. 66, stone and macadam.

Michigan—Apr. 11, by State Hy. Dept., at office Kent Co. Rd. Comn., Grand Rapids, grading and surfacing 13.853 mi. Federal Aid Project 113, C, Kent Co., 70,851 cu.yd. excav., 162,545 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, state engr.

Michigan—Apr. 14, by State Hy. Dept. at office Berrien Co. Rd. Comn., St. Joseph, grading and surfacing 1.236 mi. State Trunk Line Rd. 58-5, Berrien Co., 8,790 cu.yd. excav., 13,671 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—Apr. 14, by G. H. Green, resident engr. of State Hy. Dept., at Midland, surfacing with 1 course gravel 5.508 mi. State Trunk Line Rd. 18-13, Midland Co.

Michigan—Apr. 15, by State Hy. Dept., at office Comrs. Chippewa Co., Saulte Ste. Marie, grading and surfacing 2.207 mi. State Trunk Line Rd. 48-6, Sect. B, Chippewa Co. G. C. Dillman, ch. engr.

Michigan—Apr. 15, by State Hy. Dept. at office Comrs. Isabelle Co., Mt. Pleasant, grading and surfacing 1.03 mi. State Trunk Line Rd. 24-25, Sects. A and B, 11,518 cu. yd. excav., 12,140 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—Apr. 16, by State Hy. Dept. at office Bd. Barry Co. Rd. Comrs., Hastings, grading and gravel surfacing 7.204 mi. State Trunk Line Rd. 43-1, Barry Co., 98,897 cu.yd. excav., 68,882 sq.yd. 2 course gravel.

Michigan—Apr. 21, by State Hy. Dept., at office Comrs. Clare Co., Harrison, grading and surfacing 1.249 mi. State Trunk Line Rd. 14-37, Clare Co., 8,996 cu.yd. excav., 20,030 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, state engr.

Michigan—Apr. 22, by State Hy. Dept., at office Ingham Co. Rd. Comn., Mason, grading and surfacing 0.723 mi. State Trunk Line Rd. 14-15, Sect. A, Ingham Co., 9,730 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, state engr.

Ill., La Grange — Apr. 11, by Village Clerk, grading and concrete paving Northwest portion of village, 14,000 sq.yd. concrete, 14,000 lin.ft. integral curb., $75,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Wisconsin—Apr. 7, by State Hy. Comn. at div. office 3, Nicollet Bldg., Green Bay, grading and surfacing, Sniderville Rd., Project [illegible]42, Sect. A and Chilton-Hilbert Rd., Project 1040, 14,952 cu.yd. unclassified excav., 45,300 sq.yd. concrete surfacing, etc. A. R. Hirst, Madison, state highway engr.

Wisconsin—Apr. 8, by State Hy. Comn., Div. Office 2, Stephenson Bldg., Milwaukee, grading and paving, Sects. A and B Lake Shore Rd., Federal Aid Project 363, Sheboygan Co., also Truesdale-Somers Rd., Federal Aid Project 378-A, Kenosha Co., incl. 70,719 cu.yd. earth excav., 148,603 sq. yd. concrete, 48,840 bbl. cement in place, etc.; 3 bridges on Fond du Lac-Oshkosh Rd., Federal Aid Project 364, Fond du Lac Co., 16 ft. and 12 ft. spans, and 8 ft. extension span. A. R. Hirst, Madison, state highway engr.

Wisconsin—Apr. 14, by State Hy. Comn., at div. office 1, State Capitol Annex, Madison, grading and paving Sects. A and B Watertown-Waupun Rd., Federal Aid Project 359, Dodge Co., Sects. A, B and C Portage-Kilbourn Rd., Federal Aid Project 360, Columbia Co., incl. 133,471 cu.yd. earth excav., 140,322 sq.yd. concrete, 22,037 cu.yd. gravel, etc. A. R. Hirst, Madison, state highway engr.

Wis., Elkhorn—Apr. 10, by H. J. Peters, comr. Walworth Co., concrete surfacing, etc., Whitewater-Elkhorn Rd., 97,852 sq.yd. concrete, 16,720 lin.ft. combined concrete curb and gutter 49,560 cu.yd. earth, 5,100 cu.yd. rock and 728 cu.yd. borrow excav., etc. Wisconsin Hy. Comn., Div. 2, 444 Milwaukee St., Milwaukee, engrs.

Wis., Eau Claire—Apr. 8, by Eau Claire Co. Hy. Com., grading and paving 0.72 mi. Augusta-Fall Creek Rd., Trunk Highway 12, 740 cu.yd. earth excav., 3,776 sq. yd. concrete, etc.; Creamery Bridge at Sta. 27 on above project, 40 ft. rein.-con. deck girder span, 24 ft. roadway. G. Osborne, comr.

Wis., Juneau—Apr. 9, by Dodge Co. Hy. Com., grading and surfacing Lomira-Campbellsport Rd. in Town Lomira, Alderly-Washington Co. line Rd., Town Ashippun, Huilsburg-Theresa Rd., Town Theresa, Clyman-Hustisford Rd., Towns Clyman and Hustisford, Reesville-Hubbleton Rd., Towns Portland and Shields, Lowell-Beaver Dam Rd., Towns Lowell and Beaver Dam, Hustisford-Horicon Rd., Towns Hustisford and Hubbard, Lowell-Reeseville Rd., Town Lowell and village Reeseville, Beaver Dam-Horicon Rd., Town Oak Grove, work involves 118,360 cu.yd. earth excav., 43,548 cu.yd. gravel surfacing, 46,035 cu.yd. concrete surfacing. E. T. Klug, comr.

Wis., LaCrosse—Apr. 10, by Bd. Pub. Wks., grading various streets, 82,342 cu.yd. excav. and 33,810 cu.yd. fill. C. C. Congdon, City Hall, engr.

Minn., Buffalo—Apr. 8, by E. R. Anderson, aud. Wright Co., 5.4 mi. Job 2401, State Rd. 1, 60,803 cu.yd. excav., etc.; 4.3 mi. Job 2402, State Rd. 2, 26,334 cu.yd. excav.; Job 2403, State Rd. 12, 19,896 cu.yd. excav., etc. $26,000. C. E. Stahl, Buffalo, engr.

Minn., Duluth—June 1, by W. H. Fischer, city comr., paving. 3,750 ft. Wabasha St., 24 ft., 9,200 yd. gravel surface, 7,412 lin. ft. concrete curb, 32,700 lin.ft. sidewalk, 6,350 cu.yd. earth and 1,000 cu.yd. rock excav., $33,190; concrete paving 60th Ave. W., from Grand Ave. to 8th St., 7,300 sq. yd. concrete, 4,950 lin.ft. concrete curb, 18,200 sq.yd. concrete sidewalk, etc., $48,590. J. Wilson, city engr.

Kan., Dodge City — Apr. 22, by Clerk Ford Co., grading and sand clay surfacing 4.405 mi. Federal Aid Project 221, Sect. A, 9,683 cu.yd. sand clay, 160 cu.yd. concrete, etc. J. W. Thornbough, co. engr. Noted Mar. 27.

Kan., Ft. Scott—May 6, by Clerk Barbour Co., grading and resurfacing with waterbound macadam, bituminous filled brick or bituminous macadam 3.897 mi. Kansas City Rd., Federal Aid Project 208, Sect. A, also constructing 2 ft. concrete shoulder on each side, 32,383 sq.yd. surfacing, 41,211 lin.ft. concrete curbing, 400 sq. yd. stone gutter, 27,350 cu.yd. earth and 153 cu.yd. rock excav., 49,377 lb. reinforcing, etc. Blair Boyle, co. engr.

Kan., Sedan—Apr. 25, by Clerk Chautauqua Co., grading and surfacing with bituminous macadam or concrete 2.495 mi. Chautauqua Highway, Federal Aid Project 201, Sect. A, 25,916 sq.yd. bituminous macadam or concrete, 24,890 cu.yd. excav., 25,730 lb. reinforcing, etc. F. L. Appleby, co. engr.

Kan., Kansas City—Apr. 14, by O. K. Williams, co. engr., paving witn waterbound macadam, bituminous macadam or concrete 0.75 mi. road, 16 ft.

Neb., Nebraska City—Apr. 8, by Clerk Otoe Co., paving 2.43 mi. Federal Aid Project 214, 21,500 cu.yd. excav., 8,234 sq. yd. pavement 20,700 sq.yd. gravel surface, $65,000, also removing old structure and building 32 ft. I beam bridge, 20 ft. roadway, on Sta. 92 x 50. R. L. Cochran, Lincoln, state engr.

Streets and Roads (Continued)

N. D., Cooperstown—Apr. 17, by P. A. Melgard, aud. Griggs Co., gravel surfacing 11.3 mi. Federal Aid Project 108, B and C, and 10 mi. Federal Aid Project 109, A and B, $32,000.

N. D., Hillsboro—Apr. 12, by C. D. Olson, aud. Traill Co., grading 7 mi. Federal Aid Project 61-A, 33,328 cu.yd. excav., grading and gravel surfacing 3 mi. Federal Aid Project 5-G, 19,491 cu.yd. excav., etc. $25,000.

N. D., Valley City—Apr. 16, by C. W. Nelson, aud. Barnes Co., grading 12 mi. Federal Aid Project 221, 90,347 cu.yd. excav.; gravel surfacing 11 mi. Federal Aid Project 36, and 10 mi. Federal Aid Project 124, $55,000.

Mo., Richmond Heights (St. Louis P. O.)—Apr. 16, by G. H. Skillman, city clk., 7409 La Veta Ave., grading, curbing, guttering and concrete paving, etc., 114,000 sq.ft. Bredell and Park Aves. $64,800. Pitzman Co., 615 Chestnut St., St. Louis, engrs.

Arkansas—Apr. 24, by State Hy. Dept., Little Rock, paving 43 mi. Little Rock-Hot Springs Highway Impvt. Dist. R. C. Limerick, state highway engr.; adv. E. N.-R. Apr. 3.

Tex., Commerce—Apr. 8, by C. P. England, city secy., paving 24,411 sq.yd. various streets, brick, rock asphalt or bitulithic on 5 in. concrete, 6-7½-in. concrete paving, 2½ or 3 in. brick, 1½ in. bituminous top. $50,000.

Tex., Crosbyton — S. W. Cooper, city secy., taking bids paving 11 blocks (patented earth asphalt). $28,000. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Tex., Dallas—See "Unclassified" under Underpass.

Tex., Dallas — Dallas Co. taking bids grading and surfacing, etc., 3 mi. Dallas Mesquite Rd., 18 ft., concrete or bituminous on concrete. $100,000. Nagle Witt & Rollins, Court House, co. engr.

Tex., Liberty—Apr. 25, by C. R. Wilson, judge Liberty Co., grading, gravel surfacing, etc., 4.16 mi. State Highway 35, Federal Aid Project 426-A, 12 ft. $41,655. W. C. Youngs, Dayton, co. engr. Noted Mar. 13.

Tex., Lubbock—Apr. 15, by City Com., paving 100 blocks, various types. $300,000. Hawley & Roberts, Cotton Exch. Bldg., Ft. Worth, engrs.

Tex, Sanderson—Apr. 24, by G. J. Henshaw, judge Terrell Co., grading, gravel surfacing and bridging 12.48 mi. State Highway 12, Federal Aid Project 324-B, 18 ft. $209,436. J. Stovell, co. engr.

Tex., Tyler—Smith Co. taking bids concrete surfacing 4 mi. State Highway 31, 16 ft. $80,000. D. K. Caldwell, co. engr.

Colorado — Apr. 8, by State Hy. Dept., Denver, concrete paving 0.787 mi. Federal Aid Project 246-B, Pueblo Co., 4,200 cu.yd. borrow fill, 3,800 sta.yd. overhaul, 8,315 sq.yd. concrete alternate bituminous on concrete, $28,411; 2.944 mi. Federal Aid Project 255-B, Morgan Co., 8,700 cu.yd. borrow fill, 100 sta.yd. overhaul, 1,990 cu. yd. sand cushion, 4,300 cu.yd. common earth excav., 31,070 sq.yd. one course concrete alternate bituminous on concrete, $77,967; grading 1.0575 mi. Federal Aid Project 254-A, Grand Co., 4,500 cu.yd. common earth and 57,700 cu.yd. rock excav., etc., $90,981. L. D. Blauvelt, State Office Bldg., Denver, highway engr.

Wash., Port Angeles—Apr. 9, by Comrs. Clallam Co., grading, etc., 6.8 mi. Joyce-Pysht Rd. from Shadow to Twin. F. Sullivan, Port Angeles, engr.

Wash., Raymond—Apr. 9, 7,550 sq.yd. 8-in., 3,000 sq.yd. 4½-in., 18,000 sq.yd. 4-in. and 3,400 sq.yd. 6-in. concrete, in L.I.D. 117, 118 and 119. L. D. Kelsey, Raymond, engr.

Calif., Los Angeles—Supervs. Los Angeles Co. taking bids and open same about Apr. 7, improving 2.78 mi. Whittier Blvd. between Pasadena and south west boundary Montebello, Co. Rd. Impvt. 52, incl. 22,411 cu.yd. excav., removing 2,664 cu.yd. old macadam, placing 37,136 sq.yd. old macadam and disintegrated granite subbase, 9,135 ft. curb, 90,048 sq.ft. gutter, 37,137 sq.yd. concrete, 37,136 sq.yd. asphaltic concrete base.

Calif., Los Angeles—Apr. 14, by Supervs. Los Angeles Co., improving 5,400 lin.ft. Long Beach Blvd. between Compton and Long Beach, incl. 10,000 cu.yd. excav., 18,000 sq.yd. sub-base, 18,000 sq.yd. concrete, shaping 18,000 sq.yd. roadway, etc.; 3.67 mi. Western Ave., 30 ft., incl. 95,900 cu.yd. excav., shaping 64,600 sq.yd. roadway, 1,550 lin.ft. corrugated iron pipe, various diameters.

Calif., Los Angeles—Apr. 14 by Supervs. Los Angeles Co., improving Pomona Blvd. east of Town of Del Monte, 2,711 cu.yd. excav., shaping 16,000 sq.yd. roadway, removing 2,133 cu.yd. old macadam, replacing 16,000 sq.yd. sub-base, 16,000 sq.yd. concrete, shaping 4,800 lin.ft. shoulders (county will furnish 5,000 bbl. cement); Pomona Blvd. from Ellis Lane east to Arden Dr., 3,080 tons asphaltic concrete top, 145 tons asphaltic concrete base, etc.; Long Beach Blvd. between Lemon St. and north boundary of Long Beach, 10,027 cu.yd excav., removing 2,800 cu.yd. old macadam, shaping 18,004 sq.yd. roadway, 18,004 sq.yd. cement concrete, 18,004 sq.yd. sub-base, shaping 10,802 lin.ft. shoulders (county will furnish 5,500 bbl. cement).

Calif., San Rafael—Supervs. Marin Co. taking bids improving 7.5 mi. Mansanita and Bolinas Rd., Sects. 4, 5 and 6, incl. 112,694 sq.yd. excav., 3,040 lin.ft. 8- to 60-in. corrugated metal pipe. J. C. Oglesby, co. surv.

Calif., Ventura—Apr. 23, by Supervs. Ventura Co., grading and bridges on Matthiessen Rd., Rd. Dist. 7, incl. 16,000 cu.yd. excav., 145 cu.yd. concrete, 7,200 lb. reinforcing, etc.

BIDS RECEIVED

New Hampshire—State Hy. Dept., Concor,d, Mar. 28, paving road in Derry, 25,480 sq.yd. concrete, etc., from Winslow & Cummings, Nashua, $98,696. Noted Mar. 20.

R. I., Providence — Water Supply Bd., City Hall, Mar. 26, grading, paving, etc., 4 mi. road in Scituate, from J. H. Sullivan Co., Brighton, Mass., $218,565. Noted Mar. 6.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Mar. 26, from Borough Asphalt Co., 1301 Metropolitan Ave., asphalt paving Blake Ave. $3,967, East 34th St. $8,052, Hegeman Ave. $14,336, Union St. $4,638; from W. E. Carberry, 45 South Elliott Pl., grading sidewalk space, curbing and flagging Dahill Rd. $2,384, grading, curbing and flagging East 37th St. $6,736; from W. H. Geoghegan Realty Co., grading Flatbush Ave. $376,980; From L. Mangieri, 190 31st St., grading sidewalk space, curbing and flagging 7th Ave. $1,023. Noted Mar. 20.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Mar. 25, receiving basins, etc., in Barclay St., from Cleveland Trinidad Paving Co., Flushing, $17,798; regrading, curbing, laying sidewalks, etc., on Beach Channel Rd., from E. A. Ferguson, $18,975; grading, curbing and laying sidewalks on Buckley St., and paving with bituminous macadam Linden St., from Welsh Bros. Contg. Co., 32 Queens St., Astoria, $5,720 and $4,980 respectively; grading, curbing and laying sidewalks on Merritt St., Lewis, 55th and 89th Aves., from Interstate Contg. Co., $12,230, $6,960, $5,061 and $11,922 respectively; grading sidewalk space, etc., on 87th St., and grading, curbing, laying sidewalks etc. on 88th Rd., from J. J. O'Brien, Jr., William St., Jamaica, $1,757 and $6,367 respectively; sheet asphalt paving 88th Rd. and 89th Ave., from W. P. MacDonald Constr. Co., 342 Madison Ave., New York, $18,600 and $24,350 respectively; grading, curbing, laying sidewalks, etc., on 89th Ave., from E. Block, $8,088. Noted Mar. 20.

New Jersey—State Hy. Dept., Trenton, Mar. 26, concrete paving 51,000 yd. Route 10, Sect. 6, Hackensack-Paterson Rd., Bergen Co., from G. M. Brewster, Ft. Lee Rd., Bogota, 89% engrs. est. ($240,983); 36,586 sq.yd. Route 9, Sect. 13, White House to Somerset Co. line, Hunterdon Co., and 24,394 sq.yd. Route 9, Sect. 14, Somerset Co. line to North Branch, Somerset Co., from J. F. Chapman & Son, Hillside, 97% and 98% of engrs. ests. ($185,198 and $123,287) respectively. Noted Mar. 13.

Pa., Harrisburg — H. A. Sherk, supt. Streets & Pub. Improvements, Room 408, Dauphin Bldg., 65,000 sq.yd. paving and 36,000 lin.ft. curbing on 28 streets, (1) national asphalt, (2) oil asphalt, (3) granite curb, (4) granolithic curb, from Central Constr. Corp., 7th and Emerald Sts., (1) $3,70, (2) $3.50, (3) $1.85, (4) $0.90. Noted Mar. 13.

Pa., Phila. — Bureau Highways, Dept. Pub. Wks., paving with asphalt (1) 66th Ave., repaving with asphalt (2) Bambrey, Taney, 23rd and 26th Sts., (3) Haverford St. from 33rd to 36th Sts., (4) Haverford St. from 60th to 63rd Sts., (5) Ridge Ave., (6) Rutner, Wolf and 7th Sts., (7) Venango St., redressed granite block repaving (8) Callowhill St., (9) Cherry, Hicks and Spring Sts., (10) Frankford Ave., (11) Lancaster Ave., (12) Vine St., (13) 13th St., (14) 25th St., (15) 29th St., from Union Paving Co., 30th and Locust Sts., (1) $11,957 (2) $30,267 (3) $23,486 (6) $48,149 (7) $13,843 (13) $58,686 (15) $51,691; Barber Asphalt Paving Co., 239 North 30th St., (4) $48,713; Eastern Paving Co., 401 Colonial Trust Bldg., (5) $74,381 (10) $59,900 (12) $33,205; Municipal Paving Co., 622 Kater St, (8) $44,683; United Paving Co., Real Estate Trust Bldg., (9) $15,195 (14) $16,367; Muzzola Paving Co., 414 North Gross St., (11) $92,491.

Delaware—State Hy. Dept., Dover, paving, etc. (a) stone concrete (b) slag concrete, (1) 2.18 mi. Bear-Christiana Rd., Contr. CN-16, (2) 1.9 mi. New Castle-Basin Rd., Contr. CN-17, from D. E. O'Connell & Sons, Ridley Park, Pa., (a1) $84,750 (b1) $82,280, (a2) $71,850 (b2) $69,705; 0.836 mi. Clayton-Smyrna Rd., Contr. CK-21, from E. Riley Mixner Co., Goshen, N. J., (a) $37,611 (b) $36,991. Noted Mar. 6.

Md., Annapolis—State Rds. Comm., Baltimore, paving Severn River Bridge, near here, 8,800 sq.yd. bituminous concrete, 4,800 sq.yd. concrete base course, 2,500 cu.yd. excav., from Amer. Paving & Constr. Co., Montebello Ave., Baltimore, $34,635.

O., Cincinnati — Director Pub. Serv. granite curbing and granite block paving 4,500 sq.yd. Baymiller St., from Henkel & Sullivan, 105 Bell Blk., $72,599. Engrs. est. $83,000. Noted Mar. 13.

O., Cleveland—Improving Ferris Ave., 1,230 cu.yd. excav., 2,750 sq.yd. brick on 8 in. concrete. 1,877 lin.ft. stone curb, etc., from A. M. Pejsa Paving Co., 3161 Derbyshire Rd., Cleveland Heights, $15,499; East 176th St., 2,850 cu.yd. excav., 7,455 sq.yd. brick on 8 in. concrete, 4,726 lin.ft. stone curb, etc., from Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $42,836; East 119th St., 1,485 cu.yd. excav., 3,550 sq.yd. brick on 8 in. concrete, 2,260 lin.ft. curb, etc., from Enterprise Paving & Constr. Co., 8444 Bway., $19,062; East 140th St., 5,740 cu.yd. excav., 9,860 sq.yd. (a) brick or (b) bituminous concrete on 8 in. concrete 6,000 lin.ft. stone curb, etc., from Baldwin Bros., 4500 Euclid Ave., (a) $58,887, Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, (b) $46,727. Noted Mar. 13.

Ind., Jasper—Dubois Co., grading and graveling 2.6 mi. O. Ahrensman Rd., 18 ft., from A. B. Krempp & Son, Jasper, $25,896, engrs. est. $31,283. Noted Jan. 17.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete, from Detroit Asphalt Paving Co., 20 McGraw Bldg., Coplin Ave. $8,668, Devereaux Ave. $5,980, Holmur Ave. $24,140, Homedale Ave. $15,347, Kentucky Ave. $14,530, Marlborough Ave. $15,829, Park Grove Ave. $26,754, Roselawn Ave. $35,946, Six Mile Rd. $70,075, from Cleveland Trinidad Paving Co., 402 Hammond Bldg., Glendale Ave. $29,147, Lawrence Ave. $20,729; from Cooke Asphalt Paving Co., 1260 Penosbot Bldg., Mitchell Ave. $39,067.

Missouri—State Hy. Dept., Jefferson City, Mar. 21, grading and penetration macadam paving 4.308 mi. road from King City east, Gentry Co., from E. C. Johnson, Carrollton, $48,027 and $47,695 respectively; grading 3.579 mi. road from Grant City north and south, 30 ft., Worth Co., from M. Haase, Trenton, $24,463, 4.89 mi. and 5 mi. road from Maryville south, Nodaway Co., from J. Stanton, 6th and Kiowa Sts., Leavenworth, Kan., $31,947 and $29,232 respectively, 0.72 mi. Marshall-Miami Rd., 26 ft., Saline Co., from Pittsburgh-Des Moines Steel Co., Tuttle and South West 10th Sts., Des Moines, Ia., $17,844, 4.652 mi. road from Anderson south, 26 ft., McDonald Co., from B. C. Cossota, Oklahoma City, Okla., $62,057, 3.8 mi. road from Montgomery City south, 30 ft., Montgomery Co., from F. A. Stonner, Chamois, $15,827, 3.501 mi. road from Mansfield east and west, 26 ft., Wright Co., from A. M. Curtis and B. Ellis, Springfield, $17,150, 2.335 mi. road from Anderson south, 26 ft., McDonald Co., from C. J. Williams, Monett, $16,663, 2.165 mi. road from Mansfield east and west, 26 ft., Wright Co., from J. G. Nevels & Masoner, Willow Springs, $17,995; graveling 1.719 mi. road from Puxico north, 16 ft., Stoddard Co., from J. L. Richmond, Advance, $19,159, 3.771 mi. Benton-Charleston Rd., 16 ft., Scott Co., from F. D. Harvey & Co., Memphis, Tenn., $34,706, 0.872 mi. Festus-St. Louis Rd., 16 ft., St. Genevieve Co., from C. P. O'Reilley, Wainright Bldg., St. Louis, $34,225, 4.992 mi. road from Eldon north and south, 12 ft., from Fogleman & Thompson, Eugene, $23,573, 4.924 mi. Vienna-Dixon Rd., 12 ft., Maries Co., from J. M. Birmingham, Vienna, $27,580, concrete paving 4.89 mi. and 5 mi. road from Maryville south, 18 ft., from C. H. Atkinson Paving Co., Watertown, S. D., $78,493 and $81,803 respectively; 1.97 mi. road from Springfield south, 18 ft., Greene Co., from Springfield Constr. Co., Springfield, $47,575; graveling and concrete paving 3.33 mi. road from Bernie south, 40 ft., Stoddard Co., from Dexter Constr. Co., Dexter, $42,904. Noted Mar. 13.

Streets and Roads (Continued)

Wash., Seattle—Bd. Pub. Wks., Mar. 21, paving Bagley Ave. et al., from R. G. Stevenson, 1327 North 34th St., 12,300 sq. yd. 6-in. concrete $1.65, 830 ft. asphaltic concrete curbing $0.65, 7,250 ft. concrete curbing $0.35, 3,000 cu.yd. earth excav. $0.70, total $30,877. Engrs. est. $32,906.

California — State Hy. Comn., Sacramento, Federal Aid Project 144-A, 3.72 mi. Milpitas to Coyote Creek, Santa Clara Co., (1) 8,000 cu.yd. embankment (2) 10,080 tons asphaltic mixture, surface (3) 400 tons asphaltic mixture, repairs to existing base (items 2 and 3 produced by using plant furnished by contractor) (4) 4,400 tons broken stone in shoulders (5) 10,080 tons asphaltic mixture, surface (6) 400 tons asphaltic mixture, repairs to existing base (items 5 and 6 produced by using state plant at San Jose, considered as alternative for items 2 and 3), from Valley Paving & Constr. Co., 113 North Court St., Visalia, (1) $0.90 (2) $6.88 (3) $9.75 (4) $3.67 (5) $6.58 (6) $9.45, total using (1) and (2) $97,248, using (5) and (6) $94,104; Federal Paving Co., New Standard Oil Bldg., San Francisco, (1) $0.50 (4) $3 (5) $6.60 (6) $6.60, total $86,768. Noted Mar. 6.

Calif., Venice—Paving Indiana and Vernon Aves., 4 and 5 in. concrete, curbs, walks, gutters and sanitary sewers, from S. Pearson, 3847 South Bway., Los Angeles, $35,650.

Calif., Los Angeles—Los Angeles Co. improving Tract 4224, streets west of Fort McArthur, from Butterfield-Sears Co., 410 6th St., San Pedro, 69,422 cu.yd. excav. $0.50, 25,971 lin.ft. curb $0.60, 104,066 sq. ft. walks $0.20, 452,000 ft. oil screenings wearing surface $0.05. Noted Jan. 24.

Calif., Los Angeles—Improving Hoover St. between Fountain St. and Santa Monica Blvd., from G. R. Curtis, 2440 East 26th St., grading $2,450; 50,285 sq.ft. Warrenite-bituminous $0.29, 4,332 sq.ft. walks $0.24, 2,309 sq.ft. sewer $0.32, etc. Noted March 20.

Calif., San Diego—Improving Cedar and Date Sts., from Griffith Co., 25 14th St., 246,122 sq.ft. 1½ in. sheet asphalt on 3 in. bituminous $0.162, 8,636 sq.ft. cement concrete sidewalk $0.22, 2,216 lin.ft. concrete curb $0.65, 1,095 cu.yd. earth excav. $1. Noted Jan. 24.

Calif., San Francisco—Improving 48th Ave. between Lawton and Santiago Sts., incl. 2,382 cu.yd. cut, 39,353 cu.yd. fill, 190,344 sq.ft. asphaltic concrete, etc., from Raisch Impvt. Co., 46 Kearny St., San Francisco, $116,684.

CONTRACTS AWARDED

Vermont—State Hy. Dept., Montpelier, will construct 3.1 mi. Newport, Vt.,-North Stratford, N. H., Rd., 15,400 cu.yd. excav., etc., by force account. T. W. Dix, ch. engr.

N. Y., Brooklyn—F. D. Gallatin, pres. Park Comrs., Municipal Bldg., New York, grading and paving, etc., Eastern Parkway, here, sheet asphalt on concrete, to M. J. O'Hara, 1228 Park Ave., New York, $140,415. Noted Jan. 17.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Galecor Contg. Co., Ridge Blvd., grading, curbing, flagging and paving East 18th St. $5,613, curbing and flagging where necessary on West 12th St. $3,717, 67th St. $4,059; to Cranford Co., 52 9th St., sheet asphalt paving Lenox Rd. $3,404, Quentin Blvd. $16,077, Warehouse Ave., etc., $40,919, West 8th St. $91,932, 10th Ave. $11,652, 43rd St. $10,094, 77th St. $8,298, 79th St. $8,607, 81st St. $9,288; to M. J. O'Hara Contg. Co., 717 65th St., sheet asphalt paving West 35th St. $17,671; to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., sheet asphalt paving 67th St. $7,383; to W. G. Grimm, curbing and flagging where necessary on Lott Ave. $1,817, Quentin Blvd. $2,165; to W. E. Carberry, 45 South Elliott Pl., curbing and flagging where necessary on 66th St. $4,403. Noted Mar. 20.

Md., Townson—Comrs. Baltimore Co., concrete paving 1 mi. Group 5, Tufton Ave., 4th Dist., to H. T. Campbell & Sons Co., Townson, $27,490; macadam paving Group 6, Merritt Ave. and German Hill Rd., 12th Dist., to P. Reddington & Son, 2 East Lexington St., Baltimore, $28,609. Noted Mar. 20.

N. C., Charlotte—Paving various streets, to Blythe Bros., Brevard Ct., $620,000; sidewalks to Hooks & White, Charlotte, $73,600. Noted Mar. 13.

Fla., De Land—Volusia Co., paving and widening 4 mi. highway, 4½ ft. shoulder on each side, incl. 21,120 sq.yd. 6 in. concrete, to Inglis Constr. Co., De Land, $2.47 sq.yd.

Fla., Kissimmee — See "Material and Equipment."

Fla., St. Petersburg — Paving 11th St., etc., 427,425 sq.yd. vitr. brick, 240,540 lin. ft. granite curbing, to Georgia Eng. Co., Augusta, Ga., $1,500,000.

S. C., Lexington—Lexington Co., 12.41 mi. State Route 2, Federal Aid Project 234-B, to J. L. Carroll, Columbia, $41,060; topsoiling 7.176 mi. State Route 1, Federal Aid Project 234-A, to J. F. Cleckley, Cope, $20,703, 10.44 mi. State Route 391, to T. E. Hook, New Brookland, $44,176.

Ala., Decatur — Asphalt and concrete paving various streets, to Independent Paving Co., American Trust Bldg., Birmingham. Est. cost $300,000. Noted Feb. 28.

Ky., Louisville—Bd. Pub. Wks. reconstructing and paving Murray Ave., 22nd, 23rd and Lee Sts., etc., to F. G. Breslin, 32nd and Market Sts., Henry Bickel Co., 443 Garden St, and Louisville Asphalt Co., Floyd and Lee Sts. Total $250,000.

O., Ashtabula—Grading and brick paving State Rd., to T. P. Fitzgerald, Ashtabula, $102,648.

O., Cleveland—Cuyahoga Co., grading, vitr. tile guttering and 8 in. concrete paving 10,406 sq.yd. Highland Rd. 3, to Ohio Constr. Co., Hunkin-Conkey Bldg., $43,676. Engrs. est. $48,300. Noted Mar. 27.

O., Columbus—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.57 mi. Sect. "D" and 2.587 mi. Sect. "E" Barberton-Greenwich Rd., Ashland Co., bituminous concrete on water-bound macadam, to D. A. Phillips & Son, Ashland, $70,283 and $72,156 respectively. Noted Mar. 20.

O., East Cleveland (Cleveland P. O.)—Repaving and widening Shaw Ave., brick, to Rieley Bros., The Arcade, Cleveland, $28,655; repaving Nela Court, Cort and Lakeview Aves., asphalt, to Gould & Maybach, 16311 Saranec Rd., Cleveland Heights, $29,319; paving Euclid Ave. and resurfacing 4th and 6th Aves., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $11,144. Noted Mar. 20.

O., Jefferson—Ashtabula Co., paving and grading Sheffield-Kingsville Rd., to T. P. Fitzgerald, Ashtabula, $28,224. Engrs. est. $28,980.

Ind., Jasper—Dubois Co., hard surfacing 3.85 mi. Andrew Wagner Rd., 18 ft., to O. P. Ohlinger, Ferdinand, $54,890. Engrs. est. $63,038.

Ind., Kokomo—Hardsurfacing 0.95 mi. roads, 30 ft., in Patterson Park Addition, to Citizens Paving Co., Kokomo, $26,620. Engrs. est. $28,240.

Ind., Marion—Grant Co., hard surfacing 3.5 mi. Charles Trueblood Rd., 18 ft., to Huffman Co, Warren, $53,490. Engrs. est. $55,000.

Ind., Winchester—Randolph Co., grading and graveling 3.8 mi. G. S. Wampler Rd., 18 ft., to J. L. Teegarden, Union City, $33,000. Engrs. est. $38,155.

Michigan — State Hy. Dept., Lansing, grading and surfacing 0.992 mi. State Trunk Line Rd. 27-12, Sect. D, Sanilac Co., 15,441 sq.yd. asphalt, concrete or bituminous concrete and 1.001 mi. State Trunk Line Rd. 46-25, Sanilac Co., 13,385 sq.yd. asphalt, concrete or bituminous concrete, to Deckerville Constr. Co., Deckerville, $35,268 and $29,630 respectively.

Michigan — State Hy. Dept., Lansing, grading and surfacing 8.91 mi. Federal Aid Project 87, Sects. A and B, Wayne Co., 104,900 sq.yd. asphalt, concrete or bituminous concrete, to Wayne Co. Rd. Comn., Detroit, $285,120.

Mich., Brighton—Grading and concrete surfacing Grand River Ave. and Main St., to Rennie & Dibble, Detroit, $37,900.

Mich., Flint—Genesee Co., grading and surfacing with 2 course gravel, 10 mi. Rds. 36, 58, 63 and 71, 3 mi. to J. Dunn, Grand Blanc, 2 mi. to Westfall, Payne and Westfall, Montrose, 2 mi. to T. McNally, Saginaw, and 3 mi. to W. Johnson, Flint.

Mich., Monroe—F. M. Kressbach, city clk., 21,621 sq.yd. 8 in. concrete on Sackett Ave., East 3rd and West 8th Sts., to Webber Constr. Co., Ionia, $77,613.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, 18 ft concrete paving on 2.99 mi. Route 8, Sect. 32, Woodford Co., to Hedges Constr. Co., Chicago, $60,506, 12.84 mi. Route 25, Sects. 15 and 16, Coles and Cumberland Counties, to Stressenreuter Bros., 3020 South Halsted St., Chicago, $238,800; 1 girder and 1 substructure for steel bridge on Route 3, Sect. 26 B, Mercer Co., to C. D. Stratten, Little York, $8,566. Noted Feb. 7.

Wis., Green Bay—Brown Co., concrete surfacing Greenleaf-Lark Rd., to Jorgenson Constr. Co., Denmark, $94,315; State Rd. and Dixon Rd., to H. O. Schaefer & Sons, Green Bay, $58,627 and $52,331 respectively. Noted Mar. 6.

Wis., Menasha—Concrete paving 10,000 sq.yd. 3rd and De Pere Sts., to J. Schneider Contg. Co., $32,149.

Ia., Grundy Center—Grundy Co., 89,221 cu.yd. earth excav., to C. C. Barnes, 343 51st St., Des Moines, $22,528; 10,000 lin.ft. 6 in. drain tile, to L. Wical, Grundy Center, $3,506.

Ia., Sioux City — Paving Dupont Ave., Chambers, Morgan and 33rd Sts., 10,400 sq.yd. concrete on 6-in. concrete, to P. C. Hansen & Son, 1422 Court St., $2.10 per sq.yd.; Perry and 5th Sts., 25,000 sq.yd., to Western Asphalt Paving Corp., 1st and Nebraska Sts., $2 per sq.yd.

Kan., Hays — Grading and paving 15 blocks, 3-in. vertical fibre brick on 5-in. concrete with 1-in. sand cushion and asphalt filter, 8 x 24 in. concrete curb and gutter, to H. J. Taylor, Belleville, $3.80 per sq.yd. for paving, $0.95 per lin.ft. curbing and guttering, $0.60 per cu.yd. grading. Noted Jan. 3.

Minnesota—State Hy. Dept., St. Paul, grading 11 mi. road between Foxhome and Fergus Falls, State Project 3-40, Federal Aid 351, 144,000 cu.yd. excav., to Stanley Bros., St. Cloud, $45,241; 7 mi. between Ball Club and Deer River, State Project 8-31, Federal Aid Project 168, 63,000 cu.yd. excav., to M. Barrett, St. Cloud, $30,017; 6 mi. between Minneopa and Mankato, State Project 5-28, Federal Aid 320, and 11 mi. between New Ulm and Lafayette, State Project 15-30, Divs. A and B, Federal Aid Project 341, to Nolan Bros., 18 North 2nd St., Minneapolis, $76,696 and $77,397 respectively; 7 mi. between Ogilvie and Mora, State Project 23-24, Federal Aid Project 337, 122,000 cu.yd. excav., to C. F. Johnson, Forest Lake, $42,270; 9 mi. between Mora and Quamby, State Project 23-30, Div. A, Federal Aid Project 257, 104,000 cu.yd. excav., to S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, $42,328; 6 mi. between Erhart and Pelican Rapids, State Project 30-26, Federal Aid Project 354, 108,000 cu.yd. excav., to Studor & Manion, Excelsior, $32,144; 8 mi. between Eden Valley and Watkins, State Project 69-21, Sect. 1, Federal Aid 339, 86,000 cu. yd. excav., to W. Petrie, Champlin, $26,801. Noted Mar. 6.

Minn., St. Paul—H. W. Austin, city purch. agt., paving Grand Ave. between Nilton St. and Cretin Ave., 52,867 sq.yd. 3-in. vertical fibre brick, 315 sq.yd. creosoted wood blocks, and George St. between Ohio and State Sts., 6,017 sq.yd. brick, 15,484 sq.yd. asphaltic concrete, etc., to Thornton Bros. Co., 318 Endicott Bldg., $231,244 and $81,431 respectively; Grand Ave. between Oakland Ave. and Milton St., 16,247 sq.yd. 3-in. vertical fibre brick, etc., to Feyen Constr. Co., 277 Burgess St., $67,200; Park Ave. between Wabasha St. and Como Ave., and Como Ave. between Park Ave. and Rice St., 11,288 sq.yd. 3-in. vertical fibre brick, etc., to Hanlon & Okes, 338 Lumber Exch., Minneapolis, $50,442. Noted Mar. 13.

Minn., Worthington—Nobles Co., grading 12 mi. Job 2402, State Rd. 14, 95,970 cu.yd. excav., 41,690 cu.yd. overhaul, to McGuire Bros., Forest City, Ia., $28,510.

Neb., Battle Creek—Paving 18,400 yd., curbing 9,000 ft. and grading 7,000 yd. in Dist. 1, to A. A. Dobson Constr. Co., 1st Natl. Bank Bldg., Lincoln, $56,000.

Neb., Nebraska City—Paving 55,000 yd. various streets, to Abel Constr. Co., Terminal Bldg., Lincoln, $160,000. Noted Feb. 7.

S. D., Sioux Falls—Paving 23 blocks to C. H. Atkinson Paving Co., 304 Western Surety Bldg., $2.62 for sheet asphalt, $2.37 for bituminous concrete and $2 for concrete. Noted Mar. 27.

N. D., Minot—Ward Co., 8 mi. Federal Aid Project 182, 62,856 cu.yd. excav., etc., and 9 mi. Federal Aid Project 82, 70,311 cu.yd. excav., to Schultz Bros., Bowbells, $27,079 and $31,930 respectively.

Mo., Higginsville—For 11,813 sq.yd. concrete paving to Haller & Davis, Boonville, $34,621.

Mo., Kansas City—Jackson Co. constructing Winner Rd. and small concrete bridge, to Norton Bros., 3200 Central St., $111,782.

Mo., Slater—For 10,000 yd. concrete paving, to C. F. Brindle, Kansas City, $31,959. Noted Mar. 6.

Ark., Pine Bluff—Constructing road in Dist. 71, to Kaw Paving Co., 616 N. E. Bldg., Topeka, Kan., $54,116.

Tex., Canton—Van Zandt Co., grading and gravel surfacing 7.14 mi. State Highway 15, Federal Aid Project 363-C, 451.5 cu.yd. concrete in structures, 51,863 cu.yd. roadway and 14,137 cu.yd. borrow excav., 39,636 sq.yd. concrete pavement, etc., to T. F. Larkin & Co., 3927 Bowser St., Dallas, $136,047. Noted Mar. 27.

Tex., Galveston—Improving 25th St., to Bart Moore Constr. Co., Amicable Bldg., Waco, 27,665 sq.yd. concrete paving $2.60, 3,254 ft. drain $1.35 per ft., 10,114 ft. coping $0.35.

Tex., Harlingen—Willacy Co., gravel surfacing 7 mi. highway, 16 ft., to Dobbs & Wedegarter, San Benito, $78,748.

Streets and Roads (Continued)

Tex., Houston—Grading Buffalo Bayou Dr. from Baker to Terrell Sts., to Starket & Brown, 2nd Natl. Bank Bldg., $28,000.

Nev., Reno—Improving various streets, concrete pavement, curbs, gutters, walks, to I. Christensen, Reno, $49,720; paving asphaltic concrete with Warrenite-bituminous surface, to Clark & Henery Co., Chancery Bldg., San Francisco, $130,745. Noted Aug. 23.

Wash., Chehalis — City Comn., cement sidewalks on Chehalis Ave., Market St., et al., 160,000 sq.yd. sidewalks, to J. H. Collins, 1902 Jackson St., Seattle, $35,504. Engrs. est. $40,000.

Calif., Compton — Improving Arbutus, Magnolia, School Sts., etc., incl. 730,800 sq.ft. grading, 730,800 sq.ft. 5 in. concrete, etc., to H. H. Oswald, 366 East 58th St., Los Angeles, $133,745. Noted Mar. 20.

Calif., Huntington Beach — To G. M. Souter, Box 626, grading, paving, curbs, gutters, walks and lighting systems, portion 5th St., 3 in. Willite on 4 in. asphaltic concrete, $44,782; portion 10th St., 2 in. Willite on 4 in. asphaltic concrete, $41,825; portion 15th St., 2 in. Willite on 3 in. asphaltic concrete $44,649. Noted Feb. 14.

Calif., Los Angeles—Improving Oxnard St. between Woodman and Sherman Sts., to Gibbons & Reed, 905 South Olive St., grading, $1,975, 108,902 sq.ft. concrete, $0.2275, total $26,800; Waverly Ave. between Auburn St. and Hyperion Ave., to G. A. Constantine, Haas Bldg., grading $7,560, 52,816 sq.ft. concrete $0.235, 1,666 ft. light curb $0.58, 7,879 sq.ft. walks $0.21 sanitary sewer complete $6,500. Noted Mar. 20.

Calif., Mill Valley—Improving Alcatraz, Corte Madera Aves., etc., incl. 4,624 cu. yd. grading, 121,007 sq.ft. 5 in. concrete, 19,044 sq.ft. macadam, 2,730 lin.ft. concrete curb and gutter, 2,768 sq.ft. concrete gutter, etc., to F. C. McIntyre, Farmers & Merchants Bank Bldg., Stockton, $41,780. Noted Feb. 21.

Calif., Modesto—Stanislaus Co., improving Newman-Hills Ferry Highway, to Merced Concrete Pipe Co., 16th and H Sts., Merced, 273,652 sq.ft. concrete $0.206, 7,000 cu.yd. excav. $0.63, total $60,782.

Calif., Monterey — Improving Spencer, Archer Sts., etc., incl. 35,000 lin.ft. concrete curb and gutter, 450,000 sq.ft. 5 in. waste quarry rock pavement, 2,500 lin.ft. corrugated iron and concrete culvert, to J. L. Conner, Box 565, Santa Cruz, $81,900. Noted Mar. 20.

Calif., Oakland—F. T. Wood & Co., 417 15th St., improving 25 acre tract, oil macadam, concrete curbs, gutters, etc., to Heafey-Moore-McNair, 2030 High St., San Francisco, $75,000. Noted Feb. 14.

Calif., Oroville—Improving Lincoln, Oak, Pine Sts., etc., incl. 4,100 cu.yd. excav., 170,400 sq.ft. 2½ in. asphaltic concrete with 1½ in. Warrenite surface, etc., to Lord & Bishop, 113 Orange Ave., $42,748. Noted Feb. 28.

Calif., Redondo Beach—Improving Aves. A, B, C, D, etc., incl. 205,800 sq.ft. rock and screenings surface, 93,101 sq.ft. cement concrete with oil screenings protective coat, 15,295 lin.ft. r. w. headers, to Pacific Paving Co., Metropolitan Theatre Bldg., Los Angeles, $38,175.

Calif., San Diego — See "Unclassified under Pier."

Calif., Santa Ana — Improving portion West 2nd St., to Wells & Bressler, California Bank Bldg., 105,085 sq.ft. concrete $0.1985, 2,121 ft. curb $0.50, etc.

Calif., Santa Ana — Orange Co. paving Placentia Rd. (Rd. Impvt. 23), to Griffith Co., Railway Bldg., Los Angeles, $82,500.

Industrial Works

PROPOSED WORK

Conn., Stratford (Bridgeport P. O.) — Factory—Bridgeport Safety Emery Wheel Co., 82 Knowlton St, Bridgeport, plans 1 and 2 story, brick and steel, plain foundation, West Broad St., here. Engineer and architect not selected.

N. Y., Fultonville — Factory — Brand & Nellis Silk Mfg. Co. plans brick, concrete and steel, to replace one recently destroyed by fire. $75,000-$100,000.

N. Y., Long Island City—Factory—H. Maillard, 368 5th Ave., New York City, having sketches made by Buchman & Kahn, archts. and engrs., 49 West 45th St., New York City, 7 story, rein.-con., brick and steel, plain foundation, Henry St., here. $750,000.

N. Y., Troy—Troy Coke & Iron Corp., had plans prepared and takes bids about May 1, blast furnace and coking plant. $3,000,000. W. E. Millhouse, Brunswick Rd., genl. mgr. W. W. Wright and L. Willard, Troy, engrs.

N. Y., Waverly — Factory — Frank & Dugan, plan 60 x 800 ft., brick, concrete and steel, Broad St. $100,000.

Pa., Reading—Factory—Carpentier Steel Co., River Rd. and Exeter St., having plans prepared by F. H. Muhlenberg, Ganster Bldg., 1 story, 150 x 400 ft. brick and steel, plain foundation, River Rd. and Exeter St. $200,000.

N. C., Spencer—Roundhouse, etc.—Southern Ry., 13th and Penna Ave., Wash., D. C., plans 37 stall roundhouse, 51 x 155 ft. flue and babbitt shop, 100 ft. turn table, 320 ft. runway for 10 ton traveling crane and other shop and yard facilities, here. Cost several hundred thousand. R. Hayes, structural engr.

Fla., St. Petersburg—Gas Plant, etc.—City election May 20, $125,000 bonds, gas plant and main extensions. E. Kitchen, St. Petersburg, engr.

La., Baton Rouge—Plant—C. C. Mengel Co., Dumesnil Ave. between 11th and 12th Sts., Louisville, Ky., purchased land 4 mi. from here and plans plant. $1,000,000.

Tenn., Chattanooga—Mill—B. L. Talley Milling Co., 1420 Cowart St., plans to rebuild mill recently destroyed by fire. $50,000.

O., Avon Beach (near Cleveland)—Power House—Cleveland Electric Illuminating Co., c/o J. F. Cook, constr. engr., Illuminating Bldg., Cleveland, having plans prepared 1 story, brick, steel and concrete, here. Engineers and architects names withheld.

O., Cleveland — Factory — Automobile Hospital Co., 2076 East 22nd St., had plans prepared by E. McGeorge, 3020 Euclid Ave., 1 and 2 story, 30 x 90 ft., brick and steel, 2076 East 22nd St. $40,000.

O., Massillon—Factory—Realty Rubber Co. plans rebuilding factory to replace one recently destroyed by fire. $50,000.

O., Mineral City—Power House—Hickory Mining Co., Finance Bldg., Cleveland, plans 1 story, 30 x 48 ft., brick and steel, here. $75,000. Private plans.

Ill., Chicago—Laundry and Power House —Howard Laundry, 2900 West 22nd St., having plans prepared by Ronneberg & Pierce, 10 South La Salle St., 1 story, 50 x 125 ft. and 30 x 40 ft., fireproof, Rogers St. and Clayton Court. $50,000.

Wis., Madison—Laundry—Bd. Health, H. C. Buser, city clk., having plans prepared by Claude & Starck, Badger Annex, 2 story and basement, 36 x 70 ft. boiler house and laundry, brick, rein.-con. and steel, plain foundation. $50,000.

Wis., Waukesha — Factory — Quality Aluminum Casting Co., Lincoln Ave., plans 1 story, 40 x 100 ft. addition, brick and steel, plain foundation. $40,000. Engineer and architect not selected.

Kan., Kansas City — Factory — Kansas City Can & Mfg. Co., 1019 North 4th St., preparing plans 4 story and basement, rein.-con. and brick factory. $100,000. Private plans.

Mo., St. Louis—Factory—S. G. Adams Stamp & Stationery Co., 410 North 6th St., soon takes bids 4 story, brick and concrete addition, 30,000 sq.ft. floor space, Garrison and Franklin Aves. C. H. Deitering, Central Natl. Bank Bldg., archt.

Ore., Tigard — Factory — Amer. Ry. Car Co., 613 Henry Bldg., Portland, having plans prepared by E. A. Miller, Henry Bldg., Portland, and takes bids about May 9, 1 and 2 story, 60 x 300 ft., factory and office building, 8 acre site, here. $75,000. A. D. Brown, 613 Henry Bldg., engr.

Calif., El Monte — Laundry — Mission Laundry Corp., 319 South Raymond Ave., Pasadena, plans laundry, here. To exceed $50,000.

Calif., Ignacio — Packing Plant — California Packing Corp., 101 California St., San Francisco, having plans prepared by P. Bush, 101 California St., San Francisco, packing plant, here. $50,000.

Calif., Loyalton—Lumber Mill, etc.—Clover Valley Lumber Co. plans to enlarge lumber mill, build 8 mi. logging road and install traveling crane. Logging road will probably be built by day labor.

Calif., Oakland—Factory—Niedringhaus Metal Ware Corp., 5739 Natural Bridge St., St. Louis, Mo., plans factory on 5 acre site along tracks of Southern Pacific and Western Pacific R.R., here. To exceed $50,000.

Calif., Oakland — Factory — Montague Pipe & Steel Co., Hobart Bldg., San Francisco, had plans prepared, 1 story, steel, concrete and corrugated iron, 22nd, 24th, Kirkham and Poplar Sts., here. $100,000 or more. Private plans.

Calif., Oakland — Plant — Puget Sound Auto Co., c/o W. A. King, Bank of Savings Bldg., plans plant on 5 acre site.

Calif., Oroville—Power House—See "Unclassified under Hydro-Electric Development."

Calif., Ontario — Factory — Ironall Factories of California, 822 South Los Angeles St., Los Angeles, having plans prepared by F. O. Eager, 137 East White Oak St., Monrovia, first unit overall factory, 60 x 125 ft., here. To exceed $50,000.

Calif., San Francisco—Laundry—Independent Laundry, 2798 19th St., having revised plans prepared by J. J. Foley, 770 5th Ave., 2 story and basement, 200 x 200 ft., rein.-con. laundry, also 1 and 2 story, 40 x 100 ft. addition to present structure, Alabama and 18th Sts. $115,000 or more. Former bids returned unopened. Noted Mar. 20.

Calif., Vacaville—Substation—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, appropriated $855,000 for additions to substation, here.

Ont., Ft. William—Great Lakes Paper Co. takes bids about Apr. 15, paper mill. $2,000,000.

BIDS DESIRED

Vt., Morrisville—Power House—See "Unclassified."

Pa., Chester—Substation—Mar. 31, by J. T. Windrim, archt., Commonwealth Bldg., 1 story and basement, 60 x 136 ft., brick and steel substation, plain foundation, 6th St. between Welsh and Crosby Sts., for Delaware Co. Electric Co., c/o Phila. Electric Co., 10th and Chestnut Sts., Phila.

Pa., Elkins Park—Power House—Apr. 7, by Bd. Educ. Abington Twp., 1 story 40 x 70 ft. with brick stack 92 ft. high, for high school. Heacock & Hokansen, Bailey Bldg., Phila., archts.

W. Va., Bluefield—Power Plant—Appalachian Power Co., 31 Nassau St., New York City, plans last unit to power plant, 20,000 kw. capacity, here. Viele, Blackwell & Buck, engrs., 49 Wall St., New York City, will handle above project and award all separate contracts.

Miss., Neches—Power House—Southern Ry. & Light Co. taking bids 75 x 75 ft., brick, steel and iron, $45,000.

O., Cleveland — Factory — S. Bingham Sons Co., 1515 Kentucky Ave., Indianapolis, Ind., taking bids 3 story and basement, 107 x 113 ft., brick and steel, Clinton and Dexter Aves., here. $100,000.

Wis., Milwaukee—Factory—O. H. Kindt Mfg. Co., 986 47th St., taking bids 2 story, 60 x 150 ft. factory, 1 story, 60 x 92 ft. warehouse and 1 story, 30 x 42 ft., boiler-engine house, brick and timber, plain foundation, Cedarburg Rd. $75,000. Private plans.

Kan., Fredonia—Electric Light Plant—Apr. 14, by City Comn., electric light plant and distribution system incl. 300 hp. Diesel oil engines, generators, switchboard, building, electric distributing lines and street lighting system. A. L. Mullergren, 555 Gates Bldg., Kansas City, Mo., consult. engr.

New Zealand, Wellington—May 21, by Secretary Pub. Wks. Tenders Bd., power house and plant; adv. E. N.-R. Apr. 3.

New Zealand, Wellington—Apr. 30, by Secretary Pub. Wks. Tenders Bd., headworks; adv. E. N.-R. Apr. 3.

BIDS RECEIVED

D. C., Wash. — Headhouse — Norfolk & Washington Steamboat Co., 731 15th St., constructing headhouse recently destroyed by fire, from V. T. H. Bien, 3118 11th Ave. N. W., $32,423 (90 days).

CONTRACTS AWARDED

Pa., Erie—Factory—Erie Steam Shovel Co., 1 story, 200 x 200 ft. brick and steel addition to factory, to Constable Co., Erie, $100,000. Noted Mar. 13.

Pa., Manayunk (Phila. P. O.)—Substation —Phila. Electric Co., 10th and Chestnut Sts., Phila., 2 story and basement, 57 x 60 ft. brick, steel and stone substation, Main and Green Sts., here, to Irwin & Leighton, 126 North 12th St., Phila. Noted Mar. 13.

Pa., Phila.—Heating Plant—McClellan & Junkersford, engrs., Otis Bldg., 1 story, 65 x 138 ft., brick and steel, west bank of Schuylkill River south of South Bridge, for Trustees University of Pennsylvania, 34th and Spruce Sts., to Turner Constr. Co., 1713 Presser Bldg.

Pa., Phila.—Substation—J. T. Windrim, archt., Commonwealth Bldg., 1 story and basement, 60 x 82 ft., brick, steel and stone, Olney Ave. and Wister St., for Phila. Electric Co., 10th and Chestnut Sts., to J. N. Gill Constr. Co., City Center Bldg. Archts. est. $150,000.

Industrial Works (Continued)

Pa., Pittsburgh—Plant—B. H. Prack, archt., Keystone Bldg., 2 and 4 story and basement, 30 x 62 ft. and 85 x 282 ft. additions to plant, Lang Ave., to Hughes-Foulkrod Co., Stevenson Foster Bldg., for Westinghouse Electric & Mfg. Co., East Pittsburgh. $275,000.

Pa., Reading — Storage, etc. — F. H. Muhlenberg, archt., Ganster Bldg., 1 story, 50 x 100 ft., brick and steel, plain foundation, 12th and Bern Sts., to Fink Constr. Co., 658 Penn St., for Noe Equl Hosiery Co., 12th and Bern Sts.

Md., Baltimore—Plant—Stieff Co., 17 North Liberty St., 1 story, brick, plain foundation, Cedar Ave., to L. L. Chambers, 36th and Roland Ave., $125,000.

Va., Bristol — Glass Works — Central Glass Co., 30th St. and Bway., Louisville, Ky., 2 story, 70 x 144 ft., glass works, here, to D. W. Wagner, Bristol. $55,000.

N. C., Charlotte—Factory—H. M. Wade, South Graham Ext., 4 story, fireproof, to Southeastern Constr. Co., Trust Bldg., $100,000.

Tenn., Athens—Foundry and Warehouse —Athens Plow Co., 1 story brick, concrete and steel addition, to O. W. Duggin & Co., Athens. Est. cost $40,000.

Ky., Hickman — Factory — Mengel Co., 11th and Dumesnil Sts., will rebuild one unit of factory recently destroyed by fire, by day labor. Est. cost $200,000. Noted Feb. 28.

Ky., Louisville—Garage and Salesroom—Summers-Herrman Inc., 905 3rd St., 3 story, 90 x 100 ft., 3rd and Breckenridge Sts., to National Concrete Constr. Co., Board of Trade Bldg. Archts. est $150,000. Noted Mar. 20.

O., Cleveland—Dry Kilns—Baker R. & L. Co., 2180 West 25th St., 1 story, 54 x 192 ft., brick and steel, West 80th St., to H. G. Slatmyer & Son Constr. Co., 203 Lakeside Ave., N. W. Archts. est. $150,000.

O., Cleveland—Factory—Virden Co., 6103 Longfellow Ave., 1 story, 20 x 80 ft., brick and steel, 6703 Longfellow Ave., to Griffin Constr. Co., 5511 Euclid Ave. Archts. est. $40,000.

O., Cleveland—Factory—Chicago Pneumatic Tool Co., c/o T. P. Kimman, mgr., 1241 East 49th St., 3 story and basement, 43 x 126 ft., brick and steel, plain foundation, to Schirmer O'Hara Co., 2031 Euclid Ave. Archts. est. $75,000.

O., Cleveland — Shop — A. H. Bennett, 2180 East 19th St., 2 story, 40 x 70 ft., brick and steel, to W. I. Thompson & Son Co., 5103 Euclid Ave. Archts. est. $40,000.

Ill., Chicago—Boiler House—Crane Co., 41st and Kedzie Sts., 1 story, 87 x 104 ft., fireproof, 4100 South Kedzie St., to T. G. Gage Co., 64 West Randolph St. Archts. est. $200,000. Noted Nov. 1.

Minn., Duluth — Warehouse — Universal Portland Cement Co., Morgan Park, 2 story, 180 x 200 ft., cement block, to Bland Eng. Co., Minneapolis, $100,000.

Neb., Omaha — Printing Plant — Klopp-Bartlett Co., 10th and Douglas Sts., 1 story and basement, 132 x 132 ft. brick, general contract, to Pre-Fabricated Constr. Co., Chicago. Engrs. est. $85,000.

Mo., Kansas City—Plant—See "Buildings."

Mo., St. Joseph—Laundry—Conser Laundry Co., 908 Francis St., 1 and 2 story and basement, 17th and Buchanan Sts., to Constr. Serv. Co., 1604 South 22nd St. Archts. est. $160,000.

Nev., Sparks — Packing Plant — Pacific Fruit Express, 65 Market St., San Francisco, will build 1 story frame and galvanized iron addition to packing plant, here, by day labor. $42,000.

Calif., Antioch—Factory—Paraffine Companies, Inc., 475 Brannan St., San Francisco, 1 story, 220 x 295 ft., brick addition to factory, here, to F. Stamm, 25 A St., $54,000.

Calif., Roseville—Packing Plant—Pacific Fruit Express Co., 65 Market St., San Francisco, will build 1 story, rein.-con. and steel, by day labor, here. $80,000.

Calif., Sacramento — Warehouse — Ward Seed Co., c/o contractor, 1 story and mezzanine, 110 x 165 ft., brick and heavy mill construction, 16th St., to P. R. Ward, 180 Jessie St., San Francisco, cost plus basis. Traveling conveyors will be installed.

Calif., San Pedro — Factory — California Thorne Cordage Co., c/o contractor, 90 x 250 ft. main building, 3 storage plants, each 50 x 100 ft., general office building, etc., brick and steel, here, to Johnson Co., 1007 South Grand Ave., cost plus percentage basis.

Buildings

PROPOSED WORK

Mass., Malden — School — Owner, c/o Marcia C. Broune School, had plans prepared by M. A. Dyer, 1 Beacon St., Boston, 2 story, 76 x 150 ft. and 44 x 108 ft., brick and steel, Bway. $350,000.

N. Y., Albany—Hotel—J. L. Baker, pres. Hampton Hotel Co., 38 State St., plans 10 story, 350 room addition, Green St. side. $1,000,000.

N. Y., Albany — Storage Warehouse — Security Storage & Warehouse Co., 1 Dean St., plans concrete and steel, South Pearl and Gansevoort Sts. To exceed $250,000.

N. Y., Buffalo—High School—Bd. Educ. plans East Side High School. To exceed $150,000. Kidd & Kidd, 524 Franklin St., archts.

N. Y., Buffalo—Lodge—Buffalo Lodge of Eagles plans 4 story and basement, ornamental brick, stone, steel and concrete, Pearl and West Tupper Sts. $400,000-$425,000.

N. Y., Buffalo—School—Bd. Educ. plans Seneca Vocational School. To exceed $150,000. F. A. Spangenberg, 250 Delaware Ave., archt.

N. Y., Elmira — Church — Local Presbyterian Churches plan new church West Clinton St. $175,000-$200,000.

N. Y., Elmira—Library—Building Com. Elmira College, had plans prepared by Coolidge & Shattuck, 122 Ames Bldg., Boston, Mass., and Pierce & Bickford, 118 Lake St., 3 story, brick, stone, concrete and steel, Washington and College Aves. $250,000.

N. Y., Fort Plain — Bank — Fort Plain Natl. Bank plans brick, stone, marble, steel and concrete. $200,000.

N. Y., Jamaica—Store and Office—H. O. Falk, c/o Shampan & Shampan, archts. and engrs., 189 Montague St., Brooklyn, having plans prepared 3 story store and office building, Fulton St. near Aslop St., also 6 story office building, Fulton St. near Canal St., brick, steel and stone, plain foundations, here. $250,000 each.

N. Y., Lackawanna (Buffalo P. O.)—Schools—Voted $225,000 bonds for new school, $235,000 bonds new school, Orange and Franklin Sts., $70,000 bonds remodeling School 4 and heating system in School 2.

N. Y., New York—Apartment—P. Meirowitz, c/o Sommerfeld & Steckler, archts. and engrs., 31 Union Sq., having plans prepared 12 story, brick, steel and stone, plain foundation, West 68th St.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 5 story, brick, steel and stone, plain foundation, Vyse Ave. $300,000. Owner's name withheld.

New York—Clubhouse—Allerton House Corp., 369 Lexington Ave., New York City, plans brick, steel and stone, plain foundation, at Milton Point, Weschester Co. $500,000. Engineer and architect not selected.

N. Y., New York—Court House—City plans brick, steel and stone, plain foundation, Williamsbridge Rd. $350,000.

N. Y., New York—Bath—City plans brick, steel and stone, plain foundation, East 143rd St. between Willis and Brook Aves. $300,000.

N. Y., New York—Store—John Wanamaker, Inc., Bway. and 10th St., having preliminary plans prepared altering brick, steel and stone, plain foundation, Bway. and 9th St. $200,000. Private plans.

N. Y., Olean — Temple — Building Com. Masonic Lodge plans new temple. $150,000.-$200,000.

N. Y., Schenectady—Y. M. C. A. having sketches made by J. F. Jackson, 137 East 45th St., New York City, new building. $350,000-$400,000. Noted July 19.

N. Y., Snyder—School—Building Com. Snyder School Dist. 1, plans brick, concrete and steel. $150,000. M. J. Schenck, chn. Engineer and architect not selected.

N. Y., Syracuse—Academy—St. John the Baptist Parish, plans new academy, Park St. $150,000. J. M. Hughes, Park St., pastor.

N. Y., Syracuse—Temple—Com. of 15 Tigris Temple representing associated Masonic Orders of Syracuse, having plans prepared by Osgood & Osgood, Grand Rapids, Mich., modern temple. To exceed $250,000.

N. Y., Tonawanda—High School—Election Apr. 16, $650,000 bonds new high school. T. W. Barrally, city engr. Noted Mar. 20.

N. Y., Troy—Hotel—Building Com. of Troy Chamber of Commerce, plans new hotel. $1,000,000-$1,250,000. C. W. Ferguson, chn. Engineer and architect not selected.

Pa., Bellefonte—Hospital—Centre County Hospital Com. plans campaign to raise $100,000 for 3 story and basement, rein.-con., brick and steel hospital, Main St. Total cost $150,000. $50,000 and site now available.

Pa., Phila.—Church and Sunday School —Zion Lutheran Church, 117 East Tabor Rd., having revised plans prepared by Ritcher & Eiler, Reading, 1 story and basement, 65 x 118 ft., Fishers Lane, 1st and Olney Aves. $150,000.

Pa., Somerset—School—Somerset School Dist. plans election to vote on $100,000 bonds for 3 story and basement, 90 x 125 ft., rein.-con. and brick school. $50,000 now available.

Pa., Williamsport—Theatre and Office—Majestic Theatre, G. H. Bubb, mgr., having plans prepared by W. H. Lee, 1505 Race St., Phila., 2 story and basement, 70 x 122 ft., brick and steel, plain foundation, here.

Md., Baltimore — Apartment — Arcadia Building Corp., c/o J. H. and F. J. Thuman, archts., 2401 Shirley Ave., having revised plans prepared 4 story, 101 x 102 ft., brick, plain foundation, Harford Rd. and Parkside Dr. $350,000. Noted Jan. 17.

W. Va., Charleston — Theatre — United Theatre Enterprise Co., Huntington, having plans prepared by Carmichael-Millspaugh, 67 East Long St., Columbus, O., 1 story and basement, 50 x 160 ft., rein.-con. and brick, here. $150,000.

N. C., Asheville — Auto Storage — J. A. Barnard and W. F. Byram, having plans prepared by G. L. Preacher & Co., Healy Bldg., Atlanta, Ga., 4 story, 154 x 210 ft., rein.-con. $350,000.

N. C., Fayetteville — Auditorium — Citizens plan auditorium. $150,000. H. McD. Robinson, mayor.

Ala., Birmingham—Schools and Library —Voted $3,000,000 bonds for schools and $750,000 for library. Noted Mar. 6.

Miss., Meridian—Schools—Having plans prepared by P. K. Krouse and B. Stuart, of Meridian, and F. P. Dressler, consult. archt., Nashville, Tenn., schools. $500,000. Noted Feb. 7.

La., Shreveport—Exchange—Cumberland Telegraph & Telephone Co., Shreveport, plans new exchange, Line and Adams Sts., also extensions to lines. $460,000.

Tenn., Nashville—Dormitory—Vanderbilt University School of Medicine plans dormitory on campus. $500,000. J. H. Kirkland, chancellor.

Tenn., Nashville—Office—Life & Casualty Insurance Co., 309 Church St., plans 8 story and basement, 159-167 4th Ave. N. $500,000. A. M. Burton, pres. Architect not selected.

O., Canton—Club—Elks Home Co., 335 Tuscarawas St. W., takes bids in spring, limestone, brick and steel front addition, Tuscarawas and Dewalt Sts. $165,000. G. C. Tilden, Schaefer Blk., archt.

O., Canton—Lodge—Knights of Columbus, 6th St. N. W., plans addition. $160,000. Address J. Blake, Schaeffer Blk., member building com.

O., Cleveland—Apartment—M. Silverman, 911 Thornhill Dr., having plans prepared by M. Altschuld, 5116 Woodland Ave., 3 story and basement, 38 x 120 ft., brick and timber, East 87th St. $150,000.

O., Cleveland—Apartment—M. and W. Rosen, c/o Eagle Cap Co., 608 St. Clair Ave., having sketches made by Braverman & Havermaet, 201 Ulmer Bldg., 3 story and basement, brick and timber, Superior Rd. $200,000.

O., Cleveland — Church — St. Ignatius Roman Catholic Church, 10205 Lorain Ave., plans 1 story, brick, steel and stone, plain foundation, Lorain Ave. and West Blvd. $250,000. E. T. P. Graham, Newburry St., Boston, Mass., archt. Noted Jan. 24.

O., Cleveland—Commercial and Office—M. Gusman Investment Co., Huron-6th Bldg., plans 8 to 12 story, brick and steel, East 4th St. and Huron Rd. $350,000. Engineer and architect not selected.

O., Cleveland—Commercial and Office—S. Rosenthal, Ulmer Bldg., had plans prepared by A. F. Janowitz, 811 Prospect Ave., 3 story and basement, 79 x 177 ft., brick, Detroit Ave. and West 110th St. $200,000.

O., Cleveland—Hotel—Euclid-Oliver Hotel Building Co., c/o S. H. White, archt.,

Buildings **(Continued)**

1032 Schofield Bldg., had plans prepared 10 story, 83 x 222 ft., brick, steel and concrete, 2425 Euclid Ave. $2,000,000.

O., Cleveland—Office—Euclid-Vincent Co., c/o C. T. Prestien of J. Laronge Co., Union Trust Bldg., plans remodeling brick, steel and concrete, Euclid Ave. $175,000. F. W. Bail, Hanna Bldg., archt.

O., Cleveland—Office and Warehouse—Industrial Development Co., c/o C. E. Tousley, archt., 4500 Euclid Ave., had plans prepared 1 story, 80 x 360 ft., brick and rein.-con., Lorain Ave. $200,000.

O., Cleveland—Office, Store and Studio—Company, c/o J. Laronge, Union Trust Bldg., having plans prepared by F. W. Bail, Hanna Bldg., 12 story, 105 x 200 ft., brick, steel and concrete, near East 30th St. and Euclid Ave. $2,000,000.

O., Cleveland—School and Parish House—St. Pauls Evangelical Lutheran Church, 1486 East 55th St., having plans prepared by Corbusier & Lenske, B. F. Keith Bldg., 2 story and basement, 60 x 104 ft., brick, East 55th St. $150,000.

O., Cleveland—Theatre and Garage—L. Abrams, Engineers Bldg., having plans prepared by J. F. Steffens, Fidelity Mortgage Bldg., 1 story, 116 x 240 ft., brick and steel, East 79th St. and Lexington Ave. $150,000.

O., Columbus — Apartment — Broadwyn Apartment Co., 186 East Broad St., having plans prepared by O. Darst, 186 East Broad St., 8 story and basement, 68 x 120 ft., and 1 story, 35 x 40 ft., brick and terra cotta, East Broad St. $400,000.

O., East Liverpool—Bank—Potters Natl. Bank, 5th and Washington Sts., having plans prepared by Weary & Alford, 1923 Calumet Ave., Chicago, Ill., new bank. $200,000.

O., Lakewood—Commercial and Apartment—W. I. Corts, 17619 Detroit Ave., Cleveland, having plans prepared by Kauffman Architectural Co., 5511 Euclid Ave., Cleveland, 3 story and basement, 105 x 119 ft., brick, Detroit Ave., here. $175,000.

O., North Dayton (Dayton P. O.)—School Bd. Educ., Dayton, voted $450,000 bonds, 3 story, rein.-con. and brick, here. Engineer and architect not selected.

Mich., Detroit—Apartment—Hugh Taylor Millar, archt., 242 West Lafayette Ave., preparing plans 5 story and basement, brick, steel and stone, plain foundation, Covington Dr. $250,000. Owner's name withheld.

Mich., Detroit—Garage—Detroit Garages Inc., Hudson Motor Co., 12601 East Jefferson St., having preliminary plans prepared by Brown & Derrick, 120 Madison Ave., 6 or 8 story, rein.-con. and brick, plain foundation, Woodward Ave. $350,000.

Ill., Chicago—Apartment—Owner, c/o J. B. Aroner, archt., 304 South Wabash St., plans 3 story, 80 x 175 ft., fireproof, Franklin and Drake Sts. $225,000.

Ill., Chicago—Apartment—Owner, c/o J. B. Aroner, archt., 304 South Wabash St., plans 3 story, 110 x 115 ft., fireproof, Franklin and St. Louis Sts. $300,000.

Ill., Chicago—Apartment—Owner, c/o J. B. Aroner, archt., 304 South Wabash St., plans 3 story, 65 x 175 ft., fireproof, Franklin and Trumbull Sts. $175,000.

Ill., Chicago—Apartment—J. Cameron, c/o R. F. France, archt., 155 North Clark St., plans 3 story, 150 x 178 ft., fireproof, Crandon St. near 69th St. $200,000.

Ill., Chicago—Apartment—Owner, c/o D. S. Klafter, archt., 64 West Randolph St., plans 10 story, 197 x 375 ft., fireproof, Clarendon and Lakeside Sts. $1,500,000.

Ill., Chicago — Club House — Harvard, Yale and Princeton Club, c/o C. A. Eckstrom, archt., 5 North La Salle St., plans 8 story, 25 x 100 ft., fireproof, 316 Federal St. $150,000.

Ill., Chicago—Hotel—S. Gold & Bros., c/o Levy & Klein, archts., 111 West Washington St., plans 9 story, 100 x 127 ft., fireproof, 610-16 West Roosevelt St. $1,000,000.

Ill., Chicago — Store and Office — D. Schetnitz, c/o A. S. Alschuler, archt., 28 East Jackson St., plans 3 story, 125 x 142 ft., fireproof, Roosevelt and St. Louis Sts. $225,000.

Ill., East St. Louis—Hospital—St. Marys Hospital, 7th and Missouri Ave., having preliminary plans prepared 4 story and basement, rein.-con., brick and stone, Missouri Ave. $300,000. Engineer and architect not announced.

Ill., Evanston—Apartment—W. G. Spoeri, 6708 Sheridan Rd., Chicago, having plans prepared by H. Holmes, 720 South Michigan St., Chicago, 3 story and basement, 150 x 157 ft., fireproof, Sheriden and Main Sts., here. $150,000.

Ill., Harvey—Hotel—J. Bowers, c/o D. Meredith, archt., 4750 Sheriden Rd., Chicago, having preliminary plans prepared 3 story and basement, rein.-con., brick and stone, here. $250,000.

Ill., Hegewisch (Chicago, P. O.)—Bank—Interstate Natl. Bank plans 2 story, 50 x 125 ft., fireproof. $150,000. C. Hatzfeld, 7 South Dearborn St., Chicago, archt.

Ill., Oak Park—Apartment—H. Rabinow, c/o R. F. France, archt., 155 North Clark St., Chicago, plans 3 story, fireproof, Harvey and Washington Sts., here. $250,000.

Wis., Jefferson—School—Bd. Educ., R. E. Henry, secy., plans to rebuild 4 story, brick, rein.-con. and steel, plain foundation, recently destroyed by fire. $200,000. Engieer and architect not selected.

Wis., Madison—Church—First Methodist Episcopal Congregation having plans prepared by Claude & Starck, Badger Annex, 3 story, 60 x 120 ft. addition, brick and rein.-con. plain foundation, Dayton Ave. $150,000. Noted Mar. 20.

Wis., Milwaukee—Apartment—Franklin Investment Co., c/o R. Douglas, 85 Mason St., plans 2 or 3 story, brick and concrete, plain foundation, East Side. $150,000-$200,000. Engineer and architect not selected.

Wis., Milwaukee—Store and Loft—A. J. Straus Co., 97 Wisconsin St., having preliminary plans prepared by Herbst & Kuenzli, 114 Grand Ave., 6 to 8 story, 50 x 150 ft., brick and concrete, plain foundation, 3rd St. $150,000-$200,000.

Ia., Bedford—School—Bd. Educ. having plans prepared by Keffer & Jones, 204 Masonic Temple, Des Moines, 2 story and basement, rein.-con., brick, tile and stone. $160,000. G. S. Perlinger, secy.

Ia., Cedar Rapids—High School—Voted $200,000 bonds for school.

Kan., Chanute — Memorial — City soon takes bids 3 story, rein.-con. and steel, plain foundation. $200,000. Lorentz, Schmidt & Co., 516 4th Natl. Bank Bldg., Wichita, archts. Noted Jan. 31.

Kan., Wichita—Theatre and Hotel—St. Louis Financiers, c/o S. Isreal, Eberson & Weaver, archts., 514 Orpheum Bldg., having preliminary plans prepared 7 story and basement, 100 x 140 ft., rein.-con., brick and stone. $800,000.

Mo., Clayton—School—Election Apr. 1, $165,000 bonds for De Mun grade school, $33,500 bonds Moorlands grade school, and $30,000 bonds high school athletic field.

Mo., St. Louis — Garage — Broad-Wal Garage Co., Planters Bldg., having plans prepared 3 story and basement, 127 x 173 ft., rein.-con. and brick. $150,000. Private plans.

Ark., Little Rock—Apartment—Rackensack Apartment Corp., c/o Wittenberg, Deloney & Watts, archts., Southern Trust Bldg., soon takes bids 7 story and basement, 125 x 150 ft., rein.-con., brick, stone and terra cotta, 4th and Hill Sts. $400,000.

Ark., Little Rock—Garage, etc.—Five Fifty-five Tire Service Co., 223 Bway., soon takes bids 3 story and basement, 140 x 150 ft., garage and auto service building, rein.-con., brick and stone, Bway. at 2nd St. $160,000. Wittenberg, Deloney & Watts, Southern Trust Bldg., archts.

Tex., Austin—Warehouse—Walter Tipps Hardware Co., Congress Ave., having plans prepared by R. O. Jameson, engr., Southwestern Life Bldg., Dallas, and C. H. Page & Bros., archts., Austin Natl. Bank, 2 story and basement, 117 x 200 ft., concrete and brick, 2nd and Colorado Sts. $155,000.

Tex., College Station—Gymnasium and Hotel—A. & M. College plans 2 story, rein.-con., hollow tile and stucco, plain foundation, on Campus. $165,000. Engineer and architect not announced.

Tex., Dallas—Hotel—T. B. Baker, Oriental Hotel, having plans prepared by H. S. Green, Alamo Natl.-Bank Bldg., 10 story, rein.-con., steel, brick and stone, plain foundation. $3,000,000.

Tex., Luling — School — Luling Ind. School Dist. voted $160,000 bonds, high school. Engineer and architect not announced.

Tex., San Antonio—Bank—Commercial Natl. Bank, 117 East Houston St., and Commercial Loan & Trust Co., 303 North St. Marys St., having plans prepared by Phillips & De Wees, Gunter Bldg., 1 story (equal to 4 story) 62 x 168 ft., rein.-con., steel and stone, plain foundation, Travis and St. Marys Sts. $150,000. Noted Mar. 6.

Okla., Muskogee—Y. M. C. A. plans 4 story, 100 x 140 ft., Cherokee Ave. $150,000. Architect not selected.

Okla., Oklahoma City—University—University of Oklahoma, 400 East 3rd St., having plans prepared by Layton, Smith & Forsythe, Southwest Natl. Bank Bldg., and soon takes bids brick and stone building, concrete foundation, for medical arts and engineering departments. $200,000.

Okla., Shawnee—Hotel—J. C. Calhoon, Muskogee, preparing plans 6 story, 100 x 140 ft., brick. $300,000. Architect not selected.

Okla., Tulsa — Office — L. E. Roberts, Roberts Bldg., plans 10 story, 75 x 140 ft., brick, 5th and Boston Sts. $800,000. Engineer and architect not selected.

Okla., Tulsa—Store—Kress Stores Co., 114 5th Ave., New York City, having plans prepared by W. H. Harris, Tulsa, 4 story, 2 basements, 100 x 140 ft., rein.-con. and brick, 4th St., here. $200,000.

Colo., Canon City—High School—School Dist. sold $220,000 bonds for high school. Engineer and architect not selected.

California—Hotel—Yosemite Natl. Park Co, 689 Market St., San Francisco, had plans prepared by E. J. Symmes, 1st Natl. Bank Bldg., San Francisco, hotel, cottage style, to accomodate 1,000 guests, near Merced River, in Yosemite Valley. To exceed $150,000.

Calif., Alhambra — Club — Alhambra Athletic Club, c/o S. A. Forman, 1407 North Garfield St., plans fireproof club, on 100 x 200 ft. site. $150,000.

Calif., Bakersfield — Church — First Christian Church having plans prepared by R. H. Orr, Corporation Bldg., Los Angeles, brick church. $150,000.

Calif., Berkeley—Store and Office—Chamber of Commerce, E. F. Louideck, 2104 Shattuck St., pres., plans 5 or 6 story, brick or rein.-con. $150,000.

Calif., Glendale—Church—First Baptist Church having preliminary plans prepared by R. L. Kent Co., 130 South Brand Blvd., church, probably steel and concrete, Wilson and Louise Sts. $150,000.

Calif, Inglewood — School — Inglewood Union High School Dist. having plans prepared by G. A. Howard, 820 Story Bldg., Los Angeles, academic and gymnasium buildings, brick. $150,000. Noted Mar. 20.

Calif., Long Beach—Apartment—Beekley Bros., 844 Main St., had plans prepared 4 story and basement, 50 x 140 ft., brick, Union Ave. Work will probably be done by day labor. $150,000.

Calif., Long Beach — Schools — Long Beach City School Dist. having preliminary plans prepared by Wright & Gentry, Marine Bank Bldg., 10th-Orizaba Grammar School, to exceed $150,000; by Kistner Co. et al., Pantages Theatre Bldg., Los Angeles, elementary school, Loma Ave. and Anaheim Rd., $150,000; by Wynkoop & Law, Farmers & Merchants Bank Bldg., Long Beach, and Allison & Allison, associated archts., Hibernian Bldg., Los Angeles, Jefferson School, to exceed $150,000.

Calif., Los Angeles—Apartment—K. Albright, archt., 6426 Hollywood Blvd., making preliminary plans 4 story, fireproof, probably brick and steel, Sunset Blvd. To exceed $175,000. Owner's name withheld.

Calif., Los Angeles — Church — Ninth Church of Christ Scientist, c/o Meyer & Holer, archts., Wright-Callendar Bldg., had plans prepared 2 story and basement, 115 x 250 ft., brick, Normandie Ave. $400,000. Noted Sept. 27.

Calif., Los Angeles — Garage — Westlake Garage Co., c/o Noernberg & Johnson, archts., Railway Bldg., having plans prepared 6 story, 55 x 150 ft., rein.-con., Westlake Ave. $175,000.

Calif., Los Angeles—Hotel—K. Albright, archt., 6526 Hollywood Blvd., Hollywood, preparing preliminary plans 4 story, brick or concrete, here. $160,000. Owner's name withheld.

Calif., Los Angeles—Hotel—S. Lewis, c/o S. H. Brown, archt., Union League Bldg., having plans prepared 3 and 5 story with basement, 50 x 150 ft., brick and steel, 3rd St. $150,000.

Calif., Los Angeles — Hotel — Stern & Danziger, c/o Walker & Eisen, archts., Pacific Finance Bldg., having plans prepared, 10 to 12 story and basement, 100 x 150 ft., rein.-con., Vine St.

Calif., Los Angeles—Loft—Lloyd & Casler, c/o W. D. Lee, archt., Sun Bldg., having plans prepared 6 story and basement, 80 x 150 ft., rein.-con., Pico and Wall Sts. $150,000. Noted Oct. 18.

Calif., Los Angeles—Office—California Pacific Holding Co., c/o L. W. Rucker, Hollywood Securities Bldg., having preliminary plans prepared by J. and D. Parkinson, Title Insurance Bldg., 10 to 12 story, 150 x 175 ft., fireproof. $1,000,000.

Buildings (Continued)

Calif., Los Angeles—Office and Store—S. Marshultz, et al., 518 West 6th St., having preliminary plans prepared by Milwaukee Bldg. Co., Wright-Callendar Bldg., 4 story and basement, brick, Bixel St. $150,000.

Calif., Los Angeles—Theatre and Store—Friedman-Hill Co., 1812 West 7th St., having preliminary drawings made by Gable & Wyant, 634 South Western Ave., 1 or 2 story and basement, brick, West Adams St. $150,000. Noted Feb. 28.

Calif., Los Angeles—Warehouse—Pub. Serv. Comn., 207 South Bway., making preliminary drawings 2 story, 100 x 500 ft., rein.-con. and brick, Ducommon St. near Alameda St. $150,000. Private plans.

Calif., San Francisco—Apartment—W. H. Ratcliff, archt., Mercantile Trust Bldg., Berkeley, preparing preliminary plans 3 story and basement, frame and brick veneer, near Powell and California Sts. From $150,000 to $200,000. Owner's name withheld.

Calif., San Francisco—Store and Loft—Crocker Estate Co., Crocker Bldg., having plans prepared by L. P. Hobart, Crocker Bldg., 7 story addition to 3 story Class A fireproof building, Stockton and O'Farrell Sts. $200,000.

Calif., San Francisco—Store—O'Connor-Moffatt Co., Post and Kearny Sts., plans to remodel 6 story building for department store, also 3 story fireproof addition, Stockton and O'Farrell Sts. To exceed $150,000. Engineer and architect not selected.

Que., Montreal — Temple — Masonic Memorial Temple Corp., Dorchester St. W., having plans prepared by J. S. Archibald, 326 Beaver Hall Hill, new Masonic Temple. $500,000.

BIDS DESIRED

Mass., Boston—Hotel—Apr. 24 (extended date), by G. B. Post & Sons, archts. and engrs., 101 Park Ave., New York City, 12 story, brick, stone and steel, Arlington St., here, for Statler Hotel Co., 7th Ave. and 33rd St., New York City. $4,000,000. Noted Feb. 7.

N. Y., Canton—Office—Building Com. St. Lawrence Co., A. J. Hanmer, chn., Massena, taking bids building and equipping new county clerks office, here. S. D. P. Williams, Ogdensburg, archt.; adv. E. N.-R. Apr. 3. Noted Mar. 27.

N. Y., Flushing—School—Apr. 22, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, P. S. 32, 35th Ave. from 171st to 172nd Sts., here, for Bd. Educ., 500 Park Ave., New York City.

N. Y., Haverstraw—Club—Apr. 14, by Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, 2 story, brick, steel and stone, plain foundation, here, for B.P.O.E. $150,000. Noted Feb. 14.

N. Y. Jamaica—School—Apr. 22, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, P. S. 95, 90th Ave. from 179th St. to 179th Pl., here, for Bd. Educ., 500 Park Ave., New York City.

N. Y., New York—Office—J. Tishman & Sons, Inc., 280 Madison Ave., will build 22 story, 75 x 154 ft., brick, steel and stone, 225-241 West 34th St. $5,000,000. Owner supervises construction and awards separate contracts. Private plans.

N J., Atlantic City—Hotel—Apr. 15, by W. Smedley, archt., St. Girard Bldg., Phila., 9 story and basement, 57 x 185 ft., and 6 story and basement, 53 x 143 ft., brick and steel, wood pile foundation, here, for Hotel Dennis, Michigan Ave .and Beach. Former bids rejected. Noted Mar. 6.

Pa., Ardmore—Bank—Apr. 12, by Ardmore Natl. Bank, 1 story and basement, 40 x 93 ft. and 24 x 53 x 60 ft., brick and steel, plain foundation. $150,000. J. T. Brugger, 505 Chestnut St., Phila., archts.

Pa., Johnstown—Store—M. J. Bowman, treas. and mgr. Gately & Fitzgerald Furniture Co., 110-112 Clinton St., taking bids 8 story and basement, 30 x 125 ft. rein.-con., brick and steel, Clinton St. $200,000. H. M. Rogers, Trust Bldg., archt.

Pa., Phila.—Apartment—Apr. 5, by T. B. Lippincott, archt., 11 South 16th St., 7 story and basement, 48 x 128 ft., rein.-con., brick and steel, plain foundation, Lincoln Dr. and Emlen St., for Wynnefield Taylor, Pelham Court, Germantown (Phila. P. O.), $450,000. Noted Dec. 27.
c/o archts. $200,000.

Pa., Reading—Apr. 24, by O. B. Heinz, secy. Bd. Educ., 8th and Washington Sts., 2 story and basement, 100 x 150 ft., brick and steel, plain foundation, Riverside Ave. $200,000. Noted Mar. 27.

O., Cleveland — Apartment — J. L. Cameron, archt., 2014 East 10th St., taking bids and opens same about Apr. 10, 4 story and basement, 32 x 135 ft., brick, 2052 East 90th St., for Ohio Building Finance Co., Discount Bldg. $150,000. Noted Jan. 31.

O., Elyria — Station — Apr. 8, by New York Central R.R., c/o G. C. Cleveland, ch. engr., West 3rd St. and St. Clair Ave., Cleveland, 2 story, brick, steel and concrete, here. $250,000. Fellheimer & Wagner, 7 East 42nd St., Cleveland, archts. Noted Nov. 15.

Mich., Detroit—School—Apr. 7, by Bd. Educ., 2 story and basement 78 x 132 ft. rein.-con., brick and steel, plain foundation, West End Ave. $150,000. Malsomson & Higginbotham, Industrial Bank Bldg., archts.

Mich., Detroit—School—Apr. 10, by V. J. Waier & Co., archts., 403 Hoffman Bldg., 3 story and basement, 151 x 210 ft., brick, steel and stone, plain foundation, Lenox Ave., for St. Martins Church, Lenox and Avondale Aves. $200,000.

Ill., Aurora—Bank and Office—Apr. 15, by G. G. Elmslee, archt., 122 South Michigan St., Chicago, 3 story and basement, 50 x 200 ft., rein.-con., brick and stone, here, for Old Second National Bank, Aurora. $150,000. Noted Oct. 18.

Ill., Chicago—Apartment—J. B. Aroner, archt., 304 South Wabash St., taking bids 3 story, 125 x 175 ft., fireproof, Franklin and Central Park. Owners name withheld. $375,000.

Ill., Chicago—Apartment—C. F. Henry, 7455 Greenview St., taking bids 3 story and basement, 99 x 192 ft., fireproof, Winchester and Wilson Sts. $500,000. Oldfest & Williams, 605 North Michigan St., archt. Noted Feb. 8.

Ill., Chicago — Apartment — J. Johnson, 7453 North Clark St., taking bids 3 story and basement, 125 x 140 ft., fireproof, Robey St. near Birchwood St. $185,000. A. H. Quitsow, 11 South La Salle St., archt.

Ill., Chicago—Apartment Hotel—D. S. Klafter, archt., 64 West Randolph St., taking bids 4 story, fireproof, 931 Leland St., for J. Glasser, c/o architect. $175,000. Noted Feb. 28.

Ill., Chicago—Apartment—D. S. Klafter, archt. 64 West Randolph St., taking bids 3 story, 75 x 125 ft., rein.-con., brick and steel, Lawrence and North Troy Sts., for A. S. Shapiro, c/o architect. $200,000.

Ill., Chicago—Apartment—G. W. Turnquist, 217 East 69th Pl., taking bids 3 story and basement, 150 x 208 ft., fireproof, 67th and Constance Sts. $350,000. Z. E. Smith, 305 East 55th St., archt.

Ill., Evanston—Apartment—C. D. Johnson and A. Lindstrom, 77 West Washington St., Chicago, taking bids 3 story, 150 x 200 ft., rein.-con., brick and steel, Ridge and Noyes Sts., here. $375,000. C. W. Westerlied, 179 West Washington St., Chicago, archt.

Ill., River Forest (Oak Park P. O.)—Church—Holmes & Flinn, archts., 8 South Dearborn St., Chicago, taking bids 1 story, 61 x 112 ft., fireproof, here, for First Presbyterian Church. $200,000

Ill., Rockford — Bank — Apr. 10. by Graham, Anderson, Probst & White, archts., 80 East Jackson St., Chicago, 4 and 7 story, 88 x 112 ft., brick, steel and concrete addition, Main and Wyman Sts., here, for Rockford Natl. Bank.

Wis., Madison—Hospital—Apr. 14, by Bd. Health, City Hall, 2 story and basement, 45 x 150 ft., brick, rein.-con. and steel. $150,000. Claude & Starck, Badger Annex, archts.

Mo., Koch—Infirmary—May 2, by Bd. Pub. Serv., 208 City Hall, St. Louis, 3 story and basement, 62 x 165 ft., rein.-con., stone, steel and brick, at Robert Koch Hospital, here. $243,000. L. R. Bowen, 301 City Hall, St. Louis, archt. and engr. Noted Jan. 31.

Okla., Guthrie—High School—Apr. 14, by A. Lowther, clk. Bd. Educ., 3 story, 80 x 200 ft., brick, Harrison St. $180,000. Hawk & Parr, Cotton Exch. Bldg., Oklahoma City, engrs. Noted Mar. 20.

Calif., Marysville — Hotel — E. Glass, archt., Underwood Bldg., San Francisco, taking bids (revised plans), 5 story and basement, rein.-con., to contain 150 rooms, 5th and E Sts., here, for Marysville Hotel Co., c/o architect. Noted Oct. 11.

Calif., Monterey Park (Branch Los Angeles)—Theatre and Store—L. L. Jones, archt., Grosse Bldg., Los Angeles, taking bids 1 story, 115 x 215 ft., brick, here. Owner's name withheld.

Calif., San Diego—Store and Loft—Ashley & Evers, archts., Mortgage Guarantee Bldg., Los Angeles, taking bids 4 story and basement, rein.-con., 7th and C Sts., here, for Dohrman Commercial Co., Geary and Stockton Sts., San Francisco.

Calif., Santa Monica—Schools—Bd. Educ. Santa Monica High School Dist. taking bids auditorium, manual arts, domestic science and cafeteria buildings, brick and frame. To exceed $150,000. Allison & Allison, Hibernian Bldg., Los Angeles, archts. Noted Mar. 20.

BIDS RECEIVED

Mass., Chicopee—School—School Bd., c/o J. M. Grise, mayor, constructing Patrick E. Bowe School, Hampden St., from M. J. Walsh & Sons, 1412 Dwight St., Holyoke, $154,940. Noted May 3.

Pa., Easton—High School—School Bd., 30 North 2nd St., brick, steel and stone, 12th and Spring Garden Sts., general contract from T. M. Gibbs Constr. Co., Heyman Bldg., Phila., $587,850, heating and ventilating also plumbing from E. P. Saeger Co., Allentown, $73,888 and $36,888 respectively. Noted Feb. 28.

Pa., Stony Creek Mills—High School—Lower Alsace Twp. School Bd., 3 story and basement, 183 x 216 ft. brick and steel, plain foundation, from M. Melody & Son, 1322 Race St., $718,500. Noted Mar. 6.

Wis., Kenosha—High School—Evangelical Fridens Lutheran Congregation, C. Buenger, pastor, 65 Ridge St., 2 story and basement, 90 x 160 ft., brick and tile, plain foundation, from G. Ouandt, 28 North Lyman Ave. $150,000. Noted Mar. 13.

Ia., Des Moines—Warehouse—Brown-Camp Hardware Co., 330 Southwest 5th St., general contract 5 story and basement, 102 x 282 ft., rein.-con., brick and tile, 1st and Elm Sts., from J. and W. A. Elliott Co., 906 Lumber Exch., Minneapolis, $277,000.

Minn., St. Paul — School — Dept. Educ., Mar. 25, 3 story and basement, rein.-con., brick and tile, Albert St. and Pascal Ave., general contract, from W. Murphy & Son, 346 Endicott Bldg., $320,958. Noted Feb. 28.

Calif., Colma — School — Jefferson Union High School Dist., 1 and 2 story, rein.-con., general contract from Sample & Cody, Call Bldg., San Francisco, $122,500. Noted Mar. 6.

CONTRACTS AWARDED

Mass., Cambridge (Boston, P. O.)—School—Church of Blessed Sacrament, Pearl and Lake Sts., school, Lake St., to J. R. Byrne, 71 Magazine St. Archts. est. $150,000.

Conn., Fairfield — School — Town, brick and steel, plain foundation, to S. W. Hubbell Building Co., 589 Knowlton St., Bridgeport, $150,908. Archts. est. $250,000.

Conn., Mansfield—Hospital, etc.—Mansfield State Training School, to Tracy Bros. Co., 52 Benedict St., Waterbury, 60 x 350 ft. hospital, 40 x 80 ft. dormitory and 40 x 175 ft. nurses home, all 2 story and basement. Noted Aug. 2.

N. Y., Brooklyn—Schools—Bd. Educ., 500 Park Ave., New York, P. S. 28, Fulton St., here, to J. Fallon, 225 5th Ave., New York, $545,000; P. S. 97, Stillwell Ave., here to G. F. Driscoll, 115 Schermerhorn St., $359,800, both brick, steel and stone, plain foundations. Noted Mar. 6 and 13.

N. Y., New York — Apartment — Broff Constr. Co., c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build brick, steel and stone, plain foundation, Sheridan Ave., by day labor. $250,000.

N. Y., New York—Apartment—Gillman & Schlesinger, c/o Moore & Landseidel, archts. and engrs., 48th St. and 3rd Ave., will build brick, steel and stone, plain foundation, Nagle Ave., by day labor. $250,000.

N. Y., New York—Apartment—R. Goldstein, c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 6 story, brick, steel and stone, plain foundation, Macombs Rd., by day labor. $220,000.

N. Y., New York—Apartment—Sonnpiro Realty Co., c/o Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., will build 6 story, brick, steel and stone, plain foundation, Grand Concourse and 180th St., by day labor. $275,000.

N. Y., New York—Apartment—P. Weisman, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 5 story, brick, steel and stone, plain foundation, Anthony Ave., by day labor. $200,000.

N. Y., New York — Theatre — Chanin Constr. Co., 104 West 29th St., will build 100 x 112 ft., brick, steel and stone, plain foundation, West 46th St. . $1,150,000. Owner is builder will supervise general construction and award separate contracts. Herbet J. Krapp, 116 East 16th St., archt. and engr. Noted Feb. 7.

N. Y., Rochester—Store—Natl. Clothing Co., 5 story, tapestry brick, concrete and steel, Main St., to A. W. Hopeman & Sons Co., $200,000.

Buildings (Continued)

N. Y., Troy—Public—Bd. Contr. & Suply. City Hall, masonry contract for 3 story and basement, brick and steel, plain foundation, State St.. to C. Crowley Co., Troy, $220,300; steel and iron, to West Side Structural Co., Watervliet, $77,700. Noted Mar. 6.

N. Y., Webster — School — Bd. Educ. Webster Union Free School, general contract tapestry brick, fireproof, to A. Link Sons, Cox Bldg., Rochester, heating and ventilating, to Arensmeyer, Warnock & Zarhndt, Inc., 114 Monroe Ave., Rochester, plumbing, to M. W. Utz, 1059 Main St. E., Rochester, disposal plant, to H. L. Hotchkiss, Jr., Rochester, total cost $350,000. Noted Dec. 27.

N. J., North Plainfield (Watchung P. O.) —High School—Bd. Educ., general contract 2 story and basement, 136 x 178 ft., brick, steel and limestone, Greenbrook Rd., to T. M. Gibbs Constr. Co., Heyman Bldg., Phila.. $244,900; plumbing, also heating and ventilating, to G. J. Tobin Co., 187 North Ave., Plainfield, $15,555 and $36,000 respectively. Noted Mar. 20.

Pa., Lebanon—Church and Parish House —Holy Trinity Lutheran Church, 1 story and basement, 72 x 145 ft. and 2 story and basement, 42 x 59 ft. stone and steel, plain foundation, to Rapp Constr. Co., Lebanon.

Pa., Phila.—Apartment—L. J. Benamy, c/o M. A. Bernhardt, archt., 721 Walnut St.. 3 story and basement, 50 x 100 ft., brick and steel, plain foundation, 4044-4046 Walnut St., to M. J. Benamy, 5758 North 5th St., $150,000.

Pa., Phila.—Exchange—J. T. Windrim, archt., Commonwealth Bldg., 3 story and basement, 90 x 107 ft., brick, steel and stone, plain foundation, Oak Lane, Broad and 65th Aves., to Irwin & Leighton, 126 North 12th St., for Bell Telephone Co, 17th St. and Parkway. Archts. est. $275,000. Noted Mar. 13.

Pa., Phila.—Office—Independence Realty Co., c/o Ritter & Shay, archts., North Amer. Bldg., 8 story and basement, 85 x 125 ft., brick and steel, 5th and Walnut Sts., to J. M. Stewart Co., 30 Church St., New York City. Archts. est. $1,000,000. Noted Mar. 27.

D. C., Wash. — Hotel and Store — I. Freund, 1315 7th St., N. W., hotel and store, Vermont Ave. and L St., N. W., to Boyle-Robertson Constr. Co., Evans Bldg., $400,000.

W. Va., Wellsburg — Bank — Wellsburg Natl. Bank, 2 story, 38 x 110 ft., Indiana limestone, to R. R. Kitchin & Co., Natl. Bank of West Virginia Bldg., Wheeling. Archts. est. $150,000. Noted Nov. 29.

N. C., Fayetteville—Bank—Natl. Bank of Fayetteville, general contract 6 story, steel, concrete and brick, to James Fannings Inc., Greensboro, $148,000.

La., Lecompte—High School—Favrot & Livaudais, archts., Hibernia Bank Bldg., New Orleans, 3 story, concrete, brick and stone, to W. K. Quick, New Orleans, $141,000, for Rapides Co. Bd. Educ. (Alexandria). Noted Feb. 7.

Ky., Louisville — Office — Commonwealth Life Insurance Co., 106 South 5th St., 6 story, 60 x 120 ft., to J. M. Russell, M. E. Taylor Bldg. Archts. est. $150,000. Noted Mar. 27.

O., Cleveland — Apartment — M. Lewin, 11322 Temblett Ave., 3 story and basement, 42 x 150 ft., brick, 2110 Cornell Rd., to D. Kaufman, 11322 Temblett Ave. Archts. est. $150,000. Noted Jan. 31.

O., Cleveland — Hospital — Babies & Childrens Hospital, c/o A. D. Baldwin, Natl. City Bldg., masonry and rough carpentry for superstructures, 71 x 157 ft. and 142 x 184 ft., each 7 story, brick, steel and concrete, 11020 Euclid Ave., to A. Dall Constr. Co., 3079 Euclid Blvd. Archts. est $3,225000. Noted Mar. 8, 1923.

O., Massillon—Y. M. C. A. general contract 4 story and basement, rein.-con., brick and steel, concrete pile foundation, East Tremont St., to James Meinhart Contg. Co., Massillon, $300,000. Noted Mar. 6.

O., Portsmouth—Temple—Masonic Temple Assn., 3 story and basement, 84 x 180 ft., brick, stone, concrete and terra cotta, Gallia St., to H. R. Blagg, 1229 East 3rd St., Dayton. Archts. est. $300,000. Noted Feb. 28.

O., Steubenville — Bank — Union Savings Bank & Trust Co., 10 story addition, to R.R. Kitchen Co., Nat. Bank of West Virginia Bldg., Wheeling, W. Va., $350,000.

Ind., Hammond — Hospital — Franciscan Sisters of the Door, 4 story, 46 x 288 ft., to Larson, Danielson & Co., LaPorte, $288,000. Archts. est. $300,000.

Ind., Indianapolis — Club — Columbia Club, 10 story and basement, rein.-con., brick and steel, concrete pile foundation, Monument Circle, to W. P. Jungclaus, 825 Massachusetts Ave., cost plus basis. Archts. est. $1,000,000. Noted Mar. 20.

Ind., Notre Dame—College—St. Mary College, 4 story and basement, 300 x 400 ft., rein.-con., brick and stone, to H. G. Christman, 605 North Cushing St., South Bend. Archts. est. $900,000.

Ill., Chicago — Apartment — Granada Building Corp., 527 Arlington Pl., 5 story, fireproof, 523-33 Arlington Pl., to Great Lakes Constr. Co., 306 South Wabash St. Archts. est. $550,000.

Ill., Chicago—Apartment—Midland Constr. Co., 816-24 North Spaulding St., will build 3 story, 78 x 124 ft., fireproof, 301-07 North Spaulding St., by day labor. J. Cahan, 10 North Clark St., archt.

Ill., Chicago—Apartment—M. N. Mortensen, c/o Ronneberg & Pierce, archt., 10 South La Salle St., 3 story and basement, 120 x 130 ft., fireproof, Irving Park and Kildare St., to A. E. Johnson, 5356 Belle Plaine St. Archts. est. $200,000.

Ill., Chicago—Apartment—L. Poulsen, 6124 Kimbark St., 2 story and basement, 100 x 185 ft., fireproof, 1215-37 West 78th Pl., to M. Kuk, 5201 Princeton Ave. Archts. est. $150,000.

Ill., Chicago — Apartment — Sandberg & Osterlind, 1507 Archer Ave., 3 story, 90 x 120 ft., fireproof, 1417-23 Elmdale St., to E. Edlund, 1747 Highland Ave. Archts. est. $150,000.

Ill., Chicago—Apartment—L. R. Steward, 4450 Christiana St., 3 story, 64 x 145 ft., fireproof, 6150-54 Winthrop St., to Magnussen & Wold, 3029 North Keating St. Archts. est. $150,000.

Ill., Chicago — Bank — W. G. Uffendell, archt., 39 South State St., 2 story, 79 x 125 ft., fireproof, Fullerton and North Central Park, for Kimball Trust & Savings Bank, c/o archt., to C. B. Johnson & Son, 111 West Washington St. Archts. est. $175,000. Noted Feb. 14.

Ill., Chicago — School — Catholic Bishop of Chicago, 1340 East 72nd St., 3 story, 112 x 127 ft., brick, 1347-59 East 72nd St., to Mutual Constr. Co., 2532-34 Warren Ave. Archts. est. $200,000.

Ill., Chicago—Store and Apartment—B. Friedman, 4040 Gladys Ave., 3 story, 105 x 175 ft., fireproof, 6945-53 North Ashland St., to Goldberg & Fisher, 3059 North Troy St. Archts. est. $300,000.

Ill., Chicago—Store, Office and Apartment—Baker Building Corp., 5 South Wabash St., 3 story, 127 x 140 ft., fireproof, 7600-12 Greenview St., to G. H. Gottschalk & Co., 111 West Washington St. Archts. est. $150,000.

Ill., Evanston — Apartment — F. W. Freutel, c/o A. H. Quitsow, archt., 11 South La Salle St., Chicago, 3 story, 48 x 201 ft., fireproof, 1913-15 Sherman St., here, to J. Anderson & Son, 5606 Ridge Ave., Chicago. Archts. est. $150,000.

Ill., Evanston—Apartment—A. H. Quitsow, archt., 11 South La Salle St., Chicago, 3 story and basement, 100 x 168 ft., fireproof, Hinman St. near Kedzie St., here, for C. Pegler, c/o archt., to A. W. Anderson, 1435 Elmdale St., Chicago. Archts. est. $200,000. Noted Feb. 21.

Ill., Evanston—Hotel—A. E. Johnson, 15356 Belle Plaine St., Chicago, will build 6 story, 94 x 120 ft., fireproof, Maple and Main Sts., here, by day labor. Archts. est. $600,000. Ronneberg & Pierce, 10 South La Salle St., Chicago, archts.

Ill., Oak Park—Apartment—Gold Bros., 3604 West 26th St., Chicago, 3 story, rein.-con., brick and steel, 201-229 Washington St., here, to Gamm Constr. Co., 3501 Pierce Ave. Archts. est. $600,000.

Wis., Madison—School—Bd. Educ., general contract 2 story, 62 x 110 ft., brick, rein.-con. and steel addition, plain foundation, to C. B. Fritz & Co., 138 North Frances St. $175,000.

Wis., Mendota—Hospital—State Bd. Control, W. F. Lorenz, pres., 2 and 4 story, 75 x 150 ft., rein.-con., brick and steel, plain foundation, to F. R. Comb & Co., 206 Liberty Exch., Minneapolis, Minn., $128,000.

Minn., Duluth — Hospital — St. Lukes Hospital Assn., interior finish for 6 story and basement, 40 x 175 ft., 25 x 35 ft., 40 x 50 ft. and 26 x 42 ft., 1st St. at 9th Ave. E., to R. J. McLeod & Co., Builders Exch. Bldg., $420,000. Noted Apr. 4.

Minn., Gilbert—High School—Bd. Educ., 2 story and basement, 76 x 216 ft., fireproof, general contract to Pfeffer Constr. Co., 402 Builders' Exch. Bldg., Duluth, $169,509. Archts. est. $265,000. Noted Mar. 6

Minn., Minneapolis—Office and Store—Hamm Realty Co., Hamm Bldg., St. Paul, 2 story and basement, 100 x 112 ft., rein.-con., brick and tile, 6th St. and Hennepin Ave., here to S. M. Klarquist Sons Co., 745 Security Bldg., $100,480. Archts. est. $150,000. Noted Mar. 29.

Minn., Minneapolis—School—Bd. Educ., superstructure 1 story, 150 x 300 ft., rein.-con., brick and tile, Mississippi River Blvd., general contract to M. A. Floyd Co., 908 Andrus Bldg., $114,354. Noted Mar. 20.

Minn., Minneapolis—School—W. H. Dunwoody Industrial Institute, 810 Superior Ave., general contract on superstructure 3 story, 40 x 60 x 160 ft., rein.-con., brick and tile, 818-22 Superior Ave., to Pike & Cook, 416 South 5th St. Total cost of superstructure $150,000.

Minn., Minneapolis—School—Bd. Educ., City Hall, 2 story and basement, rein.-con., brick and tile, Dartmouth and Ontario Sts., general contract to Bracker Constr. Co., 638 Builders Exch., $116,518. Noted Mar. 27.

Neb., Lincoln—Asylum—State Bd. Control, 3 story and basement, 34 x 112 ft. concrete, brick and stone, to G. Robertson, 807 First Natl. Bank Bldg. Noted Mar. 13.

Mo., Clayton—Academy and Convent—Sisters of St. Joseph, Minnesota and Kansas Aves., St. Louis, 2 and 3 story and basement, brick, stone and rein.-con., Wydown and Pennsylvania Aves., here, to Humes-Deal Constr. Co., Century Bldg., St. Louis. Archts. est. $700,000. Noted Mar. 6.

Mo., Joplin—Office—Hadley Tatum, 827 Wall St., 8 story, 75 x 110 ft., rein.-con. and brick, plain foundation, 4th and Main Sts., to C. A. Dieter, 410 North Pearl St. Archts. est. $650,000.

Mo., Kansas City—Market, etc.—H. B. Schoolfield, 216 Reliance Bldg., 62 x 240 ft. and 140 x 140 ft., brick and concrete market and refrigeration plant, to Fogel Constr Co., 619 Reliance Bldg. Archts. est. $500,000.

Mo., University (St. Louis P. O.)—Apartment—T. J. Potashnik and J. A. Pastel, Central Natl. Bank Bldg., 3 story and basement, rein.-con., brick and stone, Washington and Melville Sts., here, to V. A. Chinberg, 808 Chestnut St., St. Louis. Archts. est. $150,000.

Tex., Dallas—Church—Calvary Baptist Church, W. O. Barnett, pastor, 1505 West 12th St., will build brick and concrete church, 12th and Windomere Sts., by day labor. $150,000. Engineer and architect not announced.

Calif., Los Angeles—Apartment—H. O. Triplett, 1627 Martel Ave., 4 story and basement, brick, Yucca St., to A. S. O'Neil, 256 Wilcox Bldg., $152,000.

Calif., Los Angeles—Loft and Store—Grether & Grether, 752 South Los Angeles St., 6 story and basement, 95 x 150 ft., rein.-con., to J. M. Cooper, 321 Marsh-Strong Bldg.

Calif., Los Angeles — Office — Southern California Telephone Co., 740 South Olive St., 5 story and basement annex and 2 story addition to present office, steel, brick and rein.-con., Gower St., to Mathis Constr. Co., 753 San Pedro St., $155,000.

Calif., Los Angeles—Science—University of Southern California, Jefferson and University Aves., 3 story and basement, brick, University Ave., to J. V. McNeil Co., H. W. Hellman Bldg, $182,000. Noted Mar. 13.

Calif., Pasadena—Lodge—Scottish Rite Cathedral Assn., fireproof on 175 x 200 ft. site, North Madison Aves., general contract to W. C. Crowell, Security Bldg., $165,000. Noted Mar. 27.

Calif., San Francisco — Apartment — J. and D. De Martini, c/o E. E. Young, archt., 2002 California St., 6 story and basement, brick and steel, California St. near Jones St., to M. A. Little, 534 Geary St., San Francisco, $152,000.

Calif., San Francisco—Apartments—E. Nelson, 78 Allston Way, will build three 3 story and basement, frame and plaster, Pierce and Union Sts., by day labor. $150,000. Baumann & Jose, 251 Kearny St., archts.

Calif., San Francisco — Apartment — A. Penziner, 750 Taylor St., will build 7 story and basement, rein.-con., Turk St. near Leavenworth St., by day labor and subcontracts. $150,000.

Calif., San Francisco—Apartment and Store—W. Plummer, c/o E. E. Young, archt., 2002 California St., 6 story and basement, rein.-con., Jones and Turk Sts., to M. A. Little, Geary St., $150,000.

Calif., San Francisco—Bank and Office—Federal Reserve Bank, Battery and Sacramento Sts., 7 story and basement, Class A,

Buildings (Continued)

second unit, to P. J. Walker Co., Sharon Bldg. To exceed $150,000.

Calif., San Francisco—Club and Dormitory—San Francisco Ladies Protective & Relief Society, c/o J. Morgan, Merchants Exch. Bldg., 3 story and basement, brick, Laguna St. near Bay St., to D. B. Farquharson, 1760 Ellis St., $153,000.

Calif., San Francisco—Loft—W. H. Sullivan, Inc., Alexander Bldg., 5 story and basement, rein.-con., Mission St. near 6th St., to G. Wagner, Inc., 180 South Park St., $152,000.

Calif., San Francisco—Hospital—Chinese Six Companies, 843 Stockton St., 4 story and basement, rein.-con., Jackson and Trenton Sts., to Barrett & Hilp, 918 Harrison St., $148,600. Noted Mar. 13.

Calif., Stockton—Bank and Office—Commercial & Savings Bank, Commercial-Savings Bank Bldg., 10 story and basement, Class A, Sutter St., to Lewis & Green, Commercial Bank Bldg., Stockton, $255,000. Noted Feb. 21.

Federal Government Work

PROPOSED WORK

Ky., Shelbyville—Post Office—Superv. Archt., Treasury Dept., Wash., D. C., plans new post office here.

O., Cincinnati—Lock Houses—U. S. Engineer, Cincinnati, plans 6 brick lock houses for Dams 34, 36 and 38, Ohio River.

BIDS DESIRED

N. Y., Oswego—Post Office, etc.—Apr. 24, by Treas. Dept. office of Superv. Archt., Wash., D. C., restoration stonework, new roof, gutters, down spouts, waterproofing, etc., for Post Office and Custom House; adv. E. N.-R. Apr. 3.

N. C., Thomasville—Post Office—Apr. 30, by Treas. Dept. at office Supervising Architect, Wash., D. C., 1 story, 62 x 64 ft. post office here; adv. E. N.-R. Apr. 3.

Fla., Jacksonville—Barge—Apr. 30, by U. S. Engineer, one steel barge 6 x 26 x 80 ft., for dredge Barnard; adv. E. N.-R. Apr. 3.

Ky., Louisville—Steel Boat Hulls and Derricks—Apr. 28, at U. S. Engineer Office, P. O. Box 72, 5 steel maneuver boat hulls and derricks; adv. E. N.-R. Apr. 3.

Ind., Leavenworth—Turbine—Apr. 5, by U. S. Engineer, P. O. Box 72, Louisville, furnishing one 33 in. vertical water turbine, with gearings, etc. Noted Mar. 20.

Ill., Chicago—Quarters—Apr. 22, by Treas. Dept., Supervising Architects Office, Wash., D. C., constructing quarters for pharmacists, nurses and attendants, medical officers, at Marine Hospital here.

Mo., Glasgow—Current Retards—Apr. 8, by U. S. Engineer Office, Kansas City, furnishing and placing 750 ft. current retards at Cambridge Bend in Missouri River near here.

Mo., Marthasville—Current Retards—Apr. 24, by U. S. Engineer Office, Kansas City, 1,363 lin.ft. current retards in Missouri River here.

Calif., San Diego—Buildings, etc.—Spec. 4933—Bureau Yards & Docks, Navy Dept., Wash., D. C., taking bids building, roads and service connections at Marine Base Corps, here.

BIDS RECEIVED

Ala., Florence—Generators—U. S. Dist. Engineer, Florence, 4 electric generators, 32,500 kva., from Allis-Chalmers Mfg. Co., West Allis, Milwaukee, Wis., $712,500. Noted Feb. 14

O., Cincinnati—Cement—U. S. Engineer, furnishing 6,200 bbl. cement for Dams 34, 36 and 38, Ohio River, from Wellston Iron Furnace Co., Jackson, 2,000 bbl. at $2.78, and 4,200 bbl. at $2.67. Noted Mar. 13.

Mo., Liberty—Post Office—Treas. Dept. at office Supervising Architect, Wash., D. C., constructing post office here, from W. D. Lovell, 1415 S. E. 8th St., Minneapolis, Minn., $51,700.

CONTRACTS AWARDED

Pa., Phila.—Foundations—Bureau Yards & Docks, Navy Dept., Wash., D. C., permanent foundations for frame buildings at hospital here, to Kaufman Constr. Co., 219 North American Bldg., $2,437 (120 days). Noted Mar. 27.

Va., Hampton Roads—Breakwater Pier—Spec. 4944—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to north breakwater pier at Naval operating base here, to A. R. Masters Co., Inc., Bank of Hampton Bldg., Hampton, $11,220. Noted Mar. 27.

Texas—Dredging—U. S. Engineer, Galveston, dredging Sabine-Neches Waterway, to Gulf Refining Co., Port Arthur, $66,360. Noted Mar. 27.

Ore., Portland—Roads—C. H. Purcell, dist. engr., Bureau Pub. Wks., U. S. Dept. Agriculture, 316 New Post Office Bldg., Portland, 24.8 mi. Austin-Unity Natl. Forest Rd., in Grant and Baker Counties, to Bauers & Bauers, Dayton, Wash., $193,227. Noted Mar. 13.

Unclassified

PROPOSED WORK

Gas Pipe Line — Connecticut — Eastern Connecticut Power Co., Putnam, plans laying 9 mi. gas pipe line between Putnam and Danielson. Private plans.

Elimination of Grade Crossing — New York—State Hy. Dept., Albany, takes bids about May 15, eliminating grade crossing on Delaware & Hudson R.R. near Cantys Cut and constructing 0.6 mi. road, Saratoga Co. $85,000. A. W. Brand, comr.

Power Development—New York—International Paper Co., Glen Park, Watertown, had surveys made hydro-electric power development along Black River at several mill sites. To exceed $300,000.

Swimming Tank—Herkimer, N. Y.—F. Carroll, 500 North Main St., plans 60 x 200 ft., rein.-con. swimming tank in amusement park.

Heating System—Lackawanna (Buffalo P. O.), N. Y.—See "Buildings."

Tunnels—Trenton, N. J.—Philadelphia & Reading R.R., Reading Terminal, Phila., plans tunnels at Hillcrest and Edgemere Aves., here. $70,000. S. T. Wagner, ch. engr.

Transmission Line—West Virginia—West Pennsylvania Power Co., West Pennsylvania Bldg., Pittsburgh, Pa., plans transmission line from Parkersburg to Woodlawn. To exceed $25,000.

Gas Mains — St. Petersburg, Fla. — See "Industrial Works."

Sea Wall — Waveland, Miss. — Hanover Co. voted $225,000 bonds sea wall. Noted Mar. 13.

Extension to Telephone Lines—Shreveport, La.—See "Buildings."

Transmission Line — Kentucky — Louisville Gas & Electric Co., 311 West Chestnut St., Louisville, plans 41 mi. transmission line from Louisville to Madison, Ind. To exceed $50,000. L. Strong, c/o owner ch. engr.

Subway—Ashtabula, O.—New York Central R.R., c/o G. C. Cleveland, ch. engr., West 3rd St. and St. Clair Ave., Cleveland, having plans prepared rein.-con. subway, 4 tracks, 56 ft. span, here. $400,000. C. F. Mayer, c/o owner, engr. grade separations.

Retaining Wall—Clevland, O.—Pennsylvania Co., 5716 Euclid Ave., had plans prepared 5,000 cu.yd. retaining wall, 250,000 cu.yd. dirt fill, and 900 ft. steel trestle. B. A. Noore, 5716 Euclid Ave., engr.

Subway—Conneaut, O.—New York Central R.R., c/o G. C. Cleveland, ch. engr., West 3rd St. and St. Clair Ave., Cleveland, having plans prepared rein.-con. subway, 4 tracks, 56 ft. span, here. $400,000. C. G. Mayer, c/o owner, engr. grade separations.

Grand Stand—Milwaukee, Wis.—State Fair Bd., O. E. Remey, sec., having plans prepared 650 ft. rein.-con. grand stand, 30 rows seats, 15,000 seating capacity, at State Fair Grounds. $30,000-$50,000. A. Peabody, Capitol, Madison, engr.

Electric Lighting System — Glencoe, Minn.—City having preliminary plans prepared electric lighting system . $100,000. R. W. Richardson, 301 Zenth Bldg., St. Paul, engr.

Athletic Field—Clayton, Mo.—See "Buildings."

Underpasses — Dallas, Tex. — Southern Pacific R.R., Southern Pacific Bldg., Houston, plans 2 concrete underpasses at White Rock reservoir. $50,000. Under supervision E. A. Kingsley, city engr. acting for city of Dallas.

Harbor Improvements — Long Beach, Calif.—Plans to vote on $5,000,000 bonds, harbor improvements, incl. wharves, repairs to existing wharves, dredging and reclaiming 1,371 acres on harbor front.

Hydro-Electric Development — Oroville, Calif.—Feather River Power Co., Hobart Bldg., San Francisco, having plans prepared 7 storage dams, concrete constant angle arch design; 2 large tunnels, total length 8 mi.; 70,000 to 80,000 hp. power house; 30 mi. roads, near here. From $10,000,000 to $12,000,000. Private plans.

Park Improvements—Richmond, Calif.—City plans to vote on $200,000 bonds, parking and boating center on lagoon east of Washington School. Involves considerable dredging. H. D. Chapman, city engr.

Grain Elevator—Halifax, N. S.—Dept. Trade & Commerce, Ottawa, Ont., plans grain elevator, here. $200,000. R. C. Wright, c/o Dept. Pub. Wks., Ottawa, archt.

Grain Elevator—Edmonton, Alta—Dept. Trade & Commerce. Ottawa, Ont., plans grain elevator, here. $1,000,000. R. C. Wright, c/o Dept. Pub. Wks., Ottawa, archt.

BIDS DESIRED

Power Development—Morrisville, Vt.—Apr. 17, by Water and Light Comrs., power development, Station 2, incl. dam, forebay, penstock lines, and power house, etc.; adv. E. N.-R. Apr. 3. Noted Nov. 1.

Transmission Line—New York Apr. 16, by H. C. Kurblanck, Bolton Landing, 22 mi. transmission line with 6 mi. distribution lines from Bolton to Chestertown, Harrison and Pottersville. $50,000. Utilities Eng. Co., Inc., 467 Bway., Albany, engrs.

Heating and Ventilating Apparatus — Brooklyn, N. Y.—Apr. 14, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., heating and ventilating apparatus in James Madison High School, Bedford Ave. from Ave. P. to Quentin Rd., for Bd. Educ., 500 Park Ave., New York City.

Fire Alarm System—Middletown, N. Y.—Apr. 23, by State Hospital Comn., Albany, fire alarm system in Middletown State Homeopathic Hospital, here. S. W. Jones, Albany, state archt.; adv. E. N.-R. Apr. 3.

Heating and Ventilating Apparatus—New York, N. Y.—Apr. 14, by W. H. Gompert, supt. School Buildings, Flatbush Ave., extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 99, 100th St. between Exterior St. and 1st Ave. extending through to East 99th St., also in James Monroe High School, Boynton Ave. from East 172nd to East 173rd Sts., here, for Bd. Educ., 500 Park Ave.

Subway Entrance—New York, N. Y.—Apr. 16, by Transit Comn., 49 Lafayette St., additional entrance to Canal St. Sta. (Loop Line) of Bway.-4th Ave. Rapid Transit R.R. G. McAneny, chn.

Electric Light Improvements—Metropolis, Ill.—See "Waterworks."

Electric Light Distributing System—Fredonia, Kan.—See "Industrial Works."

Underpass — Dallas, Tex. — Apr. 14, by Dallas Co., and St. Louis and Southwestern R.R., underpass and paving roadway, concrete, at Lemmon Ave. $60,000. Nagle Witt & Rollins, Court House, engrs.

BIDS RECEIVED

Grandstand—Norristown, Pa.—J. B. Long, engr., Boyer Arcade, 61 x 92 ft. rein.-con. grandstand for Bd. Educ., here, from Anthracite Bridge Co., 30 Genat St., Scranton, $51,200.

Lighting System—Long Beach, Calif.—Lighting systems on 4th and Magnolia Sts., from Osborn Electric Co., Pasadena, $19,555 and $28,574 respectively.

Street Lighting System—Los Angeles, Calif.—Electroliers in Brooklyn Ave. between Evergreen and Kearney Sts., from H. H. Walker, 1800 West 12th St., $44,818.

CONTRACTS AWARDED

Heating and Ventilating Apparatus — Flushing, N. Y.—Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 107, Franconia Ave., Upper Flushing, here, to Gillis & Geoghegan, 537 West Bway., New York, $114,200. Noted Mar. 20.

Heating and Ventilating Apparatus — New York, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in George Washington High School, Audubon Ave., to Almirall & Co., Inc., 1 Dominick St., $298,621; P. S. 79, East 181st St., and P. S. 70, Weeks Ave., to T. F. Hall Inc., 405 Lexington Ave., $116,590 and $136,150 respectively; P. S. 120, Broome St., to H. Starkman & Bros., 1482 2nd Ave., $2,789. Noted Mar. 20.

Heating and Ventilating Apparatus — Richmond Hill (branch of Jamaica), N. Y.—Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 108, Suwanee Ave., here, to Gillis & Geoghegan, 537 West Bway., New York. $114,700. Noted Mar. 20.

Power and Lighting System—Annapolis, Md.—State Rds. Comn., Baltimore, electric wiring and power equipment for Severn River Bridge, near here, to Imbach, Wozny & McCoy, Knickerbocker Bldg., $15,358. Former contract rescinded. Noted Mar. 20.

Storage Bins — Salina, Kan. — Robinson Milling Co., 6 concrete storage bins, 200,000 bu. capacity, to Stone Eng. Co., Merchants-Exch. Bldg., St. Louis, Mo. Est. cost $50,000.

Unclassified **(Continued)**

Pier—San Diego, Calif.—City, Contr. D for Pier 2, incl. concrete and pile foundations for shed, grading, concrete walls for center track depression, railroad tracks on pier and approaches, drainage system, concrete paving on south half of pier, etc., (city to furnish cement and track material) to R. E. McKee, 1616 Texas St., El Paso, Tex., $72,760.

Tunnels — California — Southern Pacific R.R. Co., 65 Market St., San Francisco, one 310 ft. and one 699 ft. concrete lined tunnel, near Yuba Pass, also one 2 mi. tunnel at Summit, Sierra Route, to Utah Constr. Co., Phelan Bldg., San Francisco, who sublet Yuba Pass tunnels to J. M. De Lucca, 5500 Kales Ave., Oakland. Noted Jan. 17.

Electrolier System—Fresno, Calif.—City Council, 258 electroliers on portion Ventura, Mono, Inyo, G Sts., etc., to Valley Electrical Supply Co., 1817 Tulare St., $53,480. Noted Mar. 13.

Lighting System — Huntington Beach, Calif.—See "Streets and Roads."

Traveling Conveyors—Sacramento, Calif.—See "Buildings."

Wharf—Ontario—Dept. Pub. Wks. Provincial Government, Ottawa, extension to wharf at Pelee Island, to E. Conroy, Peterboro, $32,758.

Grain Elevator—Edmonton, Alta.—Dept. Trade & Commerce, Parliament Bldg., Ottawa, Ont., 2,500,000 bu. grain elevator, to Carter & Aldinger, Union Bank Bldg., Winnipeg, Man. Noted Jan. 10.

Grain Elevator—Vancouver, B. C.—Terminal Grain Co., 207 Hastings St. W., 2,000,000 bu. grain elevator, 10 story workhouse, forty 18 x 100 ft. bins, to Pacific Constr. Co. Ltd., 510 Hastings St., $2,500,000.

Clearing Right of Way—British Columbia—British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, clearing 13 mi. power line right of way 100 ft. wide, from Stave Falls to north end of Alouette Lake, to Montizambest & Rolston, 510 Hastings St. W., Vancouver, $50,000.

Material and Equipment

PROPOSED WORK

Paving Stone, etc. — Buffalo, N. Y. — Commissioner Pub. Wks., rejected bids Mar. 7, paving stone, curbing, sand, gravel and crushed stone for street repairs during 1924. Noted Mar. 20.

Truck and Snow Plow—Frankfort, N. Y.—Town Bd. plans to purchase 10 or 12 ton truck and snow plow. $6,000-$7,000.

Paving Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., rejected bids Mar. 11, paving materials for various streets, 86,428 sq.yd. 3-in. vertical fibre brick, portland cement, etc. Noted Mar. 6.

Traveling Crane—Calif., Loyalton—See "Industrial Work." P. W.

Traction, etc.—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., plant to purchase small tractor, for hauling 20 in. pipe, traveling derrick and trench back filler.

Street Sweeper—Niagara Falls, Ont.—Plans to purchase street sweeper. $8,500.

BIDS DESIRED

Brick—Providence, R. I.—Apr. 7, by City Clerk, 400,000 hard body bricks.

Shovel—Gardner, Mass.—F. W. Proctor, City Supt. Highways, in market for steam or gasoline power shovel.

Road Roller and Scarifier, etc.—Holyoke, Mass.—Apr. 8, by Bd. Pub. Wks., steam road roller and scarifier, also 21E full caterpillar paver. G. Stone, asst. clk.

Sand, etc.—Brooklyn, N. Y.—Apr. 9, by E. Riegelman, boro pres., Boro Hall, 5,000 cu.yd. paving and concrete sand; 4,000 cu.yd. 1½ in. gravel or 4,000 cu.yd. 1½ in. broken stone; 400,000 gal. asphaltic road oil for cold application delivered by rail to any or all railroad stations as engineer may direct; 300,000 gal. asphaltic cement for sheet asphalt and bituminous concrete mixtures, A, in liquid form; 7,000 cu.yd. asphalt sand; 1,400 net tons limestone and other suitable inorganic dust; 250 tons paving pitch; 3,000 cu.yd. binder stone; 50,000 asphalt paving blocks, 2½ in. deep; 50,000 wood paving blocks.

Bitumen Top Dressing—Buffalo, N. Y.—Apr. 8, by Commissioner Pub. Wks., Municipal Bldg., bitumen top dressing for macadam roads during 1924. C. E. P. Babcock, Municipal Bldg., engr.

ROAD IMPROVEMENT—BLOOMFIELD, N. J.

Bids were opened by Bd. Freeholders of Essex Co., Newark, Feb. 8, for grading and paving Bay Ave. from Broad St., Bloomfield, to Glen-Ridge Montclair line, from (A) Franklin Contg. Co., 20 Washington Pl., Newark (awarded contract); (B) Jannarone Contg. Co., 225 Passaic Ave., Belleville; (C) Standard Bitulithic Co., 50 Church St., New York. The unit bids were as follows:

	A	B	C
3,500 cu.yd. earth excavation	$1.15	$1.25	$1.40
4,850 sq.yd. granite block, cement grouted on 6 in. portland cement concrete base	7.55	7.495	7.50
5,500 sq.yd. 3 in. sheet asphalt on 6 in. portland cement concrete base	3.50	3.58	3.43
200 lin.ft. blue stone header	1.80	1.50	1.50
11 manholes rebuilt	30.00	50.00	50.00
11 catch basins	75.00	100.00	130.00
100 lin.ft. granite header	2.50	1.75	2.00
6 capping monuments	14.00	9.00	11.00
1 cu.yd. extra rock excavation	5.00	5.00	5.00
1 cu.yd. extra concrete	12.00	12.00	12.00
Extended totals	$61,759	$62,612	$62,703

Road Material—Buffalo, N. Y.—Apr. 7, by T. H. McElvein, Jr., purch. agt. Erie Co. Highway Dept., various road building materials.

Lumber, etc.—New York, N. Y.—Apr. 7, by E. W. Buckley, comr. Purchase, Municipal Bldg., lumber and piles; also machinery and steel for North Channel bridge, to Dept. Plant & Structures.

Paving Blocks—New York, N. Y.—Apr. 9, by E. W. Buckley, comr. Purchase, Municipal Bldg., granite paving blocks, sand, broken stone and portland cement to Dept. Plant & Structures and Parks-Queens.

Snow Plows—New York, N. Y.—Apr. 4, by E. W. Buckley, comr. Purchase, Municipal Bldg., snow plows, parts and chain, to Dept. Street Cleaning.

Oil, etc.—Trenton, N. J.—Apr. 12, by City Comn., oil, etc., for streets. $20,000. J. E. English, City Hall, engr.

Bituminous Penetration Material—Harrisburg, Pa.—Apr. 9, by Dept. Highways, bituminous penetration material for 1924.

Concrete Mixer—Lewistown, Pa.—Apr. 7, by Boro. Council. power concrete mixer, between 5 and 10 cu.ft. capacity.

Cement—Alabama—Apr. 17, (extended date) by State Hy. Comn., Montgomery, 66,000 bbl. Portland Cement in cloth bags and 66,000 bbl. in paper bags, f.o.b. railroad cars at points on Louisville & Nashville R.R. Federal Aid Project 100. Noted Mar. 6.

Coal Machinery—Allais, Ky.—Columbus Mining Co., 332 South Michigan Ave., Chicago, in market for coal handling machinery, etc., in connection with development of mines, here.

Street Sweepers, etc.—Cleveland, O.—Apr. 11, automatic street sweepers and tractors for Div. Street Cleaning.

Road Oil, etc.—Milwaukee, Wis.—Apr. 7, by Central Bd. Purchases, City Hall. (1) 400.000 gal. medium light surfacing oil (2) 500,000 gal. light bituminous (3) 200,000 gal. medium tar (4a) 150,000 gal. heavy tar (4b) 100,000 gal. heavy tar.

Culverts — Buffalo, Minn. — Apr. 8, by Wright Co., corrugated metal and sectional concrete culverts, various sizes, for 1924 season. C. E. Stahl, Buffalo, engr.

Bucket Loaders — Minneapolis, Minn. — Apr. 8, by F. S. Gram, city purch. agt., 2 gasoline operated bucket loaders for gravel. Former bids rejected. N. W. Elsberg, city engr. Noted Feb. 28.

Fordson Tractors—St. Paul, Minn.—Apr. 8, by H. W. Austin, city purch. agt., 10 Fordson tractors. G. M. Shepard, city engr.

Cedar Blocks, etc.—Kansas City, Mo.—Kansas City Ry. Co., 1500 Grand Ave., in market for cedar blocks for repaving 100,000 yd. streets, also steel rails for car tracks. To exceed $400,000. G. B. Buffee, mgr.

Road Maintainer—Houston, Tex.—Apr. 14, by auditor Harris Co., one road maintainer. Howe & Wise, co. engrs.

Roller — Mineral Wells, Tex. — McClung Constr. Co. taking bids 10 ton roller, steam or gasoline.

BIDS RECEIVED

Bituminous Material—Albany, N. Y.—A. W. Brandt, comr. highways, Mar. 28, bituminous material, all divisions, 1 to 9 inclusive, from Standard Oil Co. of New York, 26 Bway., New York City, Contr. 1, Material "A," cut back, barrels in car load lot $0.1523, surface treatment tank car lot $0.1098, total $385,227, Contr. 2, Material "A," penetration method, tank car lot $0.0713, barrels car load lot $0.1074, total $114,924, Contr. 3, Material "A," hot application, tank car lot $0.0778, cold application, tank car lot $0.0723, total $39,439; from Barrett Co., 17 Battery Pl., New York City, Contr. 4, Material "T," penetration method, tank car lot $0.1036, barrels car load lot $0.1497, cut back, barrels car load lot $0.189, total $47,477, Contr. 5, Material "T," hot application, tank car lot $0.1035, cold application, tank car lot $0.103, barrels car load lot $0.155, total $298,971, Contr. 7, Material "T," cold application, tank car lot $0.103, total $25,750; from L. L. Gowdy, Contr. 6, Material "A," Emulsion, barrels car load lot $0.1535, total $144,367, Contr. 7, Material "T," liquid Trinidad asphalt, tank car lot $0.095, total $23,750. Noted Mar 20.

Tractor—Benson, Minn.—Swift Co., Mar. 19, 1 gas tractor, Crawler type, 40- to 60-hp., from Holt Mfg. Co., 417 Washington Ave. N., Minneapolis, $6,250 (factory); W. H. Ziegler Co., 425 South 5th St., Minneapolis, and Minneapolis Equipment Co., 309 South 5th St., Minneapolis, both $6,250 f.o.b. Benson. Noted Feb. 7.

CONTRACTS AWARDED

Steam Boiler Ashes—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., 4,000 cu.yd. hard coal clean steam boiler ashes, to Ames Building Material Co., 3437 Kingsbridge Rd., $4,760. Noted Mar. 13.

Brick, Cement, etc.—Kissimmee, Fla.—Osceola Co., material for 7½ mi. road, to Southern Clay Mfg. Co., Volunteer State Life Bldg., Chattanooga, Tenn., 32,300 sq. yd. No. 2 brick $37 per 1,000 delivered, to Osceola Hardware Co., Kissimmee, 3,350 bbl. cement $3.31 bbl. delivered. County will build road.

Cement — Milwaukee, Wis. — For 10,000 bbl. cement, to Wauwatosa Fuel & Supply Co., Wauwatosa, $2.75 per bbl.; 10,000 bbl. cement, to Schneider Fuel & Supply Co., 1546 Forest Home Ave., Milwaukee, $2.6125 per bbl. Noted Mar. 20.

Paving Materials—Minneapolis, Minn.—F. S. Gram, city purch. agt., to Purington Paving Brick Co., Galesburg, Ill., 1,500,000 vitr. paving brick $40.32 per M.; to Barrett Co., 1 19th Ave. S., 600 tons paving pitch $22.10 per ton in tank cars (cold) and $23.02 in trucks (hot), 600 tons refined tar $0.1095 per gal. in tanks (cold), $0.1149 in tank wagons (hot) and $0.1495 in tank cars (hot); to Trap Rock Co., Bway. and K St. N. E., 11,500 tons traprock $1.25 for ¾-in., $2 for ⅝-in. to 1¼-in., $2.25 for ¼- to ⅝-in., f.o.b. Dresser Junction, Wis.

Paving Mixer—St. Paul, Minn.—H. W. Austin, city purch. agt., gasoline power paving (concrete) mixer, non-tilting type, for Water Dept., to Austin Mchy. Corp., Dorr St. along tracks New York Central Ry., Toledo, O., $5,500. Noted Mar. 13.

Stone Crusher, Road Roller, etc.—Minneapolis, Minn.—F. S. Gram, city purch. agt., stone crusher to W. H. Ziegler Co., 425 South 5th St., $1,715 for Cedar Rapids jaw-crusher; gasoline driven road roller, to Huber Mfg. Co., 500 Washington Ave. N., $4,600 ($500 allowance granted on old machine). Noted Feb. 28.

Clamshell Bucket and Cement Sidewalk Tile—St. Paul, Minn.—H. W. Austin, city purch. agt., 2,000 cement sidewalk tile 18-in. square, and ten thousand 24-in. square, to Belvidere Cast Stone Co., 501 Concord St., $0.22 and $0.325 each respectively; clamshell bucket for Dept. Pub. Wks., to T. W. Rosholt Co., 421 South 5th St., Minneapolis, $588. Noted Mar. 6.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: April 23.

State Hospital Work

Central Islip, N. Y.

Sealed proposals for Construction, Heating, Sanitary and Electric Work—Cottages Nos. 4, 5, 6 and 7 (Cottages for Senior Assistant Physicians), Central Islip State Hospital, Central Islip, N. Y., will be received by the State Hospital Commission, until 3 o'clock P.M. on Wednesday, April 23, 1924, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the awards are made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specifications Nos. 4251, 4252, 4253 and 4254. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Central Islip State Hospital, Central Islip, N. Y., at the New York Office of the Department of Architecture, 18th Floor, Fuller Building, Broadway & 23rd St., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: March 26, 1924.

Bids: April 23 and 24.

Highway Work

Harrisburg, Pa.

Pennsylvania Department of Highways, Harrisburg, Pa.—Bids will be received April 23, 1924, for construction of 12 projects, totaling 32 miles; also April 24, 1924, for construction of 11 projects, totaling 39 miles, construction to be either bituminous surface on a concrete base or reinforced concrete. Projects situated in the following counties:

Allegheny
Beaver
Bradford
Butler
Carbon
Erie
Fayette
Huntingdon
Indiana
Lackawanna
Lehigh
Luzerne
Montgomery
Northampton
Potter
Susquehanna
Somerset
Washington
Westmoreland
York

Full particulars upon application to P. D. Wright, Secretary of Highways, Harrisburg, Pennsylvania.

Bids: April 28.

Sewer

Providence, R. I.

Sealed proposals will be received at the City Clerk's Office, until 2:15 o'clock p.m., Monday, April 28, 1924, for building Manton District Sewer, Sect. No. 33, from Manton Village to present end of sewer near Glenbridge Avenue.

Plans and specifications may be obtained at the office of the City Engineer, City Hall.

By order of the Board of Contract and Supply.

JOSEPH H. GAINOR,
Mayor and Chairman.
EVERETT D. MILLER, Clerk.

OFFICIAL PROPOSALS

Bids: April 11.

Pipe

Elizabeth, N. J.

SEALED PROPOSALS will be received by THE UNION COUNTY PARK COMMISSION at its office, 286 North Broad Street, Elizabeth, N. J., at 5.00 P.M., April 11th, 1924, for furnishing and delivering at Warinanco Park in Elizabeth and Roselle, N. J.

(A) 14,000 or more lineal feet of STANDARD DRAIN TILE 4 and 6 inches in diameter, also

(B) 12,000 or more lineal feet of CONCRETE SEWER PIPE varying in size from 6 to 18 inches including 50 or more "Y" branches of various sizes or

(ALTERNATE B) Same amount of CLAY SEWER PIPE.

SPECIFICATIONS for these materials may be examined at the above mentioned office.

Proposals to be considered must be submitted on forms supplied by the Engineer of the Commission and accompanied by a CERTIFIED CHECK for at least 10% of the amount of the bid in accordance with the specifications.

The Commission reserves the right to reject any or all bids, waive any or all informalities and award contracts either in part or as a whole as may be deemed best for the interest of THE UNION COUNTY PARK COMMISSION.

W. RICHMOND TRACY,
Engineer and Secretary.

Bids: April 23.

Electrical Equipment

CUSHMAN POWER PROJECT

Tacoma, Wash.

Sealed proposals will be received at the office of the Commissioner of Light and Water, Tacoma, Washington, between the hours of 12:00 M. and 2:00 P.M., April Twenty-third, 1924, for the manufacture and delivery of Electrical Equipment for the Cushman Power Project, consisting of 8—110,000 volt, 8—50,000 volt, 16—15,000 volt and 10—7,500 volt Oil Circuit Breakers; 18—110,000 volt, 123—15,000 volt and 60—7,500 volt Disconnecting Switches; Five Switchboards; 4—110,000 volt, 2—50,000 volt, 2—13,200 volt and 1—2,300 volt Lightning Arresters and Choke Coils; and accessories, in accordance with the Specifications therefor, copies of which may be obtained at this office by intending Bidders upon deposit of Twenty-five ($25.00) Dollars.

IRA S. DAVISSON,
Commissioner of Light & Water,
Tacoma, Washington

Bids: April 21.

Roads and Bridges

STATE OF NEW JERSEY
STATE HIGHWAY COMMISSION

Trenton, N. J.

Notice is hereby given that sealed bids will be received by the State Highway Commission of New Jersey for the following:

ROUTE NO. 10, SECTION NO. 1-A

Construction of Route No. 10, Section No. 1A, Arcadian Way to Fort Lee Ferry, in the County of Bergen. Estimated 18,400 sq.yds. double line reinforced concrete; 8,620 lin.ft. of Granite Curb.

ROUTE NO. 12, SECTION NO. 6

Construction of Route No. 12, Section No. 6, Port Colden to Stephensburg, in the County of Warren. Estimated 23,788 cu.yds. earth excavation; 64,810 sq.yds. double line reinforced concrete pavement; and including nine small span bridges.

OFFICIAL PROPOSALS

ROUTE NO. 12, SECTION NO. 7

Construction of Route No. 12, Section No. 7, Stephensburg to Hackettstown, in the County of Warren. Estimated 24,754 cu.yds. earth excavation; 50,302 sq.yds. double line reinforced concrete pavement; and including four small span bridges.

Bids for the above will be received at the offices of the State Highway Commission, 9th floor, Broad Street Bank Building, Trenton, New Jersey, on Monday, April 21st, 1924, at twelve o'clock noon (12:00 Noon), Standard Time, and will be opened and read immediately thereafter.

Drawings, specifications and form of bid, contract and bond for the proposed work are on file in the office of the State Highway Department, Trenton, New Jersey, and may be inspected by prospective bidders. Plans will be furnished on a deposit of Ten Dollars ($10.00) for each project upon application to the State Highway Department, Room No. 901, Broad Street Bank Building, Trenton, New Jersey. Bids must be made on the standard proposal forms in the manner designated in the 1924 specifications and must be enclosed in sealed special addressed envelopes bearing the name and address of the bidder and name and section of the route on the outside, and must be accompanied by a certified check drawn to the order of the Treasurer of the State of New Jersey for not less than ten per cent (10%) of the amount of the bid, provided that the said certified check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the above place on or before the hour named. Copies of the standard proposal form and special addressed envelopes will be furnished on application. Bids not enclosed in special addressed envelopes will be considered informal and will not be opened.

Each bidder must accompany his bid with a certificate from a surety company duly authorized to do business in this State, stating that such surety company will provide said bidder with a bond in such sum as is required in and in accordance with the provisions of the said specifications, conditioned for the faithful performance of the provisions of the contract and specifications. Each bidder must also accompany his bid with a Statement of Equipment properly filled out.

By order of the State Highway Commission.

A. LEE GROVER, Secretary.

Bids: August 29, 1924.

QUEENSLAND GOVERNMENT

Twin Screw Trailing Suction Hopper Dredger

Brisbane, Queensland, Australia.

Tenders are invited until noon on Friday, 29th August, 1924, for the Construction and Delivery of a Twin Screw Trailing Suction Hopper Dredger for the Government of Queensland, Australia. Tenders should be enclosed in sealed envelopes endorsed "Tender for Dredger," and addressed to The Under Secretary, The Treasury, Brisbane, Queensland, Australia. General Specification and Conditions of Contract may be obtained by intending contractors at the Offices of the High Commissioner for Australia, 44 Whitehall Street, New York. Tenders should be on the form attached to the General Specification. The lowest or any tender will not necessarily be accepted.

J. H. STANLEY,
Acting Under Secretary.
The Treasury, Brisbane, Queensland,
15th February, 1924.

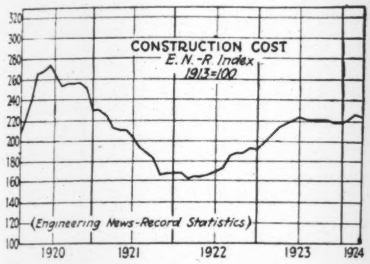
CONSTRUCTION NEWS

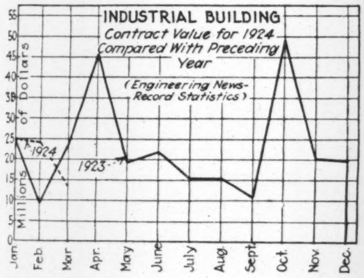
Engineering News-Record, April 10, 1924

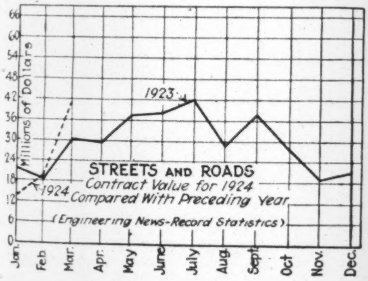
The Construction Barometer

Increase in Volume of March Construction Due to Lower Cost—Materials Stocks Adequate for Present Needs—Little Buying for Replenishment Despite Easier Prices

HESITANCY in buying characterizes the materials market at the present time. Prices are easier yet there is no forward purchasing tendency. Reserve stocks of materials are adequate for present needs but replenishment will be necessary before the season advances much further. That this condition is temporary is indicated by the high rate of production now being maintained in most of the basic industries. While the bulk of the present output is on orders already placed, there is some confidence in demand for the near future, otherwise production would decline. The increased volume of March construction consequent to decreased cost is shown in the accompanying charts. The *Engineering News-Record* Cost Index Number for April is 221.6 (1913 = 100) as compared with 224.7 last month and 213.5, one year ago.







Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Mar. 20	$17,126,000	$31,125,000	$48,251,000
Mar. 27	28,345,000	23,151,000	51,496,000
Apr. 3	23,838,000	20,548,000	44,386,000
3 weeks	$69,309,000	$74,824,000	$144,133,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

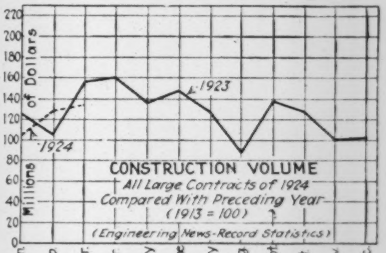
Week Ended	No.	Public Work	No.	Private Work
Mar. 20	13	$4,152,000	62	$24,070,000
Mar. 27	15	3,416,000	33	17,317,000
Apr. 3	16	6,553,000	58	17,247,000
3 weeks	44	$14,121,000	153	$58,634,000

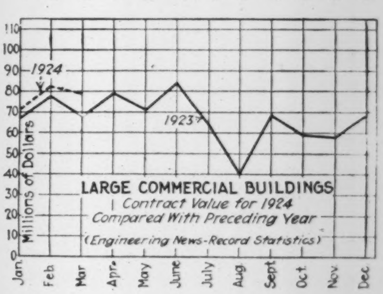
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

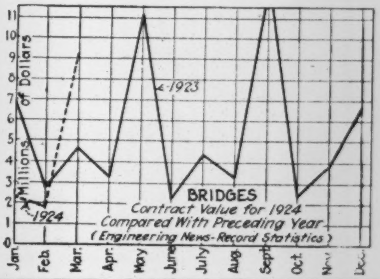
Week Ended	Private	All Buildings	Public		
			Streets and Roads	Waterworks and Sewers	All Public
Mar. 20	40	64	81	47	256
Mar. 27	28	50	99	41	262
Apr. 3	37	53	127	50	301

DEMAND RESTRICTED DESPITE LOWER PRICES

	Quoted on Apr. 10 at	Price was	On
Structurals, Pittsburgh, 100 lb....	$2.30 @2.50	$2.40 @2.50	Mar. 13
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M. ft....	64.00	65.00	Mar. 13
Fir, San Fran., M.ft...	36.00	38.00	Jan. 24
Common labor, hr....	.55	.54	Feb. 28







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
Apr. 11	Cleveland, O.	Apr. 3
Apr. 14	Downington, Pa.	Mar. 27
Apr. 14	Newton, N. J. Adv. Apr. 10.	Apr. 10
Apr. 15	Jamestown, N. Y.	Mar. 27
Apr. 15	Dubois, Pa.	Apr. 3
Apr. 15	St. Paul, Minn.	Apr. 10
Apr. 16	Cleveland, O.	Apr. 10
Apr. 17	Altheimer, Ark.	Apr. 10
Apr. 18	Plattsburg, N. Y.	Apr. 10
Apr. 21	Buffalo, N. Y.	Mar. 27
Apr. 21	Albany, N. Y. Adv. Apr. 10.	Apr. 10
Apr. 21	St. Paul, Minn.	Apr. 10
Apr. 21	Smiths Falls, Ont.	Apr. 10
Apr. 24	Metropolis, Ill.	Apr. 3
Apr. 24	Roselle, Ill.	Apr. 10
May 5	Springfield, Mass. Adv. Apr. 10.	Apr. 10
May 6	Hinsdale, Ill. Adv. Apr. 10.	Apr. 10

SEWERS

Bids Close		See Eng. News-Record
Apr. 11	Mercer, Pa.	Mar. 27
Apr. 11	New Jersey	Apr. 3
Apr. 14	Ventnor, N. J.	Apr. 3
Apr. 14	Long Island City, N. Y.	Apr. 10
Apr. 14	St. George, N. Y.	Apr. 10
Apr. 14	Detroit, Mich.	Apr. 10
Apr. 15	Ely, Minn.	Apr. 3
Apr. 15	Lubbock, Tex.	Apr. 3
Apr. 15	Elizabethtown, Pa.	Mar. 20
Apr. 15	Grand Rapids, Mich.	Mar. 27
Apr. 15	Marion, O.	Mar. 27
Apr. 15	New York, N. Y.	Apr 10
Apr. 15	Gloversville, N. Y.	Apr. 10
Apr. 15	Long Island City, N. Y.	Apr. 10
Apr. 16	Phila., Pa.	Apr. 3
Apr. 17	New Brunswick, N. J.	Apr. 10
Apr. 20	Akron, O.	Apr. 10
Apr. 21	Plainfield, N. J. Adv. Apr. 10.	Apr. 10
Apr. 23	Longmeadow, Mass.	Mar. 27
Apr. 28	Providence, R. I. Adv. Apr. 3 and 10.	Apr. 3
Apr. 29	Indianapolis, Ind. Adv. Apr. 10.	Apr. 10
May 19	Royal Oak, Mich. Adv. Apr. 10.	Apr. 10

BRIDGES

Bids Close		See Eng. News-Record
Apr. 11	Ohio	Apr. 3
Apr. 11	Le Roy, N. Y.	Mar. 27
Apr. 14	Eufaula, Ala.	Mar. 20
Apr. 14	Aurora, Ill.	Apr. 3
Apr. 15	Chamberlain, S. D.	Mar. 13
Apr. 15	Arkansas	Mar. 27

Bids Close		See Eng. News-Record
Apr. 15	Indiana	Apr. 10
Apr. 15	Nebraska	Apr. 10
Apr. 16	Coleman, Tex.	Apr. 10
Apr. 17	Scarsdale, N. Y.	Apr. 3
	Adv. Mar. 27 to Apr. 10.	
Apr. 17	Maine	Apr. 10
Apr. 17	Mt. Clemens, Mich.	Apr. 10
Apr. 18	Alabama	Apr. 3
Apr. 18	Milford, O.	Mar. 27
Apr. 18	Cambridge, Ill.	Apr. 10
Apr. 18	Newton, N. C.	Apr. 10
Apr. 19	Georgia	Apr. 10
Apr. 21	Pittston, Pa.	Apr. 3
Apr. 21	Jacksonville, Fla.	Apr. 10
Apr. 21	California	Apr. 10
Apr. 22	East St. Louis, Ill.	Mar. 27
Apr. 23	Lakewood, O.	Apr. 3
Apr. 23	Cleveland, O.	Apr. 10
Apr. 24	Akron, O.	Apr. 10
Apr. 24	New Jersey	Apr. 10
	Adv. Apr. 10.	
May 1	Tientsen, North China	Oct. 11
May 8	Greenville, Miss.	Apr. 3
May 20	Corpus Christi, Tex.	Apr. 10
May 26	Sunbury, Pa.	Apr. 10
	Adv. Apr. 10.	

RAILWAYS

Bids Close		See Eng. News-Record
Apr. 15	New York	Mar. 20
	Adv. Mar. 20 to Apr. 3.	
Apr. 17	Ontario	Apr. 10

EXCAVATION, DRAINAGE IRRIGATION

Bids Close		See Eng. News-Record
Apr. 15	Rochester, N. Y.	Mar. 20
	Adv. Mar. 20 to Apr. 10.	
Apr. 15	New York	Mar. 20
	Adv. Mar. 20 to Apr. 10.	
Apr. 24	Royal Oak, Mich.	Apr. 3
	Adv. Apr. 3 and 10.	
May 6	Minneapolis, Minn.	Mar. 20
May 20	Corpus Christi, Tex.	Apr. 10

STREETS AND ROADS

Bids Close		See Eng. News-Record
Apr. 11	Ohio	Apr. 3
Apr. 11	Bexley (Columbus P. O.), O.	Mar. 27
Apr. 11	Richmond, Va.	Apr. 10
Apr. 11	South Orange, N. J.	Apr. 10
Apr. 14	West Union, W. Va.	Apr. 3
Apr. 14	St. Albans, W. Va.	Mar. 20
Apr. 14	New Jersey	Mar. 27
Apr. 14	Michigan	Apr. 3
Apr. 14	Central Falls, R. I.	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 14	Crown Point, Ind.	Apr. 3
Apr. 14	Kansas City, Kan.	Apr. 3
Apr. 14	Wisconsin	Apr. 3
Apr. 14	Long Island City, N. Y.	Apr. 10
Apr. 14	Harvey, Ill.	Apr. 10
Apr. 14	Granfield, Okla.	Apr. 10
Apr. 14	Milwaukee, Wis.	Apr. 10
Apr. 14	Dalton, Ga.	Apr. 10
Apr. 14	Omaha, Neb.	Apr. 10
Apr. 15	Lubbock, Tex.	Apr. 3
Apr. 15	Letchworth Park (Portageville P. O.), N. Y.	Apr. 3
Apr. 15	Tonawanda, N. Y.	Mar. 20
	Adv. Mar. 20 to Apr. 10.	
Apr. 15	Pottsville, Pa.	Mar. 27
Apr. 15	Bay City, Tex.	Mar. 27
Apr. 15	West Virginia	Mar. 27
Apr. 15	New Mexico	Mar. 27
Apr. 15	St. James, Minn.	Mar. 27
Apr. 15	Charleston, W. Va.	Apr. 3
Apr. 15	Michigan	Apr. 3
Apr. 15	Gloversville, N. Y.	Apr. 3
Apr. 15	Linton, Ind.	Apr. 3
Apr. 15	Hastings, Minn.	Apr. 10
Apr. 15	New York, N. Y.	Apr. 10
Apr. 15	Ottawa, Ont.	Apr. 10
Apr. 15	Nebraska	Apr. 10
Apr. 15	Nova Scotia	Apr. 10
Apr. 15	Denver, Colo.	Apr. 10
Apr. 15	Colorado	Apr. 10
Apr. 15	Buffalo, N. Y.	Apr. 10
Apr. 16	Michigan	Apr. 3
Apr. 16	Richmond Heights (St. Louis P. O.), Mo.	Apr. 3
Apr. 16	New Philadelphia, O.	Apr. 3
Apr. 16	Phila., Pa.	Apr. 3
Apr. 16	Valley City, N. D.	Apr. 3
Apr. 16	Poughkeepsie, N. Y.	Apr. 10
	Adv. Apr. 10.	
Apr. 16	Quebec	Apr. 10
Apr. 16	Clayton, Mo.	Apr. 10
Apr. 16	Michigan	Apr. 10
Apr. 16	Nebraska	Apr. 10
Apr. 16	San Francisco, Calif.	Apr. 10
Apr. 16	New York, N. Y.	Apr. 10
Apr. 17	Cooperstown, N. D.	Apr. 3
Apr. 17	West Virginia	Mar. 27
Apr. 17	Maine	Apr. 3
Apr. 17	Charleston, W. Va.	Apr. 3
Apr. 17	Janesville, Wis.	Apr. 10
	Adv. Apr. 10.	
Apr. 17	Gallatin, Tenn.	Apr. 10
Apr. 17	Michigan	Apr. 10
Apr. 17	Nebraska	Apr. 10
Apr. 17	Ecru, Miss.	Apr. 10
Apr. 17	Newark, N. J.	Apr. 10
Apr. 17	New Brunswick, N. J.	Apr. 10
Apr. 17	New York, N. Y.	Apr. 10
Apr. 18	Alabama	Apr. 3
Apr. 18	New York	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 18	Buffalo, N. Y.	Apr. 10
Apr. 18	Florida	Apr. 10
Apr. 18	Plattsburg, N. Y.	Apr. 10
Apr. 18	Nebraska	Apr. 10
Apr. 18	Cleveland, O.	Apr. 10
Apr. 19	Williamson, W. Va.	Apr. 10
Apr. 19	Cleveland, O.	Apr. 10
Apr. 19	Georgia	Apr. 10
Apr. 21	New Jersey	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 21	South Bend, Ind.	Apr. 3
Apr. 21	Michigan	Apr. 3
Apr. 21	New Hartford, N. Y.	Apr. 3
Apr. 21	St. Paul, Minn.	Apr. 10
Apr. 21	California	Apr. 10
Apr. 21	San Anselmo, Calif.	Apr. 10
Apr. 21	Kirksville, Mo.	Apr. 10
Apr. 21	Daly City (Branch of San Francisco), Calif.	Apr. 10
Apr. 22	Hopatcong, N. J.	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 22	Michigan	Apr. 3
Apr. 22	Dodge City, Kan	Apr. 3
Apr. 22	Grand Rapids, Minn.	Apr. 10
Apr. 22	Minnesota	Apr. 10
Apr. 22	Kentucky	Apr. 10
Apr. 22	Bridgeton, N. J.	Apr. 10
Apr. 23	Ventura, Calif.	Apr. 3
Apr. 23	Pennsylvania	Apr. 10
	Adv. Apr. 3 and 10.	
Apr. 23	Benson, Minn.	Apr. 10
Apr. 24	Sanderson, Tex.	Apr. 3
Apr. 24	Arkansas	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 24	Topeka, Kan.	Mar. 27
Apr. 24	Pennsylvania	Apr. 10
	Adv. Apr. 3 and 10.	
Apr. 24	Michigan	Apr. 10
Apr. 24	Wisconsin	Apr. 10
Apr. 24	Pipestone, Minn.	Apr. 10
Apr. 25	St. Louis, Mo.	Mar. 27
Apr. 25	Sedan, Kan.	Apr. 3
Apr. 25	Liberty, Tex.	Apr. 3
Apr. 25	Troy, Kan.	Apr. 10
Apr. 25	Michigan	Apr. 10
Apr. 28	Emporia, Kan.	Apr. 10
Apr. 28	Moundsville, W. Va.	Apr. 10
Apr. 28	San Antonio, Tex.	Apr. 10
Apr. 28	Pennsylvania	Apr. 10
	Adv. Apr. 10.	
Apr. 28	New Jersey	Apr. 10
	Adv. Apr. 10.	
Apr. 28	California	Apr. 10
Apr. 29	Pennsylvania	Apr. 10
	Adv. Apr. 10.	
Apr. 30	Delaware	Apr. 10
	Adv. Apr. 10.	
Apr. 30	Leavenworth, Kan.	Apr. 10
May 1	Duluth, Minn.	Mar. 20
May 1	Michigan	Apr. 10
May 6	Ft. Scott, Kan.	Apr. 3
May 6	Princeton, N. J.	Apr. 10
May 14	Baton Rouge, La.	Apr. 10
	Adv. Apr. 10.	
June 1	Duluth, Minn.	Apr. 3

INDUSTRIAL WORKS

Bids Close		See Eng. News-Record
Apr. 14	Fredonia, Kan.	Apr. 3
Apr. 14	Long Island City, N. Y.	Apr. 10
Apr. 15	Somerset, Pa.	Mar. 20
Apr. 15	Zanesville, O.	Apr. 10
Apr. 15	New Orleans, La.	Apr. 10
Apr. 15	Phila., Pa.	Apr. 10
Apr. 15	Geneva, O.	Apr. 10
Apr. 17	Buffalo, N. Y.	Mar. 27
	Adv. Mar. 20 to Apr. 10.	
Apr. 18	Duluth, Minn.	Apr. 10
Apr. 30	Wellington, New Zealand	Apr. 3
May 21	Wellington, New Zealand	Apr. 3
May 21	Wellington, New Zealand	Jan. 10

BUILDINGS

Bids Close		See Eng. News-Record
Apr. 12	Ardmore, Pa.	Apr. 3
Apr. 14	Haverstraw, N. Y.	Apr. 3
Apr. 14	Forty Fort, Pa.	Apr. 10
Apr. 14	Bridgeton, N. J.	Apr. 10
Apr. 14	Trenton, N. J.	Apr. 10
Apr. 14	Detroit, Mich.	Apr. 10
Apr. 14	Camp Hill, Pa.	Apr. 10
Apr. 15	Aurora, Ill.	Apr. 3
Apr. 15	Atlantic City, N. J.	Apr. 3
Apr. 15	Somerset, Pa.	Mar. 20
Apr. 15	Woodbury, N. J.	Mar. 27
Apr. 15	Norman, Okla.	Apr. 10
Apr. 15	Hazelton, Pa.	Apr. 10
Apr. 15	North Milwaukee, Wis.	Apr. 10
Apr. 15	Anna, Ill.	Apr. 10
Apr. 16	Denver, Colo.	Mar. 27
Apr. 16	Stratford, Conn.	Apr. 10
Apr. 18	Elizabethtown, Pa.	Apr. 10
Apr. 18	Akron, O.	Apr. 10
Apr. 18	Hannibal, Mo.	Apr. 10
Apr. 19	Orange, N. J.	Apr. 10
Apr. 19	New Orleans, La.	Mar. 27
Apr. 19	Muskogee, Okla.	Apr. 10
Apr. 22	Jamaica, N. Y.	Apr. 3
Apr. 22	Flushing, N. Y.	Apr. 3
Apr. 22	Le Roy, N. Y.	Apr. 10
Apr. 23	Central Islip, N. Y.	Apr. 10
	Adv. Apr. 3 and 10.	
Apr. 23	Buffalo, N. Y.	Apr. 10
Apr. 23	St. John, N. B.	Apr. 10
Apr. 24	Reading, Pa.	Apr. 3
Apr. 24	Boston, Mass.	Apr. 3
Apr. 25	Springfield, O.	Apr. 10
Apr. 25	Baltimore, Md.	Apr. 10
Apr. 29	Ohio	Apr. 10
May 1	Youngstown, O.	Feb. 7
May 1	Cedar Grove, N. J.	Apr. 10
May 2	Koch, Mo.	Apr. 3

FEDERAL GOVERNMENT WORK

Bids Close		See Eng. News-Record
Apr. 12	Dredging — Providence, R. I.	Mar. 13
Apr. 14	Dredging—New York, N. Y.	Mar. 27
Apr. 14	Stone—Wilmington, Del.	Mar. 27
Apr. 15	Post Office — Hastings, Mich.	Mar. 20
Apr. 16	Road—California	Apr. 10
Apr. 17	Waterworks—Fort Hamilton (Sta. Brooklyn), N. Y.	Apr. 10
	Adv. Apr. 10.	
Apr. 18	Riprap—Detroit, Mich.	Mar. 20
	Adv. Mar. 20 to Apr. 10.	
Apr. 19	Excavating—Wilmington, Del.	Mar. 20
Apr. 22	Steel Gates — Florence, Ala.	Mar. 13
	Adv. Mar. 27 to Apr. 10.	
Apr. 22	Post Office—Water Valley, Miss.	Mar. 27
Apr. 22	Quarters—Chicago, Ill.	Apr. 3
Apr. 23	Ammunition Depot—Puget Sound, Wash.	Mar. 27
Apr. 24	Post Office—Oswego, N. Y.	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 24	Current Retards—Marthasville, Mo.	Apr. 3
Apr. 25	Lock—Fords Ferry, Ky.	Mar. 27
	Adv. Mar. 27 to Apr. 10.	
Apr. 28	Steel Boat Hulls and Derricks—Louisville, Ky.	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 29	Walls—Fords Ferry, Ky.	Mar. 27
Apr. 29	Motor Launch—Detroit, Mich.	Apr. 10
	Adv. Apr. 10.	
Apr. 30	Barge—Jacksonville, Fla.	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 30	Post Office—Thomasville, N. C.	Apr. 3
	Adv. Apr. 3 and 10.	
May 8	Post Office—Bakersfield, Calif.	Apr. 10
	Adv. Apr. 3 and 10.	

UNCLASSIFIED

Bids Close		See Eng. News-Record
Apr. 11	Park—Trenton, N. J.	Apr. 10
Apr. 14	Heating and Ventilating Apparatus—New York, N. Y.	Apr. 3
Apr. 14	Heating and Ventilating Apparatus—Brooklyn, N. Y.	Apr. 3
Apr. 15	Hot Water Supply System—Perrysburg, N. Y.	Apr. 10
Apr. 15	Fire Alarm System—New York, N. Y.	Apr. 10
Apr. 15	Stadium—Morgantown, W. Va.	Apr. 10
Apr. 16	Subway Entrance—New York, N. Y.	Apr. 3
Apr. 16	Bulkhead, etc.—Chicago, Ill.	Apr. 10
	Adv. Apr. 10.	
Apr. 17	Hydro Electric Development Morrisville, Vt.	Apr. 3
	Adv. Apr. 3 and 10.	
Apr. 17	Ferry House, etc.—New Orleans, La.	Apr. 10
Apr. 18	Generator—Turlock, Calif.	Apr. 10
Apr. 23	Fire Alarm System—Middletown, N. Y.	Apr. 3
Apr. 25	Subway—New York, N. Y.	Apr. 10
Apr. 30	Headworks—Wellington, New Zealand	Dec. 13
May 20	Transfer Shed, etc.—Corpus Christi, Tex.	Apr. 10

MATERIAL AND EQUIPMENT

Bids Close		See Eng. News-Record
Apr. 11	Paving Materials—Chicopee, Mass.	Apr. 10
Apr. 11	Tier Plates—New York, N. Y.	Apr. 10
Apr. 12	Oil, etc.—Trenton, N. J.	Apr. 3
Apr. 14	Road Maintainer — Houston, Tex.	Apr. 3
Apr. 14	Trucks—St. George, N. Y.	Apr. 10
Apr. 15	Crushed Stone, etc.—Wilmington, Del.	Apr. 10
Apr. 15	Brick, Portland Cement, etc.—St. Paul, Minn.	Apr. 10
Apr. 15	Sand Grit, etc.—Long Island City, N. Y.	Apr. 10
Apr. 16	Power House Equipment—Tacoma, Wash.	Mar. 13
Apr. 16	Paving Materials—Springfield, Mass.	Apr. 10
Apr. 16	Asphalt Binder, etc.—New York, N. Y.	Apr. 10
Apr. 17	Cement—Alabama	Apr. 3
Apr. 17	Cement—Buffalo, N. Y.	Apr. 10
Apr. 18	Asphaltic Binder—Plattsburg, N. Y.	Apr. 10
Apr. 21	Stone, etc.—Trenton, N. J.	Apr. 10

Bids Close		See Eng. News-Record
Apr. 22	Road Oil — Hartford, Conn.	Apr. 10
Apr. 22	Road Material—Louisiana.	Apr. 10
Apr. 23	Electrical Equipment — Tacoma, Wash.	Mar. 27
Apr. 25	Condensers, etc.—Cleveland, O.	Apr. 10
May 15	Turbine — Prince Albert, Sask.	Mar. 27
Aug. 29	Dredger—Brisbane, Queensland, Australia	Apr. 10

Adv. Apr. 10.

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Binghamton — Common Council voted $15,000 bonds altering pumps and equipment at pumping plant. B. Winsor, comr. Pub. Wks.

N. Y., Potsdam—Bd. Village Trustees had plans prepared water supply. $275,000. J. P. Wells, Cutler Bldg., Rochester, hydraulic engr.

W. Va., Piedmont — Election Apr. 23, $30,000 bonds, chlorinating and filtration plant, pump and pumping system.

W. Va., St. Marys—Election Apr. 22, $60,000 bonds, improving waterworks, incl. wells, new pumping machinery, additional mains, etc. J. M. Rice, engr.

Kentucky—City of Morganfield plans intake line in Ohio River, pumping station at Uniontown and 4 mi. supply line to Morganfield. $90,000. Gannett, Seelye & Fleming, Rand Bldg., Memphis, Tenn., engrs. Noted Dec. 13 under Morganfield.

Ala., Bessemer — Alabama Water Co., American Trust Bldg., Birmingham, plans to install electric operated pumping machinery. $175,000.

Miss., Magee—Soon takes bids electrically driven pumping unit, etc. $50,000.

O., Columbus—See "Streets and Roads."

Ill., Hammond — Having preliminary plans prepared enlarging intake, pumping equipment and main extensions. $150,000.

Wis., Milwaukee—Central Bd. Purchases, soon takes bids 3 chlorinators for Riverside Pumping Station, $5,000. J. Schwada city engr.

Minn., Waconia — Making plans waterworks system. Election soon, $25,000 bonds. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs.

Kan., Riley—Election Apr. 14, $31,000 bonds, 50,000 gal. tank on tower, 11,136 lin.ft. 4-, 6-, and 8-in. pipe, 3,700 ft. 2-in. galvanized pipe, 23 hydrants, deep well, etc. Hensington Eng. Co., Natl. Bldg., Omaha, engrs. Noted Mar. 31.

Neb., Lincoln—Lincoln Water Co. soon takes bids extending 4, 6 and 8 in. pipe lines. $16,200. Private plans.

Neb., Republican City—C. E. McPherson, city clk., received no bids Mar. 20, improving waterworks. $20,000. Noted Mar. 20.

Neb., Scottishbluff—Plans 27,600 lin.ft. 4, 6 and 8 in. c.i. mains in various streets. J. Fuehrig, City Hall, engr.

Mo., Perryville—Plans waterworks, filtration plant, tank and tower, distribution mains, etc. $75,000. Engineer not selected.

Tex., Snyder — Having plans prepared complete waterworks. $50,000. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Okla., Cheyenne—Voted $35,000 bonds and preparing plans waterworks, incl. pumps, reservoir and mains. Noted Sept. 27.

Okla., Newkirk—Defeated $110,000 bonds, new source of supply, wells, pipe lines, etc. H. E. Musson, Grain Exch. Bldg., Oklahoma City, engr. Noted Mar. 6.

Wash., Kelso—Making plans improvements to water system, incl. 2 m.g. reservoir. $200,000. U. G. Jackson, city engr.

Calif., Anaheim—Having plans prepared improvements to water system, 450 lin.ft. 16 in., 3,230 lin.ft. 12 in., 3,110 lin.ft. 10 in., 14,620 lin.ft. 6 in. and 31,491 lin.ft. 4 in. c.i. pipe, well, pump, motor, fittings, fire hydrants, etc. O. E. Steward, city engr. Noted Apr. 3.

Calif., Newport Beach—Plans to increase capacity from 2,700,000 to 5,000,000 g.p.d., for fire protection.

Calif., Ontario—Plans to vote on $60,000 bonds, 10 m.g. reservoir.

Calif., Whittier—Plans to vote on $100,000 bonds, extensions to water system.

Calif., San Francisco — City and San Francisco Co., Bay-Pulgas pumping plant, Hetch Hetchy Project, Contr. 94, to De-Laval Steam Turbine Co., Rialto Bldg., $5,125. Noted Apr. 3.

Que., Montreal—Voted $300,000 for improvements incl. tunnel under Lachine Canal near Wellington Bridge for passage of three 48 in. water conduits tunnel under Canadian Natl. R.R. tracks near Atwater Ave., for two 48 in. water conduits, and viaduct under Canadian Natl. R.R. tracks near Atwater Ave. C. J. Des Baillets, ch. engr. Aqueduct Bd.

Que., Verdun—Plans to expend $60,000 for extending and enlarging waterworks, and installing additional filters. H. Hadley, city engr.

Ont., Campbellford — Plans extending mains, 10,000 ft. 6 in. c.i. pipe, gate valves, hydrants, etc. $30,000. Engineer not selected.

Ont., Smiths Falls—Having plans prepared and soon takes bids filtration plant, concrete and brick building, mechanical filters, c.i. pipe, etc. $35,000. E. H. Darling, Home Bank Bldg., Hamilton, engrs. Noted Mar. 13.

BIDS DESIRED

Mass., Springfield—May 5, by Bd. Water Comrs., 4 covered masonry filters, buildings, etc. E. E. Lochridge, ch. engr. Hazen & Whipple, 25 West 43rd St., New York City, consult. engrs.; adv. E. N.-R. Apr. 10.

N. Y., Albany—Apr. 21, additions to water purification plant. Hazen & Whipple, 25 West 43rd St., New York City, engrs.; adv. E. N.-R. Apr. 10.

N. Y., Binghamton—Bd. Contr. & Supply taking bids 3,852 ft. 12 in. mains in Court St., and 4,125 ft. 8 in. mains in Vestal Ave. $50,000. E. Prentice, city engr.

N. Y., Plattsburg—Apr. 18, by Common Council, 1,200 ft. 4 in. and 1,200 ft. 6 in. B and S, also 1,200 ft. 4 in. and 1,200 ft. 6 in. Universal c.i. pipe. I. L. Wood, city clk.

N. J., Newton—Apr. 14, by Town Com., 115 Spring St., 4 in. c.i. pipe f.o.b. Newton. W. J. Hardin, town engr.; adv. E. N.-R. Apr. 10.

O., Cleveland—Apr. 16, mains in Woodland Ave., Sect. E. A. V. Ruggles, City Hall, engr.

O., Cleveland—Apr. 16, by Cuyahoga Co. 15,000 ft. 6 and 8 in. c.i. mains, Impvt. 13 of Co. Sewer Dists. 1 and 2. R. F. MacDowell, Court House, engr.

Ill., Hinsdale—May 6, by Bd. Trustees, Village Office, drilling deep well on waterworks property. F. D. Danielson, village mgr.; adv. E. N.-R. Apr. 10.

Ill., Roselle—Apr. 24, by City Clerk, 10 in. well, 200 ft. deep, and 50,000 gal. tank on tower. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Minn., St. Paul—Apr. 15, by H. W. Austin, city purch. agt., 48 tons reinforcing steel for Water Dept. G. M. Shepard, city engr.

Minn., St. Paul—Apr. 21, by G. J. Ries, aud. Ramsey Co., 2 pump houses, with weir boxes, flumes and well sump pits over wells, at Matoska Park; installing pumps, alternate bids on (a) 2 vertical type single stage centrifugal pumps of 750, 100 or 1250 g.p.m., (b) turbines or impellers two rotating deep well pumps of 750 or 1000 g.p.m., (c) 2 horizontal centrifugal pumps 500, 750 or 1000 g.p.m. $25,000. P. N. Coates, 900 Guardian Life Bldg., co. surv.

Minn., St. Paul — See "Material and Equipment."

Ark., Altheimer—Apr. 17, by Bd. Impvt. Water Works Dist. 1, 615 Citizens Bank Bldg., Pine Bluff, 75,000 gal. tank on 100 ft. tower, 1,395 ft. 6 in Class "B" c.i. pipe, 6,865 lin.ft. 4 in. pipe, 16 standard 2 way fire hydrants, 13 gate valves. $25,000. F. Bennett, 410 Citizens Bank Bldg., Pine Bluff, engr. Noted Jan. 31.

Ont., Smith Falls — Apr. 21, by J. J. Marsh, chn. Waterworks Dept., filter plant and dam, penstock and bulkhead, 15,000 gal. elevated tank, two 1,700 gal. per minute low head pumps. E. E. Darling, 47 Home Bank Bldg., Toronto, engr.

BIDS RECEIVED

N. Y., Dunkirk—Bd. City Water Comrs., 8 m.g. additional pump in pump house, Robin and Front Sts., from Worthington Pump & Mchy. Corp., 115 Bway., New York City, $41,795. Noted Mar. 20.

O., Cleveland—Cuyahoga Co., Mar. 26, 11,000 ft. 6, 8 and 12 in. c.i. mains in Lee Rd. and Lee Center subdivision, Impvt. 553, from A. Marra Co., Ulmer Bldg., $44,978.

Wis., Hartford—See "Sewers."

CONTRACTS AWARDED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Fillmore, Island, Narrows and Williams Aves., Aves. N P and Y, Delamere, Elmore and Kenmore Places, Banker, Douglass, Hendrickson, Herzl, Percival, Smith, 54th, 56th, 63rd, 73rd, 77th, 94th, East 12th, East 27th, East 93rd, West 6th, West 11th and West 12th Sts., etc., here, to Grippo Contg. Co., $24,300. Noted Apr. 3.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Washington, Wilson, 4th, 6th 7th and 9th Aves., Chauncey, Front, 4th, Hancock, Kindred, Marion and Sherman Sts., here, to S. Gallucci, $14,000; in Ava Pl., Putney Rd., 6th, 14th, 33rd, 35th and 72nd Aves., Gardiner, 4th, 6th, 16th, 19th, 160th, 161st, 202nd and 203rd Sts., to Stanhy Constr. Co., 10,961; in Dickens, Dix and Mott Aves., etc., to G. V. Cronell, $9,460. Noted Apr. 3.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Blair, Crosby, Ferris and Lawton Aves., etc., to Paladino Contg. Co., 437 East 120th St., $18,739; in Britton, Bronxwood and Duncom Aves., etc., to Knight & Demicco, Inc., 448 East Tremont Ave., $12,045. Noted Apr. 3.

Pa., Phila.—Dept. Pub. Wks., Room 216 City Hall, 9,800 lin.ft. 36 and 42 in. c.i. and steel mains in Hunting Park Ave., Contr. 664, and 550 tons 24 in. c.i. mains in 12th St., Contr. 666, to J. J. McHugh, 1617 Race St., $287,845 and $67,282 respectively; 930 tons 12 in. c.i. mains in Castor, Rahn and Cottman Sts., Contr. 665, to M. and J. B. McHugh, 892 North Markoe St., $97,772; condenser shells, piping, fittings, valves, etc., at Lardners pumping sta., Contr. 667, to Acme Machine Co., 316 North 17th St., $1,850. Noted Apr. 3.

Md., Baltimore—Bd. Awards, w.i. pipe, couplings and malleable iron fittings, to Southern Supply Co., Calvert and Saratoga Sts., $6,300; 36-in. venturi meter and special register, to Builders Iron Fdry. Co., 9 Codding St., Providence, R. I., $4,650. Noted Mar. 6.

N. C., Dunn—Extending water and sewer lines, 5½ mi. 14 in. pipe, filter plant, pumping station, 1 m.g.d. reservoir, etc., to Guion & Withers, Gastonia, $263,000. Noted Mar. 6.

S. C., Hartsville—For 500,000 gal. rein.-con. reservoir 20 x 30 ft. brick building, 2 motor driven centrifugal pumps, 1,000 g.p.m., also 4,700 ft. 6- to 12-in. c.i. watermain extensions and 6,100 ft. 8, 10 and 12 in. sewer pipe extension with manholes, flush tanks, Y branches, to Davis Constr. Co., Walton Bldg., Atlanta, Ga., $51,786. Noted Feb. 21.

O., Columbus—See "Streets and Roads."

Ill., Litchfield—Citizens Waterworks, Inc., filtration plant, dam, etc., general contract to J. T. Walbridge, 1014 South Michigan Ave., Chicago, $259,226; filter equipment to F. B. Leopold, Inc., House Bldg., Pittsburgh, Pa., $22,000. Noted Feb. 21.

Ill., McLeansboro—For 250 kw. uniflow engine generator, switchboard, etc., to Chuse Eng. & Mfg. Co., Chemical Bldg., St. Louis, Mo., $17,400. Noted Mar. 20.

Wis., White Fish Bay—See "Sewers."

Ia., Albia—Filtration plant and pumping station, to E. L. Royer Constr. Co., 1322 32nd St., Des Moines, $11,500; pumps, motors and vacuum pumps, to Dayton-Dowd Co., Quincy, Ill., $2,850; pipes and fittings, to U. S. C. I. Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, $2,550; Valves, to Iowa Valve Co., Oskaloosa, $1,115.

Kan., Newton—Pumping plant, to E. N. Jones, Leavenworth, $99,650.

Minn., Minneapolis—F. S. Gram, city purch. agt., to McWane Pipe & Fdry. Co., Birmingham, Ala., 2,800 lengths 2½-in. c.i. pipe laterals, each 5 ft. 5½ in. long, $2.95 per length; c.i. pipe, various sizes, to U. S. Cast Iron Pipe & Fdry. Co., Amer. Trust Bldg., Birmingham, Ala., 6 pieces 24-in. $6.70, 8 pieces 24-in. $6.40, 7 pieces 20-in. $5.05, 100 pieces 16-in. $4.14, 20 pieces 12-in. $2.36, 8 pieces 12-in. $2.27, 4 pieces 8-in. $1.38, 10 pieces 8-in. $1.34; to Crown Iron Wks. Co., 1229 Tyler St., 40 tons structural material and special castings for new filter plant, $3,950. Noted Mar. 20.

Sewers

PROPOSED WORK

N. Y., Binghamton—Common Council and Bd. Pub. Wks. had plans prepared Trout Brook sewer, providing surface and sanitary drains from Glenwood Ave. to Front St. $150,000. B. Winsor, comr. Pub. Wks.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, soon takes bids sewers in Sect. 2 of Foster Ave. at intersection of Ft. Hamilton Parkway and 62nd St. and intersection of Foster Ave. and Ocean Parkway. $2,900,000.

Sewers (Continued)

N. Y., Hamburg—Election soon $400,000 bonds sanitary and storm water sewerage system. G. C. Diehl, 575 Ellicott Sq. Bldg., Buffalo, engr. Noted Jan. 17.

N. J., Sayreville—Boro Council, rejected bids Apr. 2, 2.63 mi. 8 in. and 1 mi. 10 in. vitr. tile sewer, 0.13 mi. 8 in. c.i. outfall sewer, 0.29 mi. 16 in. and 0.28 mi. 10 in. c.i. force mains. Will readvertise. Noted Mar. 20.

W. Va., Princeton — See "Streets and Roads."

La., Shreveport — Plans 8-26 in. vitr. clay sanitary sewers in Northside Business Dist. $275,000. A. J. Hawkins, City Hall, engr.

O., Akron—Plans sanitary improvement program in outlying districts of Akron, largest single project is proposed sewerage and water system serving villages of Springfield Center, Lakemore and Sawyerwood, involving 10 mi. trunk sewers, and 15 to 80 mi. lateral sewers, $300,000, other sewer projects will bring estimated cost up to $500,000. E. D. Barstow, Court House, engr.

O., Columbus—See "Streets and Roads."

O., Howenstine (North Industry, P. O.)—City of Canton soon takes bids additions to disposal plant near here. $800,000. W. E. Sarver, City Hall, Canton, engr.

Wis., Wausau—Making plans 10,000 lin. ft. sewers in various streets. $25,000. B. C. Gowen, city engr.

Minn., Waconia—Making plans sanitary sewerage system and disposal plant. $40,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs.

Mo., Joplin—Soon takes bids 8- to 30-in. sanitary sewers in various parts of city. $40,000. S. P. Ashcraft, city engr.

Mo., Perryville—Plans storm and sanitary sewers. $45,000-$60,000. Engineer not selected.

Tex., Ft. Worth—Making plans sewer line south of here. $30,000. D. L. Lewis, city engr.

Okla., Newkirk — Voted $25,000 bonds new outfall sewer, disposal plant, Imhoff tank. H. E. Musson, Grain Exch. Bldg., Oklahoma City, engr. Noted Mar. 20.

Wash., Kelso—Making plans storm sewerage system. $100,000. U. G. Jackson, city engr.

Calif., La Verne—Having plans prepared 6 mi. sewer system. To exceed $25,000. Black & Veatch, Fay Bldg., Los Angeles, consult. engrs. Noted Nov. 20.

Calif., Pasadena—Will receive new bids sewer on Arroyo Blvd. from California St. to Brookside Park, 6,500 lin.ft. 22 in. vitr. pipe, etc. W. C. Earle, city engr. Noted Feb. 21.

Calif., San Diego—Had plans prepared sewer in Mission Beach, incl. 27,945 ft. 6 in., 865 ft. 8 in., 5,470 ft. 10 in. and 6,781 ft. 12 in. concrete pipe, 127 manholes, 6 flush tanks, one settling tank, 3 small pumping plants, about $2,000 each, also 1,200 ft. ocean outfall. F. A. Rhodes, city engr.

BIDS DESIRED

N. Y., Gloversville—Apr. 15, by Common Council, sanitary sewers in Hollywood Ave. and East Blvd. To exceed $50,000. W. H. Marple, city clk.

N. Y., Long Island City—Apr. 14, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Hunt, California, 95th, 97th and Ulster Aves.

N. Y., Long Island City—Apr. 15, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewer in Hammels Blvd. and Amstel Ave.

N. Y., New York—Apr. 15, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Pelham Parkway, West 255th St., Waring, Taylor and Strang Aves.

N. Y., St. George — Apr. 14, by J. A. Lynch, pres. Richmond Boro, Boro Hall, sewers in Arthur Ave., etc.

N. J., New Brunswick—Apr. 17, by Bd. Freeholders Middlesex Co., Bayard St., 1,700 vitr. tile, 1,200 ft. concrete and 700 ft. corrugated metal pipe. M. F. Larson, New Brunswick, engr.

N. J., Plainfield—Apr. 21, by Common Council, about 7,000 lin.ft. 18- to 54-in. storm sewers. A. W. Vars, city engr.; adv. E. N.-R. Apr. 10.

N. J., South Orange — See "Streets and Roads."

Md., Baltimore—Apr. 16, by Bd. Awards, constructing storm water drains in Dist. 48, Storm Water Contr. 66, 17,000 cu.yd. excav., 2,500 cu.yd. concrete masonry, 4,000 lin.ft. 24-54 in. rein.con. pipe drains, etc. B. L. Crozier, highways engr.

O., Akron — Apr. 20, by Bd. Control sewers in Willow Run Dist. and Ira Ave., $280,000. E. A. Kemmler, Delaware Bldg., engr.

Ind., Indianapolis—Apr. 29, by Bd. Sanitary Comrs. of Sanitary Dist., City Hall, additional interceptor construction; adv. E. N.-R. Apr. 10.

Mich., Detroit—Apr. 14, by Dept. Pub. Wks., monolithic concrete or brick sewer in tunnel, Wyoming Ave. from Davison to Eaton Aves., 4,461 ft. long, incl. 4,362 ft. of 7 ft. 6 in. and 99 ft. of 4 ft. 6 in. cylinder. G. Jerome, city engr.

Mich., Royal Oak—May 19, by R. B. Flaming, city clk., sewage pumping station and disposal works, 2 m.g. capacity. Hoad, Decker, Shoecraft & Drury, Ann Arbor, consult. engrs.; adv. E. N.-R. Apr. 10.

Calif., Los Angeles—Bd. Pub. Wks. taking bids and opens same about May 5, Main St. storm sewer system, incl., 9,000 lin.ft. double barrel rein.-con. rectangular section 6 ft. 9 in. high and width varying from 6 ft. 5 in. to 9 ft. 7 in. for each section; 8,000 ft. rectangular rein.-con. section from 5 ft. high by 6 ft. 7 in. wide to 6 ft. 9 in. high by 8 ft. 4 in. wide; 12,500 ft. rein.-con. rectangular section from 3 ft. 5 in. by 5 ft. wide to 5 ft. high by 5 ft. 3 in. wide; 9,800 ft. non-reinforced arch section from 5 ft. 11 in. high by 7 ft. wide to 6 ft. 6 in. high by 7 ft. wide; 11,100 ft. circular non-reinforced concrete pipe from 60 to 70 in. diam.; 59,000 ft. rein.-con. pipe from 24 to 66 in.; 23,000 ft. cement pipe from 12 to 21 in.; 20,000 ft. cement pipe sanitary sewer from 6 to 12 in.; 787 catchbasins; 179 manholes. J. A. Griffin, city engr. Noted Feb. 21.

BIDS RECEIVED

O., Cleveland — Vitr. clay sewers in Treadway Ave., from S. N. Khury, 3511 Walton Ave., $1,780; St. Catherine Ave., from J. Mandato and T. Basite, Cleveland, $525; Olympia Rd., from George & Ameen Constr. Co., 2192 East 19th St., $2,247; Hillview Rd., from L. A. Post & J. Ross, Cleveland, $7,623; Cliffview Rd. and Grovewood Ave., from A. Marra Co., Ulmer Bldg., $7,974 and $5,803 respectively; Burgess Rd., from Curro & Whittaker, 2269 Noble Rd., $7,978; Wickford Rd., from F. Hadded, 512 Fidelity Mortgage Bldg., $8,077. Work involves 7,820 ft. 12- to 24-in. vitr. clay pipe.

Mich., Dearborn—Laying 9,247 ft. storm water sewers in Michigan Ave. Dist., incl. 2,060 ft. 12 in., 2,140 ft. 15 in., 1,055 ft. 18 in., 880 ft. 20 in., 863 ft. 22 in., 908 ft. 24 in., 282 ft. 27 in., 232 ft. 30 in., 348 ft. 33 in., and 479 ft. 42 in. vitr. pipe, from Coffman Crane Service, 708 Empire Bldg., Detroit, $57,509. Noted Mar. 27.

Mich., Detroit—Dept. Pub. Wks., vitr. pipe Sewer 3977 from Western Constr. Co., 1208 Ford Bldg., $10,658; Sewer 4088 from Teetaert & Moran, 448 St. Clair Ave., $2,490; Oakman Blvd. Sewer Arm from W. Porath, 1410 West Grand Blvd., $22,100; Sewer 4100 and 4101 from Cousino Mercier Co., 13183 Wark St., $9,093 and $6,233 respectively. Noted Mar. 20.

Wis., Hartford—Sewage disposal plant and rein.-con. reservoir, from F. C. Eckerman, 316 19th Ave., Milwaukee, $21,098.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Reigelmann, boro pres., Boro Hall, to Nazzarro & Querriero, sewers in Bedford Ave. 82% engrs. est. ($11,561), 53rd St. 82% ($7,422), West 9th St. 83% ($6,946), New York Ave. 86% ($5,498), Quenton Rd. 86.49% ($2,678), 12th Ave. 96% ($1,502); to C. F. Vacharas, 645 40th St., West 9th St. 88.7% ($5,229), Beadel St. 86% ($450), Albany Ave. 91% ($3,539), 82nd St. 87% ($2,521), 4th Ave. 107% ($1,869); to Tomassetti & Co., Inc., 1133 60th St., Montgomery St. 95% ($4,139), Riverdale Ave. 99% ($15,257); to Manmill Constr. Co., 2035 Douglass St., Riverdale Ave. 89% ($1,723); to Tozzi Contg. Co., in 7th Ave. 88.74% ($1,650); to J. F. Colgan Co., in East 95th St. 82% ($74,750). Noted Mar. 27.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, temporary sewer in Price St., etc., to P. F. Connelly Co., $42,618. Noted Mar. 27.

Md., Baltimore—Bd. Awards, 47,500 lin. ft. 5-24 sanitary sewers in Dist. 24-B and P-8, to N. Martello, 417 South Eden St., $169,573. Noted Mar. 20.

N. C., Dunn—See "Waterworks."

S. C., Hartsville—See "Waterworks."

O., Columbus—See "Streets and Roads."

O., East Cleveland (Cleveland P. O.)—For 4,080 ft. 4 ft. 6 in. segmental block sewer in Hayden Ave., to Manson Co., Engineers Bldg., Cleveland, $110,000. Noted Mar. 27.

Wis., Neenah—Vitr. clay storm sewers in various streets, to E. A. Yahr, Antigo, $29,065.

Wis., White Fish Bay—For 8 in. sanitary sewers and 6 and 8 in. c.i. water mains, to Wenzel & Henoch Co., 498 27th St., Milwaukee, and F. E. Kaminski, 785 45th Ave., West Allis. Noted Mar. 27, under Waterworks.

Neb., Howells—Sanitary sewerage system, vitr. clay pipe, to Asplund Constr. Co., Tecumseh, $29,700. Noted Feb. 7.

Mo., Carthage—For 6,227 ft. 18 and 24 in. sewers, Imhoff tank and disposal plant, to V. E. Koch, 14th and Texas Sts., Joplin, $100,691. Noted Apr. 3.

Wash., Seattle—Bd. Pub. Wks., sewage disposal works, Perry St. and Rainier Ave., to Olympic Constr. Co., 400 West Harrison St., Imhoff tank $8,700, contact tank $9,100, sludge bed $2,000, tank house $1,000, etc., total $27,377. Noted Mar. 20.

Calif., Los Angeles—Storm sewer in La Brea Ave., to Allied Constr. Co., 459 East 3rd St., $68,459.

Calif., Venice—See "Streets and Roads."

Bridges

PROPOSED WORK

Pa., Grove City—Comrs. Mercer Co., having plans prepared one 160 ft. and six 30 ft. spans over Wolf Creek on Chestnut St. $80,000. F. P. Graham, Blair and Mills Sts., engr.

Tennesee—See "Streets and Roads."

Kan., Oskaloosa—Jefferson Co., rejected bids 220 ft. steel bridge, ½ mi. from Perry, Federal Aid Project 175, Sect. A. Will readvertise. $49,934. Dodd & Finney, 216 West 6th St., Topeka, engrs. Noted Mar. 6.

Kan., Topeka — Plans 100 ft. concrete arch span across Shunganunga Creek on Van Buren St., to exceed $25,000. W. E. Baldry, 1106 West 13th St., engr.

Kan., Topeka — Shawnee Co. plans replacing steel span across creek at Davis St. with 130 ft. steel span, alternate on Luten arch. To exceed $25,000. A. C. Lagerwall, co. engr.

Tex., San Angelo—Tom Green Co. had plans prepared bridge over Middle Concho River and Highway 7, 120 ft. steel span, 100 ft. concrete trestle approaches, concrete floor. $50,000. T. J. Kelley, co. engr.

California—State Highway Comn., Sacramento, having plans prepared 5 bridges on state highway between Truckee and Nevada state line, to exceed $25,000; concrete bridge over Cottonwood Creek, Kern Co., $45,000. R. M. Morton, state highway engr.

Calif., Los Angeles—Plans to vote on $1,000,000 bonds, bridges to replace present structures. J. A. Griffin, city engr.

Calif., Ukiah — Mendocino Co. having plans prepared bridge over Big River, two 120 ft. Howe truss spans and 229 ft. trestle approach, either wood piers on concrete piles or concrete piers on 5 ft. steel cylinders. R. E. Donohue, co. surv.

BIDS DESIRED

Maine—Apr. 17, by State Hy. Comn., Augusta, Mile Stream Bridge in Howland, 20 ft. concrete slab; Upper Corner Bridge over Narraguagus River, in Cherryfield, 5 concrete slab spans, 254 ft.; Fernald Bridge over Pushaw Stream, Alton, 3 concrete slab spans, 67 ft. 3 in.; bridge over Barker Brook, in Lisbon, 12 ft. concrete slab span; Passcomaway Bridge over Cape Neddick River in York, 3 concrete spans, 128 ft.; Holt Stream Bridge in Norway, 20 ft. concrete. P. D. Sargent, ch. engr. Noted Apr. 3.

New Jersey—Apr. 28, by State Hy. Dept., Trenton, concrete encased plate girder bridge, also temporary bridge and removing existing bridge over Manasquan River, Monmouth and Ocean Counties in municipalities of Brick and Wall. A. L. Grover, secy.; adv. E. N.-R. Apr. 10.

Pa., Sunbury—May 26, by Joint Bd. Comrs. of Northumberland and Union Counties, at office Comrs., (Sunbury) constructing half through plate girder highway bridge across West Branch of Susquehanna River; adv. E. N.-R. Apr. 10.

N. C., Newton—Apr. 18, by Catawba Co. Hy. Comn., (Newton) bridge over Catawba River between here and Taylorsville. W. B. Kiker, Newton, consult. engr.; adv. E. N.-R. Apr. 10.

Georgia—Apr. 19, by State Hy. Dept., East Point, treated lumber bridge over Mulberry Creek, Federal Aid Project 17, Harris Co., 133 cu.yd. concrete, 9,400 lb. reinforcing, 44,000 ft. No. 12 and 20,320 ft. No. 8, treated timber, etc.; 704 ft. steel and concrete bridge on Thomaston-Zebulon Rd., Federal Aid Project 346, Upson Co., Alternate 1, 541 cu.yd. concrete, 71,000 lb. reinforcing, Alternate 2, 682 cu.yd. concrete, 87,400 lb. reinforcing, etc.; 5 creosoted timber bridges on Columbus-Atlanta Rd., Harris Co., 27,200 ft. untreated timber, 37,059 ft. treated timber, 3,080 lin.ft.

Bridges (Continued)

treated wood piling, 15,249 cu.yd. embankment. E. H. Davis, Griffin, engr.

Fla., Jacksonville—Apr. 21, by Comrs. Duval Co. at office of F. Brown, clk., bridge on Main St., No. 4 over Trout Creek, and on Orange Park Rd. No. 5 ever McGirts Creek, incl. movable spans, several approach spans with embankment approaches connecting with present highway. Alternate bids on double leaf bascule spans, swing spans and on several types of approach spans. Noted Dec. 13.

O., Akron—Apr. 24, by Bd. Control, concrete bridges over Ohio Canal at Bartges St. $27,000. E. A. Kemmler, City Bldg., engr. Noted Jan. 3.

O., Cleveland—Apr. 23, by Cuyahoga Co., 930 ft. bridge, 80 spans, rein.-con. substructure, concrete superstructure, over Hilliard Rd. $894,000. F. Lander, Court House, engr. Noted Dec. 6.

Indiana—Apr. 15, by J. D. Williams, dir. State Hy. Comn., Indianapolis, **(r.c.g. means rein.-con. girder, r.c.s. rein.-con. slab, s.t. steel truss, r.c.a. rein.-con. arch, r.c.b. rein.-con. box)** two 24 ft. and one 28 ft. r.c.g., and one 18 ft. and one 20 ft. r.c.s., Hamilton Co.; two 40 ft. and one 55 ft. s.t., one 18 ft. r.c.s. and one 28 ft. r.c.g., Tipton Co.; one 48 ft. s.t. and two 24 ft. r.c.g., Steuben Co.; one 72 ft. s.t., one 30 ft. r.c.g. and one 65 ft. r.c.a., Miami Co.; one 16 ft. r.c.s. and one 30 ft. r.c.g., Delaware Co. and one 14 ft. r.c.s., Madison Co., one 8 ft., three 12 ft. and one 18 ft. r.c.s., one 5 x 5 ft. r.c.b. and two 30 ft. r.c.g., Clay Co.; one 20 ft. and one 16 ft. r.c.s., and four 50 ft. r.c.a., Fountain Co.; two 22 ft. and one 36 ft. r.c.g., two 8 ft., three 12 ft., one 16 ft. and one 18 ft. r.c.s., Warren Co.; one 14 ft. r.c.s., one 84 ft. s.t., one 4 x 4 ft. and one 8 x 6 ft. r.c.b., Wells Co.; one 12 ft. r.c.s., Vanderburgh Co., and one 30 ft. r.c.g., Gibson Co.; two 28 ft. and one 20 ft. r.c.g., one 18 ft. r.c.s. and one 31 ft. s.t., Noble Co.; one 5 x 4 ft. r.c.b., one 14 ft. and one 6 ft. r.c.s., Noble Co., one 31 ft. s.t., one 10 ft. and one 14 ft. r.c.s., DeKalb Co.; one 40 ft. r.c.a., three 16 ft. and one 5 ft. r.c.s., one 6 x 6 ft., one 5 x 5 ft. and one 4 x 4 ft. r.c.b., Owen Co., one 20 ft., one 12 ft. and one 10 ft. r.c.s., Putnam Co.; one 5 x 5 ft. r.c.b., two 60 ft. s.t., one 16 ft. and one 12 ft. r.c.s., Owen Co.; one 84 ft. s.t., Blackford Co., one 84 ft. s.t., one 14 ft. and one 20 ft. r.c.s., Jay Co.; two 84 ft. and one 84 ft. s.t., Scott Co.; one 28 ft. and one 38 ft. r.c.g., Martin Co.; three 65 ft. r.c.a., Blackford; one 28 ft. r.c.g., Starke Co.; eleven 38 ft. r.c.g., Parke Co.; two 84 ft. s.t., Elkhart Co. Steel superstructures for following: of two 40 ft. and one 55 ft., s.t., Tipton Co., and one 72 ft. s.t., Miami Co.; one 48 ft. s.t., Steuben Co., two 31 ft. s.t., Noble Co.; one 84 ft. s.t., Wells Co., one 84 ft. s.t., Jay Co., and one 84 ft. s.t., Blackford Co.; two 60 ft. s.t., Owen Co.; three 84 ft. s.t., Scott; two 84 ft. s.t., Elkhart Co.

Mich., Mt. Clemens—Apr. 17, by Macomb Co. Rd. Comn., two 90 ft. spans for Bridge 500401, on State Trunk Line Rd. 59, 495.6 cu.yd. Class A, 557.4 cu.yd. Class B and 195.1 cu.yd. Class C concrete, 184,240 lb. steel; also one 90 ft. span for Bridge 500404, 6 mi. southwest of here, 260.6 cu. yd. Class A and 295.8 cu.yd. Class B concrete, 93,380 lb. steel. G. C. Dillman, ch. engr.

Ill., Cambridge—Apr. 18, by County Supt. Highways Henry Co., one 45 ft. and one 60 ft. rein.-con. girders, and one 12 ft. rein.-con. box culvert. $25,000. J. H. Reed, co. engr.

Minn., Benson—See "Streets and Roads."

Nebraska—Apr. 15, at Senate Chamber in State House, Lincoln, one 55 ft. transverse joist girder bridge and incidental work on Seward Bridge Project 157, Seward Co., one 55 ft. skew bridge on Oxford Bridge Project 219, Harlan Co., one 40 ft. concrete girder bridge on Orleans West Project 220, Harlan Co., one 40 ft. concrete girder bridge on Orleans-Franklin Project 71 B, Harlan Co., and four 50 ft. concrete girder spans on Havelock-Ceresco Project 155 A, Lancaster Co. R. L. Cochran, Lincoln, state engr.

Tex., Coleman—Apr. 16, by Coleman Co. constructing substructure for new bridge also taking down and re-erecting 3 steel spans for 220 ft. bridge across Pecan Bayou. $40,000. W. E. Dickerson, co. engr.

Tex., Corpus Christi—May 20, by City Comrs., combination railroad and highway bridge, incl. single leaf bascule span, concrete approach spans and creosoted timber fender system. $100,000. R. J. Cummins, Bankers Mortgage Bldg., Houston, and E. E. Sands, 5418 Austin St., Houston, engrs.

California—Apr. 21, by State Highway Comn., Sacramento, 12 rein.-concrete bridges between Old Elk Grove and Sacramento, as follows: 2 spans, 18 ft., Sta. 217-85; 10 spans, 18 ft., Sta. 295-56; 3 spans, 12 ft., Sta. 310-77; 3 spans, 18 ft., Sta. 402-02; 2 spans, 18 ft., Sta. 449-56; 1 span, 20 ft., Sta. 519-84; 1 span, 20 ft., Sta. 522-93; 3 spans, 18 ft., Sta. 487-10; all foregoing to have 24 ft. roadway; 2 spans, 18 ft., Sta. 583-15; 3 spans, 18 ft., Sta. 594-42, two latter 30 ft. roadway; existing bridges 17 ft. span, Sta. 614-10 and 11 ft. span, Sta. 647-05, to be widened to 30 ft. roadway. R. M. Morton, state highway engr.

California—Amer. Toll Bridge Co., 525 Market St., San Francisco, taking bids 18,000 tons carbon and silicon steel and special eyebars erected for superstructure of bridge over Carquinez Straits from Solano to Contra Costa Co. C. E. Derlith, c/o University of California, Berkeley, consult. engr.

BIDS RECEIVED

North Carolina—State Hy. Dept., Raleigh **(S. P. means State Project)**, rein.-con. culverts and bridges, S. P. 721, Caldwell Co., from R. W. Curtis, Lynchburg, Va., $40,645, on S. P. 568, Moore Co., from T. J. Newell, Lillington, $42,277, on S. P. 156, Martin Co., from J. A. Peterson, Montgomery, Ala., $65,720; rein.-con. bridge over Pee Dee River, S. P. 610, Anson and Richmond Counties, from Hardaway Contg. Co., 909 Elizabeth Ave., Charlotte, $292,609. Noted Mar. 13.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, Apr. 4, one 50 ft. girder and 1 concrete culvert on Route 43, Sect. 1B, Menard Co., from H. C. Neiland, Monee, $10,647; thirteen 35 ft. rein.-con. deck girder spans on Route 22, Sect. 13D, Will Co., from Keokuk Quarry & Constr. Co., Keokuk, Ia., $131,609; 3 concrete girders on Route 27, Sect. 4B, Carroll, from W. H. Shons, 109-111 Spring St., Freeport, $28,477; 3 concrete girders, 1 concrete slab and 1 concrete culvert, Combination E, Sects. 12B and 13B, Adams Co., from Herrick Constr. Co., Carlinville, $65,992. Noted Mar. 27.

Mont., Polson—See "Streets and Roads."

Tex., Glen Rose — See "Streets and Roads."

Tex., Greenville — See "Streets and Roads."

CONTRACTS AWARDED

Alabama—State Hy. Dept., Montgomery, several small bridges on new sites, Baldwin Co., to F. D. Harvey & Co., Montgomery, $88,045. Noted Apr. 3.

Tenn., Nashville—City will repair bridges over Cumberland River on Sparkman and Jefferson Sts., by day labor. $300,000. Freeland, Roberts & Co., Independent Life Bldg., engrs. Noted Apr. 3.

Mich., Port Huron—State Hy. Comn., Lansing, Bridge 771001, St. Clair Co., 73 cu.yd. Class A and 246.8 cu.yd. Class B concrete, 12,750 lb. steel, to Hill & Belknap, East Tawas, $14,341, Bridge 771301 over Black River, Grant Twp., St. Clair Co., 563.2 cu.yd. Class A, 598 cu.yd Class B and 143.1 cu.yd. Class C concrete, 204,627 lb. steel, to R. Adler, Yale, $49,440. Noted Mar. 13.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, **(1-38D Johnson means Route 1, Sect. 38D, Johnson Co.)** to W. H. Shons Co., 109-111 Spring St., Freeport, bridge on 1-38D Johnson $29,653, on 34-7B Pope $29,643; to Zimmerly Bridge Co., Paris, bridge on 16-4B and 16-5B Coles $47,000, on 32-1B Shelby and 32-2B Moultrie $45,000; to Vincennes Bridge Co, Vincennes, Ind., bridge on 32-2C Moultrie $15,857; to Illinois Steel Bridge Co., Jacksonville, bridge on 9-45C Peoria $7,626; to St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., bridge on 1-38E Johnson $13,906, on 34-6C Pope $12,886, on 34-7C Pipe $19,578; to Pub. Wks. Constr. Co., Century Bldg., St. Louis, Mo., bridge one 8-20C Iroquois $11,845; to W. D. Lonergan Constr. Co., New Madrid, Mo., bridge on 17-5 Marshall and LaSalle Counties, and on 17-6, LaSalle, $276,170; to M. C. Merrils, Belleville, bridge on 34-6B Pope $42,610; to C. D. Strattan, Little York, bridge on 3-26B Mercer $8,566. Noted Feb. 15.

Ill., Charleston — Dept. Pub. Wks. & Buildings, Springfield, one 30-ft., one 180-ft. and one 75-ft. spans over Embarass River, near here, to Zimmerly Bridge Co., Paris. Engrs. est. $50,000.

Ia., Nevada—Storey Co., 8 culverts and extensions, 4 I-beams and one 120 ft. high truss span, to B. J. Cole, Ames, $29,208. Noted Mar. 6.

Ia., Rockwell City — Supervs. Calhoun Co., 1 I-beam span and 2 pony trusses, to Wickes Eng. & Constr. Co., 418 Polk Blvd., Des Moines, $13,485; 4 box culverts, 1 pony truss span and 5 I-beam spans, to Rodies & Bales, Strawberry Point, $25,052. Noted Mar. 6.

Wyoming—See "Streets and Roads."

Montana—See "Streets and Roads."

Tex., Houston — Harris Co. concrete bridges on Scott St. Rd., to W. M. Bates, Ballaire, $43,544. Howe & Wise, co. engrs.

Dams

PROPOSED WORK

New York—See "Unclassified."

Tex., Bay City—See "Unclassified."

Calif., Oakdale—Oakdale Irrigation Dist. had preliminary plans prepared dam 160 ft. high, rock-fill type, in connection with Beardsley Flat project. System of gravity canals also planned. To exceed $500,000. R. E. Hartley, ch. engr.

Calif., Redlands — See "Excavation, Drainage, Irrigation."

Calif., Winters — See "Excavation, Drainage, Irrigation."

Ont., Almonte—Town Council soon takes bids new dam and electric light plant. $30,000. C. Barber & Son, Meaford, engrs.

CONTRACTS AWARDED

Wash., Tacoma—I. S. Davisson, comr. Light & Water, concrete arch dam 275 ft. high, excavating and lining 800 ft. power tunnel, placing gates and valves, etc., to A. Guthrie & Co., 552 Sherlock Bldg., Portland, Ore., $881,194. Engrs. est. $1,162,000. Noted Apr. 3.

N. S., Halifax—See "Unclassified."

Railways

PROPOSED WORK

Ohio—Pennsylvania R.R. Co., Penn Sta., Pittsburgh, Pa., plans 15 mi. cutoff from Stark yards near Canton through Louisville to Bayard, 2,000,000 cu.yd. earth in establishing grade. W. D. Wiggins, ch. engr. m.w

Arkansas—Arkansas R.R. Co., Star City, having preliminary plans prepared 45 mi. standard gage lines from Pine Bluff to Star City and from Star City to Monticello. R. G. Parker, Star City, one of incorporators.

Nova Scotia—Canadian Natl. Ry., McGill St., Montreal, Que., plans 67 mi. railroad from Sunnybrae to Guysboro. $3,500,000. C. S. Gsowski, McGill St., Montreal, ch. engr. of construction.

New Brunswick—Canadian Natl. Ry., McGill St., Montreal, Que., plans 41 mi. railroad from Kingsclear to St. Croix, $2,123,000. C. S. Gsowski, McGill St., Montreal, Que., ch. engr. of construction.

BIDS DESIRED

Washington — Bloeden-Donovan Lumber Co., Bellingham, taking bids 17 mi. railroad on Olympic Peninsula. $500,000.

Ontario—Apr. 17, by W. H. Maund, secy. treas. Temiskaming & Northern Ontario Ry., North Bay, constructing 17 mi. roadbed ready for ties and rails, from Cassidy to South Lorrain. S. B. Clement, North Bay ch. engr.

CONTRACTS AWARDED

New York—Transit Comn., 49 Lafayette Ave., New York, installations of tracks for portion of 14th St.-Eastern Line, to T. H. Reynolds Constr. Co., 50 Park Pl., New York, $22.513. Noted Apr. 3.

Tennessee — Southern Railway System, 4th and Sycamore Sts., Cincinnati, O., freight yards with cut off tracks, coal yards, coal handling equipment, etc., at Caswells (Knoxville, P. O.), to Foundation Co., 120 Liberty St., New York City. Est. cost $3,000,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., Apr. 3, completing Sub-Division B of Sect. 2 of Buffalo River and Cazenovia Creek improvement, incl. channel of Buffalo River from Babcock to Seneca Sts., and channel of Cazenovia Creek to about 100 ft. easterly of South Park Ave., from Empire State Dredging Co., by H. Barnard, 233 Bway., New York City, $0.394 per cu. yd.; Cleveland Eng. Constr. Co., 778 The Arcade, Cleveland, O., place measurement, $0.195 per cu.yd. Noted Mar. 13.

Wis., Milwaukee—Rejected bids dredging rivers, channels and canals, 113 000 cu.yd. Will readvertise. $45,000. Noted Mar. 27

Calif., Del Mar — Santa Fe Irrigation Dist. plans to vote on $750,000 bonds. distributing system. J. B. Lippincott, Central Bldg., Los Angeles, consult. engr.

Calif., Oakdale—See "Dams."

Calif., Winters—California Central Irrigation Syndicate, c/o H. A. Strauss, Dir., Walker Bldg., Salt Lake City, Utah, having plans prepared system to irrigate 50,000 acres, incl. diversion works, rubble con-

Excavation, Drainage, Irrigation (Continued)

crete dam, 30 ft. high, 300 ft. long on top, 125 ft. long on bottom, with 3 radial gates; storage works, concrete dam, 150 ft. high, 380 ft. long on top, 80 ft. on bottom. 20 ft. wide at top with slopes of 1 to 2 on front and 0.67 to 1 on back, storing over 150,000 acre ft.; main canal, 180,000 lin. ft. long, 50 ft. wide on top, 30 ft. on bottom, about 5 ft. deep, here. $3,000,000. C. A. Tusch, 2211 Union St., Berkeley, consult. engr

BIDS DESIRED

Tex., Corpus Christi—May 20, by City Council, protective embankment in northern portion of city, incl. 3,100,000 yd. earth excav. $1,100,000. R. J. Cummins, 732 Bankers Mortgage Bldg., Houston, and E. E. Sands, 5418 Austin St., Houston, engrs.

Calif., Los Angeles — Drainage Impvt. Dist. 8, of Los Angeles Co., receiving bids drainage system, incl. 63,05 cu.yd. canal excav., 127,038 cu.yd. excav. in conduit trenches 19,200 cu.yd. concrete, 1,146,000 lb. steel, 6,622 lin.ft. 8 in., 889 lin.ft. 12 in., 1,030 lin.ft. 24 in, 5,970 lin.ft. 30 in., 5,588 lin.ft. 36 in. and 2,898 lin.ft. 48 in. concrete pipe, ditches to be concrete lined. J. E. Rockhold, co. surv.

BIDS RECEIVED

Calif., Williams — Williams Irrigation Dist., 13 mi. connecting canal, 140,000 cu. yd. earthwork, from D. McDonald, P. O. Box 170, Sacramento, $0.1475 yd. Noted Mar. 27.

CONTRACTS AWARDED

Minn., Jackson—Jackson Co., Co. Ditch 7, 1,900 lin.ft. open ditch, 6,902 cu.yd. excav., 37,550 lin.ft. tile drains, to C. P. Lefquest, Redwood Falls, $19,965.

N. S., Halifax—See "Unclassified."

Streets and Roads

PROPOSED WORK

N. Y., Binghamton—Bd. Contr. & Supply, soon takes bids paving various streets. $200,000. E. Prentice, city engr.

N. Y., Cohoes—United Traction Co. plans removing trolley tracks and paving in between area 2.5 mi. in Mohawk, Vliet, Columbia and other streets. $75,000. E. Murphy, genl. mgr.

N. Y., Johnson City—Plans paving Floral and Ackley Aves., warrenite bitulithic. Election soon to vote on bonds (over $25,000). H. R. Brown village pres.

N. Y., Syracuse—Making plans 70 ft. boulevard following old Erie Canal line throughout city. To exceed $250,000. T. H. Mather, city engr.

N. J., Mt. Holly—Burlington Co. plans improving 22,000 sq.yd. Kings Highway, near Camden. H. B. Smith, Mt. Holly, engr.

Va., Richmond — Plans paving Ellwood Ave., 33rd, 34th and McDonough Sts., $65,904; curbing and guttering 21st and 22nd Sts., $11,000. A. J. Saville, dir. pub. wks.

W. Va., Philippi—Barbour Co., Valley Dist., election Apr. 23, $80,000 bonds, 7 mi. roads. J. F. Heavitt, clk.

W. Va., Philippi—Union Dist., Barbour Co., voted $325,000 bonds for roads.

W. Va., Princeton—Plans election in May or June $100,000 bonds for roads and sewers.

Ga., Clayton—Rabun Co. voted $175,000 bonds for roads.

Fla., Miami—Dade Co. had estimates made improving New East Dixie Highway, $300,000; West Dixie Highway, $225,000, Canal Highway, $39,193, Everglades Ave., Red Rd. and bridge, $51,050; West Flagler St. extension and bridge, $52,500; roads in Dist. 4, $80,000, roads in Dist. 5, $100,000; completing Trail and widening South West 8th St., $400,000; North Miami Ave. extension $50,000. H. Crabtree, Miami, engr.

Fla., Ocala—Marion Co., election Apr. 30, $73,007 bonds, 6.6 mi. Rd. 1, Belleview to Sumter Co.; $263,846, 19.3 mi. Rd. 2, Ocala to State Rd. 5 via Martel; $182,798, 14 mi. Rd. 3, from Rd. 2 to Levy Co. line; $152,944, 12 mi. Rd. 4, from Rd. 2 via Flemington to Levy Co. line; $215,441, 16.5 mi., Rd. 5, Ocala to Alachua Co. via Anthony and Citra; $125,675, 9 mi. Rd. 6, Ocala to Ocklawaha River via Silver Springs; all foregoing 16 ft. of 6 in. limestone with tar or asphalt and slag surface; $122,678, 22.5 mi. Rd. 7, Ocklawaha River to Lake Co. line via Lynne; $130,449, 17 mi., Rd. 8 from Rd. 2 at Weirsdale to Lake Co. via Starks Ferry, two latter 16 ft., sand clay; $233,163, 21 mi. Rd. 9, from point on Rd. 6 to Putnam Co. via Fort McCoy and Orange Springs, 9 ft., 6 in. limestone with tar or asphaltic and slag surface. J. E. Walker, Ocala, engr.

Fla., Sandford—Seminole Co. plans improving through roads, $733,000; roads in Dists. 1 and 2, $184,000; Dist. 3, $32,000; Dist. 4, $26,000; Dist. 5, $27,000.

Ala., Huntsville—Soon takes bids paving Randolph St. $50,000.

La., DeRidder—Beauregard Co. election Apr. 22, $85,000 bonds, road improvements.

Tennessee—Dept. Hys. & Pub. Wks., Nashville, plans to grade and surface 5.5 mi. Hartsville-Sumner Co. Rd., 16 ft., Trousdale Co., probably bituminous macadam. J. G. Creveling, highway comr.

Tennessee—Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading and limestone base on 12 mi. McMinnville-Rock Island Rd., 18 ft., Warren Co. J. G. Creveling, highway comr. Noted Oct. 4.

Tennessee—Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading, etc. 5.5 mi. road from Bells to Madison Co. line, incl. several small concrete bridges. J. G. Creveling, highway comr.

Tenn., Nashville—Davidson Co. plans resurfacing, etc., roads, mostly gravel and limestone macadam, oiled surface. $110,000.

Tenn., Waynesboro—Wayne Co. voted $85,000 bonds for roads.

Ky., Newport—Campbell Co. plans to issue $750,000 bonds for roads, etc. W. Milins, co. clk.

Ky., Paducah—Plans paving from Union Depot to 10th St., also grading and graveling various city streets. $25,000. H. A. Pulliam, city engr.

O., Cincinnati—See "Material and Equipment."

O., Cincinnati—Plans election $3,300,000 bonds extending parkway or boulevard system. F. Krug, City Hall, engr.

O., Cleveland—Plans to widen Euclid Ave., and open Chester Ave., East 13th and East 35th Sts. $710,000. R. Hoffman, City Hall, engr.

O., Columbus—Making plans grading, laying necessary water services, sewer connections and paving 4,147 ft. Brehl, Richardson and Burgess Aves., 26 ft., brick $75,768, asphalt $63,981; 2,940 ft. Ogden Ave., Warren and Doyle Sts., 24 ft., brick $51,302, asphalt $41,506; 6,850 ft. Broad St., 50 ft., asphalt $29,628; 445 ft. alley west of Hamilton Ave. (Chase St.), 16 ft., brick $2,992, concrete $2,658; 880 ft. alley north of 10th Ave., 15 and 25 ft., brick $7,385, concrete $6,550; 624 ft. alley west of Highland St. (Sunside Alley), 20 ft., brick $4,954, concrete $4,360. R. H. Simpson, city engr.

O., Lisbon—Columbiana Co. takes bids in spring paving about 1 mi. Wellsville-Salineville Rd., 16 ft., brick $57,275, concrete $39,845; about 1 mi. Unity-Petersburg Rd., 16 ft., brick $58,377. L. C. Kirk, Court House, engr.

O., Steubenville — Buena Vista Heights Co., Sinclair Bldg., rejected bids Mar. 25, improving 8,937 sq.yd. Buena Vista, Rosslyn and Kingston Blvds., waterbound macadam, for F. S. King and W. C. Brown. Noted Mar. 20.

Ind., New Albany—Plans concrete paving Market St. from Vincennes to East Sts., 40 ft., $16,505; Market St. from East to Thomas Sts., 30 ft., $2,035; Jay St. from Spring to Elm, 30 ft., $4,770; 9th St. from Spring to Elm Sts., 30 ft., $4,522. Address Assistant City Engineer.

Michigan — State Hy. Dept. Lansing, plans grading 3 mi. Federal Aid Project 92, Bay Co., $60,000, 6 mi. Federal Aid Project 92, Saginaw Co., $120,000; grading and surfacing 5 mi. State Trunk Line Rd. 46-27, Gratiot Co., concrete, bituminous concrete or sheet asphalt, gravel surfacing (16 ft. wide) 9.1 mi. State Trunk Line Rd. 77-2, Sects. A and B, Schoolcraft Co., 7 mi. State Trunk Line Rd. 12-28, Gogebic Co., and 8 mi. State Trunk Line Rd. 12-41, Gogebic Co. G. C. Dillman, ch. engr.

Michigan — State Hy. Dept., Lansing, opens bids about May 1, grading and gravel surfacing 6 mi. State Trunk Line Rd. 25-15, Sect. C, Chippewa Co., also 6.26 mi. State Trunk Line Rd. 25-15, Sect. B, Chippewa Co. G. C. Dillman, ch. engr.

Michigan — State Hy. Dept., Lansing, opens bids about May 15, grading and surfacing 1 mi. State Trunk Line Rd. 75-3, Dickinson Co., concrete, bituminous concrete or sheet asphalt. G. C. Dillman, ch. engr.

Mich., Detroit — Having plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete, 7,500 sq.yd. Proctor Ave. $45,760, 1,000 sq.yd. Horatio Ave. $6,160, also 7,300 sq.yd. one course concrete in 5 alleys, $18,380. G. Jerome, city engr.

Mich., Detroit—Wayne Co. plans grading and surfacing Larned St., from Lieb to Mt. Elliot Sts., concrete or bituminous concrete, $94,000.

Wis., Wausau—Had plans prepared paving 15,000 sq.yd. Bridge and [illegible] Sts., Chicago and Adams Aves., two course rein.-con., vibrolithic, asphaltic concrete or brick. $40,000-$50,000. B. C. Gowen, city engr.

Ia., Davenport—Making plans grading and paving 40 alleys, 6-in. concrete. C. J. Stephenson, city engr.

Minn., Detroit — Becker Co. will sell $250,000 bonds, road improvements this season. C. T. Ebeltoft, aud.

Minn., Glenwood — Pope Co. will issue $152,000 bonds for road improvements this season, will take bids soon grading, etc., 23 mi. road between Westport and Starbuck. F. M. Sheperd, Glenwood, engr.

Kan., Abilene—Soon takes bids grading and surfacing with concrete 1 mi. streets, incl. 10,000 lin.ft. concrete curb and gutter. $51,000. C. Nicoley, City Hall, engr.

Kan., Hiawatha—Brown Co. plans grading, etc., Federal Aid Project 223, 5.663 mi., Sect. A, and 6.704 mi. Sect. B, 26 ft. E. C. L. Wagner, 608 Kemper Bldg., Kansas City, Mo., engrs.

Kan., Independence — Montgomery Co. plans grading 20 mi. Coffeyville-Caney Rd. $90,000. H. K. Hibbard, Independence, engr.

Kan., Kansas City—Wyandotte Co. rejected bids fine grading and concrete surfacing 0.873 mi. gaps on Federal Aid Project 102. Will readvertise. $26,201. O. K. Williamson, co. engr. Noted Mar. 6.

Kan., Olathe—Johnson Co. making plans concrete paving 10 mi. South Shawnee-Olathe Rd., 18 ft. E. C. L. Wagoner, 608 Jemper Bldg., Kansas City, Mo., engrs.

Kan., Topeka—Soon takes bids 49,000 sq.yd. 2 in. asphaltic concrete on 7 in. base, 30,000 lin.ft. gutter and sidewalk, 20,000 yd. grading, 12,415 ft. 10- to 36-in. storm sewers. W. E. Baldry, 1106 West 13th St., engr.

Nebraska — State Hy. Dept., Lincoln, plans 86.09 mi. grading in 15 counties, incl. 847,750 cu.yd. excav., $732,000, also 155.34 mi. gravel surfacing in 15 counties, 1,861,262 sq.yd. gravel, $581,640. R. L. Cochran, ch. engr.

N. D., Willston—Williams Co. having plans prepared grading 11.5 mi. road between Tioga (Williams Co.) and White Earth (Mountrail Co.) $35,000.

Mont., Great Falls—Cascade Co. plans grading 16 mi. Smith River Rd., between Great Falls and White Sulphur Springs, also concrete bridge over Smith River, $35,000. J. E. Moran, clk.

Missouri—State Hy Dept., Jefferson City, plans grading, etc., 4.951 mi. road in Barry Co., 30 ft.; graveling 67,889 cu.yd. and grading 46,529 cu.yd. roads in Clark, Perry and Madison Counties. B. H. Piepmeier, state highway engr.

Missouri — State Hy. Dept., Jefferson City, plans graveling 35,328 sq.yd. road in Cedar Co.; grading 27.217 mi. roads in Webster, Texas and Livingston Counties. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Soon takes bids grading and resurfacing 7,680 sq.yd. Dodier St., $35,500, resurfacing 3,080 sq.yd. Enright St., $7,120, grading, granite curbing and paving 17,220 sq.yd. Virginia St., $84,000, all bitulithic on concrete. W. W. Horner, 300 City Hall, engr.

Arkansas—State Hy. Dept., Little Rock, soon takes bids grading and concrete surfacing 7 mi. Little Rock-Memphis Rd., Monroe Co. and 15 mi. in St. Francis Co.; 6 mi. Memphis-Pocahontas Rd. and 17 mi. Memphis-Jonesboro Rd., Poinsett Co., all 18 ft. R. C. Limerick, highway engr.

Ark., Benton—Plans grading and surfacing with concrete or asphaltic concrete 12 blocks, 30 ft. $35,000. Engineer not announced.

Tex., Angleton — Brazoria Co. making plans grading, surfacing with macadam and shell base and bituminous topping State Highway 19, Dist. 11, 16 or 18 ft. $350,000 bonds voted. C. A. Gavin, West Columbia, engr.

Tex., Austin—Travis Co. making plans grading and gravel surfacing 14.5 mi. road from El Roy to Moores Crossing, and G. Cloud School to South Austin, 16 ft., $40,000; grading 22 mi. Bee Caves Rd., 24 ft. $26,000. O. Leonard, Box 256, co. engr.

Tex., Bellville—Austin Co. voted $450,000 bonds, highways in Rd. Dist. 4. W. I. Hill, co. judge.

Tex., Brownwood—Brown Co. election soon $700,000 bonds, hard surfacing 24 mi. highway radiating from here, 18 ft. R. E. Lee, co. judge.

Tex., Cameron—Milam Co. soon takes bids grading and bridging 4.09 mi. State Highway 43, Dist. 29, 18 ft. $33,160. A. F. Mitchell, co. engr.

Streets and Roads (Continued)

Tex., Cameron—Milam Co. plans hard surfacing 13 mi. road from Rockdale north, Dist. 6, 18 ft. $250,000. A. F. Mitchell, co. engr.

Tex., Crowell—Having plans prepared paving streets in business section. To exceed $25,000. F. E. Devlin, Bitting Bldg., Wichita, Kan., engr.

Tex., Ft. Worth—Beacon Hill Land Co., F & M Bldg., had plans prepared paving, etc., 154 acre addition at Stop 6, Dallas Interurban. $60,000. Baker & Von Zuben, Ellison Bldg., engrs.

Tex., Ft. Worth — J. P. King, 1214 Presidio St., had plans prepared paving, etc., Riverside Park, 350 acre addition. $75,500. Baker & Von Zuben, Ellison Bldg., engrs.

Tex., Gonzales — Gonzales Co. making plans hard surfacing 11 mi. highway, 18 ft. $250,000. J. G. Irby, co. engr.

Tex., Huntsville — Walker Co. voted $1,500,000 bonds improving roads. Noted Mar. 6.

Tex., Linden—Cass Co. making plans and soon takes bids grading and concrete paving 4.99 mi. State Highway 48, Atlanta to Johns Creek, 9 ft. $122,989. F. E. Hess, Medical Arts Bldg., Dallas, engr.

Tex., Memphis—Hall Co. making plans grading 5.5 mi. State Highway 18, Rd. Dist. 4, 24 ft. shoulder to shoulder. $41,390. C. L. Hasie, Box 168, engr.

Tex., San Angelo—A. De Berry and associates, San Angelo Natl. Bank, having plans prepared development of 158 acre subdivision, Hyde Park Addition, streets to be paved, etc. $75,000. H. Fry, Magnolia Bldg., Dallas, engr.

Tex., San Antonio — Soon takes bids widening 5 blocks Market St., from 31- to 70-ft. $65,000. S. Ewig, city engr.

Tex., San Diego—Duval Co. election May 3, $3,00,000 bonds, hard surfacing 11 mi. Laredo-Corpus Christi Rd., 18 ft.

Okla., Blackwell—Having surveys made grading and paving 8 blocks 8th, North, 1st and East Dewey Sts., 8,000 sq.yd. vertical fibre brick, 6,000 lin.ft. curbing, 2,400 cu.yd. excav. $30,000. W. Ritzhaupt, Blackwell, engr.

Okla., Enid—Garfield Co. preparing plans grading and paving 35 mi. roads, 18 ft. $500,000. F. W. Denner, co. engr.

Okla., Pawnee—Pawnee Co. having surveys made grading and paving 7 mi. roads in Keystone and Cimmaron Twps., 18 ft. $40,000. A. P. Walker, Pawnee, engr.

Okla., Sapulpa—Creek Co. having surveys made grading and paving 8 mi. secondary roads, 18 ft. $40,000. C. K. Howard, Sapulpa, engr. Noted Dec. 13.

Okla., Waurika—Plans grading and paving 4 blocks Bway., 9,000 sq.yd. vertical fibre brick and 2,400 lin.ft. curb and gutter. $26,000. F. E. Develin, 318 Sedgwick Bldg., Wichita, Kan., engr.

Colo., Denver — Making plans curbing, grading and surfacing ½ mi. to ¾ mi. in North Denver Impvt. Dist. 34, $121,287; concrete paving 12 blocks Alley Paving Dist. 109, $26,349, 12 blocks Alley Paving Dist. 110, $25,000; 12 blocks Alley Paving Dist. 111, $26,412; 12 blocks Alley Paving Dist. 112, $25,000. A. K. Vickery, City Hall, engr.

Wash., Kelso—Making plans paving 4th and 5th Sts. S., $60,000. U. G. Jackson, city engr.

California—State Highway Comn., Sacramento, making surveys road up North Fork Feather River Highway between Oroville, Butte Co., and Quincy, Plumas Co. $5,000,000 to $6,000,000. R. M. Morton, state highway engr.

Calif., El Cerrito—Had plans prepared improving Pomona, Carmel and Ramon Sts., 45,000 sq.ft. asphaltic madam, 6,000 sq.ft. concrete gutter, 3,000 lin.ft. concrete curb, 15,000 sq.ft. concrete walks, etc. R. L. Calfee, 222 South 2nd St., Richmond, engr.

Calif., Los Angeles—Had plans prepared improving St. Andrews Pl., incl. 99,249 sq.ft. Warrenite-bitulithic, 6,075 sq.ft. walks, etc.; Alley southwest of 4th St. between Chicago and St. Louis Sts., 24,498 sq.ft. 4 in. bituminous; El Nido St., asphaltic concrete (Topeka) pavement. J. A. Griffin, city engr.

Calif., Los Angeles—Had plans prepared improving Irolo St., 96,700 sq.ft. Warrenite-bitulithic, 1,883 sq.ft. walks, 5,464 sq.ft. gutter, 4 170 sq.ft. bituminous base; Larga St., 37,967 sq.ft. oil and roll, 7,218 sq.ft. walks, 6,101 sq.ft. gutter; 74th and San Pedro Sts., 98,055 sq.ft. 6 in. concrete, 28,715 sq.ft. Warrenite-bitulithic, 5,215 ft. curb, 25,985 sq.ft. walks, 2,517 sq.ft. gutter. J. A. Griffin, city engr.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving 1 mi. Rd. Dist. Impvt. 262, Ohio Ave., (Azusa Canyon Rd.), incl. 2,729 cu.yd. excav., shaping 12,062 sq.yd. roadbed, shaping 10,655 lin.ft. shoulders, 12,012 sq.yd. macadam; 1.94 mi. Rd. Dist. Impvt. 255, Ballona Ave. between Western Ave. and Hawthorne city limits, 6,200 cu.yd. excav., shaping 24,691 sq.yd. roadbed 22,703 sq.yd. Willite top, 22,703 sq.yd. Willite base, shaping 11,250 sq.yd. shoulders, 20,411 sq.yd. 5 in. granite subbase and shoulders; 3.71 mi. Rd. Dist. Impvt. 257, Michigan Ave. and Florence-Downey Rd., 17,948 cu.yd. excav., shaping 44,565 sq.yd. roadbed, 44,565 sq.yd. concrete, shaping 19,568 lin.ft. shoulders, etc.

Calif., Martinez—Contra Costa Co. had plans prepared improving highway, Rd. Impvt. Dist. 2, 80,000 sq.ft. 2½ in. asphaltic concrete with 1½ in. Warrenite surface, curbs, gutters, etc. R. L. Calfee, 222 South 22nd St., Richmond, engr.

Calif., Palo Alto—Plans paving streets in Crescent Park Tract. To exceed $25,000. J. F. Bxybee, Jr., city engr.

Calif., San Francisco—Had plans prepared improving Turk St. between Parker Ave. and Willard St., 52,975 sq.ft. asphaltic concrete, etc., $25,600; Turk St. between Masonic and Parker Aves., 86,000 sq.ft. asphaltic concrete, etc., $35,100; Masonic Ave., 40,398 sq.ft. asphaltic concrete, $14,000; San Jose Ave., 22,000 sq.ft. asphaltic concrete, 18,860 sq.ft. artificial stone sidewalk, etc., $11,700.

Calif., San Francisco—Rejected bids improving 48th Ave., 39,353 cu.yd. fill, 190,344 sq.ft. asphaltic concrete, etc. M. M. O'Shaughnessy, city engr. Noted Apr. 3.

Calif., San Jose—Plans paving 17 mi. streets during 1924. W. Popp, city engr.

Calif., San Rafael—Marin Co. having plans prepared improving highways, Superv. Dists. 4 and 5. $15,000 for each district. J. C. Oglesby, co. surv.

Calif., South San Francisco (Branch San Francisco)—Having plans prepared grading and paving ½ mi. road connecting Los Cerritos tract with Orange Ave., 60 ft. G. A. Kneese, city engr.

Que., Verdun—Plans to expend $84,000, construction and improvements of highways and streets, tar macadam; $75,000 extending asphalt parements on Wellington St. and Verdun Ave; $15,000 extending Wellington St., from 6th Ave. to Osborne St. H. Hadley, city engr.

Ont., Dresden—Kent Co. Good Rds. Com. plans to pave 4 mi. highway from here to Wabash, concrete. $140,000.

BIDS DESIRED

N. Y., Buffalo—Apr. 15, by Bd. Supervs. Erie Co., 29 City Hall, concrete paving Harlem Ave., Big Tree Rd. and Depot St. To exceed $25,000. G. C. Diehl, Ellicott Sq. Bldg., engr.

N. Y., Buffalo—Apr. 18, by Dept. Pub. Wks., paving and repaving Trenton Ave., Chelsea Pl., Andover and Cable Sts., vitr. brick or asphalt. To exceed $25,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., Long Island City—Apr. 14, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, etc., Corona Ave., 101st, Nicolls and 137th Sts.; curbing Potter Ave.; recurbing 81st St.

N. Y., New York—Apr. 15, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., curbing, laying sidewalks, etc., on East 132nd St.; paving Spencer St. and Greystone Ave.; grading, Ericson Pl., West 232nd St., Laconia and Gleason Aves.

N. Y., New York—Apr. 16. by J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, curbing, flagging and laying sewers in Seaman Ave. and Cummings St.; repaving West Bway., granite blocks; curbing, recurbing, flagging, reflagging and sheet asphalt paving West 174th and West 175th Sts.

N. Y., New York—Apr. 17, by Park Bd., Municipal Bldg., repaving roadway of Spuyten Duyvil Parkway. F. D. Gallatin, pres.

N. Y., Plattsburg—Apr. 18, by Common Council, 40,000 gal. carpeting asphalt on various streets. I. L. Wood, city engr.

N. Y., Poughkeepsie—Apr. 16, by S. L. Davis, town superv., Arlington Firehouse, curbing, guttering, concrete sidewalks in Arlington and Southeast Ave. Sidewalk Dists., Contrs. 1 and 2. O. A. D'Luhosch, 54 Market St., civil engr. H. Dean, 234 Main St., consult. engr.; adv. E. N.-R. Apr. 10.

New Jersey — Apr. 28, by State Hy. Dept., Trenton,, rein.-con. paving Route 6, Sect. 10, Marlboro-Quinton, Cumberland Co., also Route 7, Sect. 3, Andersons Corner-Colts Neck, Monmouth Co. A. L. Grover, sec.; adv. E. N.-R. Apr. 10.

N. J., Bridgeton—Apr. 22, by Bd. Freeholders Cumberland Co., Court House, concrete paving 43,329 sq.yd. Sect. 1, Bridgeton-Port Norris Rd. W. M. Sharp, Bridgeton, co. engr.

N. J., Newark—Apr. 17, at office of T. L. Raymond, dir. Pub. Wks., City Hall, grading, curbing, flagging and asphalt paving Prospect Row, Fabyan Pl., Eastern Parkway, Cameron and Varsity Rds., South 11th, Montrose and Dover Sts., Grove and Park View Terraces, Berkeley, Keer, West End and 13th Aves., Heller Parkway from Ridge to 1st Sts., Heller Parkway from Summer to Mount Prospect Aves. $380,240.

N. J., New Brunswick—Apr. 17, by Bd. Freeholders Middlesex Co., Bayard St., 2,800 tons ¾, 1½, 2 and 2½ in. screenings, Grades A and B trap rock or dolomite. M. F. Larson, New Brunswick, engr.

N. J., Princeton—May 6, by Mayor and Boro Council, paving 1,845 ft. University Pl., 25 ft., 3 in. asphalt on 6 in. concrete. $32,500. G. M. Brown, 28 Wiggins St., engr. Noted Mar. 13.

N. J., South Orange—Apr. 11, by Streets & Highways Com., Village Hall, grading, curbing, guttering, laying sewers, 16,000 sq.ft. concrete sidewalks and paving 6.000 sq.yd. Highland Rd., bituminous macadam; curbing and laying 5,500 sq.ft. concrete sidewalks on Thorndon St.; laying sewers and grading 17,500 cuyd. Mayhew and Harding Drives; 1,580 lin.ft. sanitary sewers in Lenox Rd. and 5th St. I. T. Redfern, village engr.

Pennsylvania—Apr. 23, by State Hy. Dept. Harrisburg, 32 mi. road in 12 projects, bids also received Apr. 24, for 39 mi. road in 11 projects. P. D. Wright, secy.; adv. E. N.-R. Apr. 3 and 10.

Pennsylvania — Apr. 28, by State Hy. Dept., Harrisburg, constructing 12 projects totaling 40 mi., and Apr. 29, 11 projects, 43 mi., in 20 counties; adv. E. N.-R. Apr. 10.

Delaware—Apr. 30, by State Hy. Dept., Dover, constructing 1.903 mi. Walker-Deakyneville Rd., Contr. CN-14; 3.314 mi. Peppers-Lowes X Rds., Contr. CS-25; adv. E. N.-R. Apr. 10.

Va., Richmond—Apr. 11, by Bd. Supervs. Charles City Co., graveling 3.47 mi. River Rd., 4.76 mi. Holdcroft Rd., 6.35 mi. Salem Church Rd., 4.5 mi. road from Bourns Store on River Rd. to Binns Store on Roxbury Rd. J. M. Gill, chn.

W. Va., Moundsville—Apr. 28, by L. L. Stidger, clk., paving with asphalt, brick block or concrete, Park Pl., Elm, Walnut, Oak, Tomlinson and Parrott Aves., 1st, 2nd, 8th and 11th Sts. Bids will be received for either curbing or paving or for entire project. Noted Mar. 6.

W. Va., Williamson—Apr. 19, by Mingo Co., improvement 7.31 mi. Marrowbone Creek Rd., 38,600 lin.ft. clearing, 60,000 cu.yd. excav., etc.; 3.35 mi. Buffalo Creek Rd., 17,690 lin.ft. clearing, 19,900 cu.yd. excav., 11,100 cu.yd. borrow, etc. H. Cook, co. engr.

Georgia—Apr. 19, by State Hy. Dept., East Point, 7.611 mi. Thomaston-Zebulon Rd., Federal Aid Project 436, Upson Co., 561 cu.yd. concrete, 41,389 lb. reinforcing, 6.532 acres clearing, 83,928 cu.yd. earth and 4,512 cu.yd. rock excav., etc., E. H. Davis, Griffin, engr.; 3.7 mi. Cleveland-Balirsville Rd., Federal Aid Project 284, Union Co., 21,751 sq.yd. 6-in. compacted waterbound macadam, 3.7 mi. shouder construction, H. L. Furlow, Gainsville, engr.

Ga., Dalton—Apr. 14, by City Clerk, paving Cleveland St. and Thornton Ave., 50,000 sq.yd. asphalt on concrete wth concrete curbing, to exceed $25,000.

Florida—Apr. 18, by State Rd. Dept., Tallahassee, constructing 10.529 mi. Rd. 2, Lake Co., Federal Aid Project 44, incl. grading, hard surfacing, plain or rein.-con., asphaltic concrete, sheet asphalt, on either concrete or rock base, vitr. brick and bituminous macadam on rock base. All black top pavements to be with or without flush curbs. J. L. Cresap, state highway engr.

Miss., Ecru—Apr. 17, by J. C. Browning, city clk., 4 mi. 4 in. single course 1-2-4 mix concrete sidewalks, 5 and 6 ft.

La., Baton Rouge—May 14, by Comn. Council, paving 46 streets. J. W. Billingsley, City Hall, consult. engr.; adv. E. N.-R. Apr. 10.

Tenn., Gallatin—Apr. 17, by Mayor nd Bd. Alderman, asphaltic resurfacing 44,000 sq.yd. existing macadam pavement, alternate bids on Kentucky rock asphalt, asphaltic concrete (Topeka), bituminous macadam, (penetration method). Work incl. 7,800 tons broken stone, rolled in place. $50,000. H. B. Klyce, 506 4th and 1st Natl. Bank Bldg., Nashville, engrs. Noted Nov. 1.

Kentucky—Apr. 22, by State Hy. Dept., Frankfort, surfacing with waterbound macadam 6.5 mi. Somerset-Stanford Rd., State Project 22, Sect. G, Lincoln Co., 13,000 cu. yd. earth, 500 cu.yd. borrow and 250 cu. yd. rock excav., 28,160 sq.yd. scarifying and reshaping, 16,250 tons crushed stone,

Streets and Roads (Continued)

(includes 20% screenings), etc. J. S. Boggs, state highway engr.

O., Cleveland—Apr. 16, grading, curbing and paving Cedar Ave. S. E., Clairdon Ave. N. E., Coronado Ave. N. E., Corsica Ave. N. E., Forest Ave. S. E., Gifford Ave. S. W., Hydraulic Ave. S. E., Moore Court N. W., Wentworth Ave. S. W., East 37th, West 4th, West 20th, West 44th and West 59th Sts. R. Hoffman, city engr.

O., Cleveland—Apr. 19, by Cuyahoga Co., grading, curbing and paving Kinsman Rd. 6. $278,600. F. Lander, Court House, engr.

Michigan—Apr. 16, by State Hy. Dept., at office Bd. Oakland Co. Rd. Comrs., Pontiac, shaping and surfacing 0.648 mi. State Trunk Line Rd. 10-34, Sect. B, 7,606 sq.yd. asphalt, concrete or bituminous concrete; grading and surfacing 3.25 mi. State Trunk Line Rd. 10-41, 38,134 sq.yd. asphalt, concrete or bituminous concrete, 4.746 mi. Federal Aid Project 97, Sect. A, 55,567 sq.yd. sheet asphalt, concrete or bituminous concret.

Michigan—Apr. 17, by State Hy. Dept., at office Bd. Ottawa Co. Rd. Comn., Grand Haven, shaping and surfacing 1.502 mi. State Trunk Line Rd. 11-71, 1,884 tons bituminous wearing surface, 2,379 tons bituminous binder.

Michigan—Apr. 24, by State Hy. Dept. at office Mason Co. Rd. Comn., Ludington, grading and surfacing 0.994 mi. State Trunk Line Rd. 20-22 and 11-37, Mason Co., 11,697 sq.yd. concrete, asphalt or bituminous concrete, bids also received at office Lapeer Co. Rd. Comn., Lapeer, grading and surfacing 1.244 mi. State Trunk Line Rd. 36-4, Lapeer Co., 7,660 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, ch. engr.

Michigan—Apr. 25, by State Hy. Dept., at office Bd. Rd. Comn., Leland, grading and gravel surfacing 3.106 mi. State Trunk Line Rd. 22-13, Sect. A, 29,156 sq.yd. gravel, and 2.992 mi. State Trunk Line Rd. 22-16, Sect. D, 28,436 sq.yd. gravel, both Leelanau Co.

Michigan—May 1, by State Hy. Dept., Lansing, grading and gravel surfacing 4.99 mi. State Trunk Line Rd. 25-12, Sect. B, Chippewa Co. G. C. Dillman, ch. engr.

Ill., Harvey—Apr. 14, by J. A. Alten, secy. Bd. Local Impvts., City Hall, 40,000 sq.yd. concrete paving, 20,000 lin.ft. concrete curb and gutter.

Wisconsin—Apr. 24, by State Hy. Comn., at div. office 4, grading and surfacing Stevens Point-Wausau Rd. Federal Aid Project 37, Portage Co. and Stevens Point-Wausau Rd., Federal Aid Project 38, Portage Co. incl. 2,532 cu.yd. borrow, 25,994 cu.yd. earth excav., 87,062 sq.yd. concrete, etc. A R. Hirst, Madison, highway engr.

Wis., Janesville—Apr. 17, by Com. of Pub. Wks., grading, paving, curbing and guttering various streets. C. V. Kerch, city engr.; adv. E. N.-R. Apr. 10.

Wis., Madison—Taking bids paving with one course concrete, curbing and guttering Vista Rd., Woodrow and St. Paul Aves., 30 ft. $25,000. E. E. Parker, city engr.

Wis., Milwaukee—Apr. 14, by Dept. Pub. Wks., improving various alleys, 13,047 sq.yd. concrete and 4,360 cu.yd. grading. $40,000. G. Schwada, city engr.

Minnesota—Apr. 22, by State Hy. Dept., St. Paul, **(S. P. means State Project, F. A. P. means Federal Aid Project)**, 12 mi. S. F. 2-32, Sect. 2, F. A. P. 348, Sect. A, 156,000 cu.yd. excav.; 4 mi. S. P. 2-33, Sect. 1, F. A. P. 348, Sect C, 63,000 cu.yd. excav., Bridge 4230; 20 mi. S. P. 6-39, Sect. 2, F. A. P. 333, 206,000 cu.yd. excav., Bridges 4107 and 4136, 120 and 40 ft. respectively; 7 mi. S. P. 9-38, F. A. P. 311, 75,000 cu.yd. excav., Bridge 3923, two 23 ft. spans; 15 mi. S. P. 9-39, Sect. A, F. A. P. 352, 187,000 cu.yd. excav., Bridge 4253, 80 ft. long; 9.5 mi. S. P. 13-26, Sect. F, F. A. P. 346, 141,000 cu.yd. excav., Bridge 4046, 40 ft. long; 25 mi. S. P. 28-25, Sect. A, F. A. P. 360, 360,000 cu.yd. excav.; 20 mi. S. P. 29-23, Sect. A, F. A. P. 358, 340,000 cu.yd. excav., Bridge 4227, 50 ft.; 4.5 mi. S. P. 30-24, F. A. P. 336, 122,000 cu.yd. excav., Bridge 4159, 30 ft., and 2 mi. paving, comprising 29,000 sq.yd. and 6,600 lin.ft. curb; 9.5 mi. S. P. 56-24, Sect. C, F. A. P. 359, 74,000 cu.yd.; 12 mi. S. P. 59-22, Sect A, F. A. P. 357, 219,000 cu.yd. excav., Bridge 4239, two 20-ft. spans, and widening Bridge 1571; 23.5 mi. S. P. 64-24, Sect. D, F. A. P. 353, 250,000 cu.yd. excav., Bridge 4226, 30 ft.

Minn., Benson—Apr. 23, by D. P. Carney, aud. Swift Co., Job 2401, Sects. A, B and C, 59,538 cu.yd. excav., 56,327 cu.yd. overhaul; Job 2402, 23,062 cu.yd. excav., 8,533 cu.yd. overhaul; one 100 ft. steel span with rein.-con. abutments and one 16 ft. I-beam with rein.-con. abutments. $26,000. J. R. Johnson, Benson, engr.

Minn., Grand Rapids—Apr. 22, by T. Erskine, aud. Itasca Co., 8 mi. Job 2303, State Aid Rd. 9, Div. A, 52,218 cu.yd. earth, 1,458 cu.yd. loose rock and 1,230 cu.yd. solid rock excav., etc.; 9 mi. Div B, 108,097 cu.yd. earth, 5,959 cu.yd. loose and 4,772 cu.yd. solid rock excav., 4.7 mi. Div. C, 38,639 cu.yd. earth, 1,587 cu.yd. loose rock and 1,295 cu.yd. solid rock excav. $50,000. H. A. Le Sueur, Grand Rapids, engr.

Minn., Hastings—Apr. 15, by R. W. Downs, aud. Dodge Co., Job 2401, State Rd. 1, 64,836 cu.yd. excav., 103,183 cu.yd. overhaul, etc., gravel surfacing about 8 mi., $35,000; Job 2407, State Rd. 7, 37,793 cu.yd. excav., 19,511 cu.yd. overhaul, etc., $10,000. J. Swan, Hastings, engr.

Minn., Pipestone — Apr. 24, by T. A. Bailey, aud. Pipestone Co., grading, etc., 8.5 mi. road, 66,000 cu.yd. excav., 320 cu.yd. monolithic concrete culverts, also 4.26 mi. grading, 33,000 cu.yd. excav., 130 cu.yd. monolithic concrete culverts, for Pipestone Co., (Pipestone), and Rock Co. (Luverne). $25,000. H. A. Smith, Pipestone, and J. Brown, Luverne, engrs.

Minn., St. Paul—Apr. 21, by G. J. Ries, aud. Ramsey Co., grading, etc., Prescott connection between St. Croix Bridge and State Highway 3, 79,507 cu.yd. earth, 5,029 cu.yd. loose rock and 23,036 cu.yd. solid rock excav., etc. $60,000. P. N. Coates, 900 Guardian Life Bldg., co. surv. Noted Nov. 29.

Kan., Emporia—Apr. 28, by Clerk Lyon Co., grading and surfacing with concrete or brick 2.003 mi. Neosho Rapids Spur, Federal Aid Project 224, Sect. A, 21,148 sq.yd. surfacing, 11,277 cu.yd. earth and 55 cu.yd. rock excav. 212 cu.yd. concrete in culverts, 14,667 lb. reinforcing, etc. W. S. Ruggles, co. engr. Noted Mar. 20.

Kan., Leavenworth—Apr. 30, by Clerk Leavenworth Co., grading and surfacing with brick 3.201 mi. Stillings Extension, Federal Aid Project 234, Sect. A, 46,220 sq.yd. vitr. brick, 1,430 sq.yd. concrete, 31,327 lin.ft. concrete curb and gutter, 24,479 cu.yd. excav., etc.; 0.635 mi., Sect. A, 8,878 sq.yd. vitr. brick, 10,168 cu.yd. excav., etc. L. C. Clark, co. engr. Noted Mar. 27.

Kan., Troy—Apr. 25, (extended date) by Clerk Doniphan Co. grading 8.012 mi. highway, Federal Aid Project 169, Sect. A, 74,136 cu.yd. excav., 8,823 cu.yd. borrow, etc.; 7.292 mi., Sect. C, 110,582 cu.yd. earth and 200 cu.yd. rock excav., etc.; grading and surfacing with concrete or brick 1.004 mi., Sect. E, 19,963 sq.yd. concrete or vitr. brick, 10,441 cu.yd. excav., etc. Kansas Eng. Co., 1233 Western St., Topeka, engrs. Noted Mar. 20.

Nebraska—Apr. 15, at Senate Chamber in State House, Lincoln, gravel surfacing and incidental work on 8.14 mi. Nebraska City-Lincoln Project 133 A, Otoe Co., 96,600 sq.yd. gravel, 9.74 mi. Milford-East Co. line Project 134 A, Seward Co., 120,450 sq.yd. gravel, 1.99 mi. Ashland-Melia Project 107 B, Saunders Co., 23,500 sq.yd. gravel, 11.78 mi. Fremont-Ceresco Project 27, Sects. 1 and 2, Saunders Co., 142,250 sq.yd. gravel, 3.98 mi. D. L. D. Project 19, Lancaster Co., 56,300 sq.yd. gravel, 16.7 mi. Lincoln-Beatrice Project 18, Lancaster Co., 207,000 sq.yd. gravel, 9.78 mi. Washington Highway Project 2 C, Otoe Co., 121,000 sq.yd. gravel; grading, culverts and incidental work on 6.009 mi. Wahoo-David City Project 204 B, Saunders Co., Hebron-Nelson Project 164 D, Thayer Co., 0.85 mi. Ashland Cemetery-East Project 107 D, Saunders Co., 4,358 mi. Lincoln-Woodlawn Project 225, Lancaster Co., 10.49 mi. Wahoo-David City Project 204 A, Butler Co., and 2.01 mi. Sterling West Project 218 A, one 16 ft. and one 28 ft. I beam bridges and one 75 ft. pony truss, Johnson Co. R. L. Cochran, Lincoln, state engr.

Nebraska—Apr. 16, at Senate Chamber in State House, Lincoln, grading, draining and incidental work on 7.72 mi. Pierce-Wausa Project 136 B, Pierce Co., 1.63 mi. Central City-Eldorado Project 156 C, also 16 ft. I beam bridge, Hamilton Co., 3.93 mi. Center-Niobrara Project 113 B, Knox Co., 3.11 mi. Greeley Center-Wolbach Project 84 C, Greeley Co.; gravel surfacing, grading and incidental work on 5.34 mi. Grand Island-Cushing Project 60 B, Howard Co., 69,400 sq.yd. gravel, 7.344 mi. Norfolk-Battle Creek Project 139 B, Madison Co., 89,350 sq.yd. gravel, 8.5 mi. Norfolk-Columbus Project 5, Madison Co., 105,225 sq.yd. gravel, 2.348 mi. Norfolk-Columbus Project 5, Platte Co., 27,700 sq.yd. gravel, 5.663 mi. Central City-Clarks Project 216 A, Merrick Co., 66,378 sq.yd. gravel. R. L. Cochran, Lincoln, state engr.

Nebraska—Apr. 17, at Senate Chamber in State House, Lincoln, gravel surfacing and incidental work on 6 mi. Beatrice-Crab Orchard Project 122 A, Gage Co., 49,300 sq.yd. gravel, 14.51 mi. Overton-Cozad Project 39, Dawson Co., 188,000 sq.yd. gravel, 22.04 mi. Red Cloud-Hastings Project 32, Webster Co., 285,500 sq.yd. gravel, 2.5 mi. Beatrice-Fairbury Project [illegible], Gage Co., 28,800 sq.yd. gravel; grading, culverts and incidental work 2.82 mi. Ringgold-Tryon Project 111 B, McPherson Co., 1.49 mi. earth road Arnold-Stapleton Project 96 B, Logan Co., 2.87 mi. earth road Arnold-Stapleton Project 96 A, Custer Co., 3.68 mi. earth road Ravenna-Sweetwater Project 212, Sherman Co., 6 mi. earth road Ansley-Sargent Project 127 A, also two 24 ft. and one 22 ft. I-beam bridges, Custer Co., 8.18 mi. earth road Ord-Arcadia Project 193 A, also three 12 ft. I-beam bridges, Valley Co. 0.744 mi. earth road Hazard-South Project 92 B, also one 22 ft. I-beam bridge, Sherman Co., 2 overflow pavements on North Loup-Ord Project 85 A, Valley Co. R. L. Cochran, Lincoln, state engr.

Nebraska—Apr. 18, at Senate Chamber in State House, Lincoln, grading, earth roads, culverts, and incidental work on 3.5 mi. Capital Highway Project 208, and one 100 ft. pony truss bridge, Richardson Co., 6.02 mi. Hay Springs-Chadron Project 124 A, Sheridan Co., 4.38 mi. Tecumseh-Auburn Project 116 B, and widening I-beam bridge, Nemaha Co., 6.07 mi. Alliance-Chadron Project 76 D, Box Butte Co., 14.01 mi. Gordon North Project 223, and one 16-ft. I-beam bridge Sheridan Co., 0.67 mi. Big Springs-Megeath Project 224 A, Deuel Co., 1.59 mi. Big Springs-Megeath Project 224 B, and one 24 ft. I-beam bridge, Keith Co.; gravel surfacing 3.705 mi. Lewellen-Oshkosh Project 117 B, 26,753 sq.yd. gravel, Garden Co., 6.153 mi. Alliance-Antioch Project 21, 58,000 sq.yd. gravel, Box Butte Co., 2.08 mi. Lewellen-Oshkosh Project 117 A, 24,445 sq.yd. gravel, Garden Co.; 4.82 mi. paved road Millard-West Project 100, Douglas Co., 4.93 mi. paved road Florence-Elk City Project 187, Douglas Co.; two 33 ft. and one 38 ft. I-beam bridges, and incidental work on York Bridges Project 143 D, York Co. R. L. Cochran, Lincoln, state engr.

Neb., Omaha—Apr. 14, by Douglas Co., paving Rd. 52, Lincoln Hy. to Military Rd., brick, concrete or asphaltic concrete. $80,000 or more. L. E. Adams, Omaha, engr.

Mo., Clayton—Apr. 16, by H. Jablonsky, engr. St. Louis Co., Court House, grading and surfacing 4.1 mi. Missouri Bottom, Auchon, Grensley and Mehl Aves., 2,326 squares 9 in. macadam, etc. $25,000.

Mo., Kirksville — Apr. 21, by E. L. Barnes, city clk., grading, curbing and rein.-con. paving 14 blocks Normal and McPherson Sts., 30 ft.

Tex., San Antonio—Apr. 28, by A. C. Pancoast, engr. Bexar Co., topping 37,000 sq.yd. St. Hedwig Rd., Precinct 4, 1 in. cold rolled Uvalde rock asphalt, $30,000; 4 mi. gravel base St. Hedwig Rd., Precinct 4, 18 ft., $25,000.

Okla., Grandfield — Apr. 14, by G. H. Hoeffer, city clk., grading and paving 5 blocks 2nd St., 11,000 sq.yd. concrete, 6,500 lin.ft. concrete curbing, 3,660 cu.yd. excav. $41,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, archts. Noted Mar. 20.

Colorado—Apr. 15, by State Hy. Dept., Denver, concrete paving and bridging 0.892 mi. Federal Aid Project 116-B, El Paso Co., 496 cu.yd. concrete, 18,500 cu.yd. earth and 400 cu.yd. rock excav., 9,710 sq.yd. one course plain cement concrete pavement, alternate bids for bituminous surfacing on concrete. $75,573. L. D. Blauvelt, state highway engr.

Colo., Denver—Apr. 15, by Dept. Impvts. & Parks, asphalt paving in East Denver Paving Dists. as follows: No. 12, 12 blocks, $40,412, No. 13, 12 blocks, $40,106, No. 14, 12 blocks, $55,017; South Capitol Hill Paving Dists. as follows: No. 1, 12 blocks, $46,057, No. 3, 12 blocks, $43,223, No. 4, 12 blocks, $45,115, No. 7, 12 blocks, $42,358, No. 8, 12 blocks, $49,092, No. 10, 12 blocks, $49,654; West 33rd Ave. Paving Dist. 1, 12 blocks, $45,064. A. K. Vickery, city engr.

California—Apr. 21, by State Highway Comn., Sacramento, surfacing 9.7 mi. between Janesville and point 4 mi. west of Milford, Lassen Co., crushed gravel or stone. R. M. Morton, state highway engr. Noted Mar. 20.

California—Apr. 28, by State Highway Comn., Sacramento, improving 1.2 mi. highway between Sea Cliff and Rancho El Rincon, Ventura Co., also constructing seawall, incl. 63,100 cu.yd. sand embankment, 17,050 cu.yd. structural excav., 6,910 lin.ft. subgrading, 4,000 cu.yd. concrete curb, paving and walks, 16,250 cu.yd. concrete seawall, 990 cu.yd. concrete for culverts, etc.

Calif., Daly City (Branch San Francisco) —Apr. 21, by City Trustees, improving Roosevelt, Templeton Sts., etc., 900,000 sq.ft. 4 in. concrete with 1½ in. Topeka asphaltic concrete surface, curbs, gutters,

Streets and Roads (Continued)

walks, etc. G. A. Kneese, Redwood City, engr.

Calif., San Anselmo—Apr. 21, by Town Trustees, improving Woodland and Ross Aves., etc., 382,292 sq.ft. grading, 385,627 sq.ft. asphaltic concrete, 30,320 lin.ft. concrete curb, 44,893 sq.ft. concrete gutter, etc. J. J. Jessup, town engr. Noted Apr. 3.

Calif., San Francisco—Apr. 16, by Bd. Pub. Wks., improving Marina Blvd. from Steiner to Lyon St., 87,907 sq.ft. asphalt with 6 in. foundation, 1½ in. binder course and 1 in. wearing surface, 20,808 sq.ft. artificial stone walks, 3,304 lin.ft. concrete curb, 6,608 sq.ft. vertical fibre brick gutter, etc. $55,000. M. M. O'Shaughnessy, city engr.

Nova Scotia — Apr. 15, by Provincial Highway Dept., Halifax, graveling 15 mi. main highway from Halifax to Yarmouth, and 16 mi. Baddeck-Port Hawkesbury Highway.

Quebec—Apr. 16, by J. L. Boulanger, Dept. Rds., Quebec, applying bituminous oil on 12 highways, 629,100 ft., also on 838,000 ft. highways in various municipalities.

Ont., Ottawa — Apr. 15, by Ottawa Suburban Rd. Comn., 279 Carling Ave., 3 mi. bituminous macadam roadway on Richmond Rd. north of Richmond. $30,000. A. K. Hay, engr.

BIDS RECEIVED

New York—A. W. Brandt, comr. highways, Albany, Apr. 4 **(e. e. means engineer's estimate)** constructing and reconstructing 8.55 mi. Highways 1671, 1668, 8176 Saugerties-Palenville, Parts 2, 1-A and I-B. Greene and Ulster Counties, from J. L. Hayes Constr. Co., Inc., 53 South Bway., Yonkers, $355,264, e. e. $387,928; 6.48 mi. Repair Contr. 1397, Genesee Co., from Rochester Vulcanite Pavement Co., Exch. Pl. Bldg., Rochester, $290,896, e. e. $299,771; 5.08 mi. Highway 8172, Bolivar-Wellsville, Part 1, Allegany Co., from Weber Co., Ionia, Mich., $252,974, e. e. $288,079; 2.92 mi. Repair Contr. 1401, Gouverneur-Edwards, Part 1, St. Lawrence Co., from E. J. Anderson, Menands, Albany, $106,933 e. e. $107,443; 3.71 mi. Highway 5691, Utica-Poland, Part 2-B, Oneida Co., from Hines-McCabe, Inc., Cox Bldg., Rochester, $108,991, e. e. $141,051; 9.78 mi. Highway 8175, Fine-Starr Lake, St. Lawrence Co., from T. Holahan, 164 Lewis St., Rochester, $399,965, e. e. $404,306; 3.11 mi. Highway 1687, Willsboro-Keeseville, Part 1, Essex Co., from Lord Coopy & Fernia, Inc., Willsboro, $157,613, e. e. $165,181; 1.2 mi. Repair Contr. 1394, Oneida-Verona, Oneida Co., from Lane Constr. Corp., 37 Colony St., Meriden, Conn., $53,167, e. e. $57,847; 1.57 mi. Repair Contr. 1398, Hudson-Hollowville, Columbia Co., from Municipal Constr. Co., U. C. N. Bank Bldg., Utica, $66,876, e. e. $69,929; 2.66 mi. Repair Contr. 1400, Rochester-Scottsville, Part 2, Monroe Co., from F. W. and J. J. Crouch, Rochester, $109,757, e. e. $121,494; 6.89 mi. Highway 8177, Attica-Batavia, Parts 2 and 4, Genesee Co., from W. J. Gallagher, Medina, $241,211, e. e. $273,456; 3.42 mi. Highway 8174, Moores-Hemmingford, Clinton Co., from Miller, Haynes & Gillette Constr. Corp., Watertown, $139,937, e. e. $145,968; 2.37 mi. Repair Contr. 1396, Horseheads-Corning, Chemung Co., from E. V. Chappell, Binghamton, $96,993, e. e. $103,893; 3.05 mi. Highway 1688, Yates Co., from Houston & Burns, Hector, $148,236, e. e. $167,266; 2 mi. Repair Contr. 1399, Campbell-Bath, Steuben Co., from W. L. Collins, Hornell, $67,218, e. e. $76,844; 1.9 mi. Repair Contr. 1395, Highways 5366 and 3567, Greene Co., from Riteway Constr. Corp., New York City, $71,702, e. e. $78,623. Noted Mar. 20.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Apr. 3, from Cranford Co., 52 9th St., asphalt paving Bay Ridge Ave. $12,942, Ave. J $4,745, Mansfield Pl. $12,180, 40th St. $8,691, 48th St. $3,525, curbing, flagging and asphalt paving Lefferts Ave. $22,782, curbing and asphalt paving Mansfield Pl. $13,610; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., asphalt paving Bay 10th St. $8,748, East 40th St. $7,396, 10th Ave. $10,237, 48th St. $3,525, West 12th St. $8,760; Borough Asphalt Co., 1301 Metropolitan Ave., asphalt paving Belmont Ave. $3,090, Thatford Ave. $8,876; L. Mangieri, 190 31st St., grading, curbing and flagging Canal Ave., etc. $7,965; F. Persicano, 350 Fulton St., grading, curbing and flagging Ave. O, etc. $9,155, Schenectady Ave. $5,005, 19th Ave. $3,610. Noted Mar. 27.

New Jersey—State Hy. Dept., Trenton, rein.-con. paving 5,793 sq.yd. Route 10, Sect. 2A, Broad Ave., in Ridgefield, Bergen Co., from E. C. Humphrey, 426 Summit Ave., Hackensack, $25,314; improving Route 16, Sect. 7, Bayard Lane-Princeton, Mercer Co., 4,988 lin.ft. concrete curbing, 3,071 cu.yd. grading, 11,155 sq.yd. rein.-con. paving, from G. Van Kueren, 76 Montgomery Ave., Jersey City, $64,465. Noted Mar. 27.

Pennsylvania—State Hy. Dept., Harrisburg, opened bids Mar. 31 **(A. means Application and R. means Route)**, 7,300 ft. A. 1952, Beaver Co., from J. B. Reed Co., 505 Bway., McKees Rocks, $83,215; 19,205 ft. R. 338, Clearfield-Jefferson Counties, from Avery & Bailey, Philipsburg, $193,040; 37,272 ft. R. 79, Butler Co., from Garvey-Weyenberg Constr. Co., 807 College Ave., Appleton, Wis., $417,996; 23,918 ft. R. 185, Schuylkill Co., from J. A. Rudolph, 27 Pine St., Tamaqua, $252,922; 2,289 ft. R. 170, Luzerne Co., from M. J. Malloy, Main St., Sugar Notch, $40,608; 12,205 ft. R. 68, Westmoreland Co., from J. C. Mickey, 1601 Ligonier St., Latrobe, $116,779; 24,823 ft. R. 65, Venango Co., from Woods & Golder Constr. Co., 212 Mechanic St., New Castle, $230,832; 4,160 ft. R. 86, Erie Co., from C. M. Spillier, 329 West 21st St., Erie, $36,893; 24,508 ft. R. 189, Armstrong Co., from L. H. Hileman Constr. Co., First Natl. Bank Bldg., New Kensington, $282,825; 10,855 ft. R. 247, Fayette Co., from A. G. Rothey, Elizabeth, $85,367; 6,068 ft. R. 146, Montgomery Co., from McNichol Paving & Constr. Co., 1923 Cherry St., Phila., $78,845; 10,560 ft. R. 2577, Clarion Co., from J. Wiesner, St. Marys, $92,991; 11,900 ft. A. 2800, R. 211, McKean Co., from E. C. Jones Great Valley, N Y., $118,244; 33,913 ft. R. 325, Washington Co., from Donora Constr. Co., Donora, $402,259; 20,505 ft. A. 2296, R. 208, Venango Co., from Jamieson & Narlee Co., Fredonia, $219,890; opened Apr. 1, fabrication and erection of 1 span pony truss bridge on R. 37, Franklin Co., from Mason & Savage, Warren, $21,026; Jacob-Heilman Bridge in Armstrong Co., from Standard Eng. & Contg. Co., 2463 Bway., Toledo, O., $42,613; 11 span concrete arch bridge 1,362 ft. long over Susquehanna River, on R. 25, Northumberland, Synder-Union Counties, from McLean Contg. Co., 1415 Fidelity Bldg., Baltimore, Md., $383,391; 5,292 ft. A. 2004, Venango Co., from Meredith, McVaugh & Webb, 1409 West 10th St., Erie, $70,570; 14,500 ft. R. 272, Erie Co., from McDermott Constr. Co., 14 Butler St., Niles, O., $78,545; 24,871 ft. A. 2776, Venango Co., from Standard Paving & Contg. Co., 210 East Ohio St., Chicago, Ill., $202,361; 36,960 ft. R. 212, Bradford Co., from Horn & Devling, Athens, $371,333; 11,360 ft. R. 74, Mercer Co., from Meredith, McVaugh & Webb, 409 West 10th St., Erie, $98,575; 26,406 ft. R. 146, Montgomery Co., from McNichol Paving & Constr. Co., 1923 Cherry St., Phila., $197,298; 18,385 ft. R. 88, Warren Co., from J. C. Devine Co., Alliance, O., $176,166; 18,375 ft. A. 31, Tioga Co., from Horn & Devling, Athens, $190,215 crushed stone, $188,574 gravel; 3,491 ft. R. 204, Beaver Co., from Allison-Harris Constr. Co., 1212 Pennsylvania Ave., East Liverpool, O., $35,444; 14,913 ft. E. 214, A. 2758, from A. R. Cooper, Idamar, $142,067; 20,637 ft. R. 99, Cameron Co., from W. A. Palmer, 431 East North St., Bethlehem, $209,482; 24,738 ft. R. 141, A. 1926; Berks Co., from D. L. Risser, 713 Walnut St., Lebanon, $200,584. Noted Mar. 13.

North Carolina—State Hy. Comn., Raleigh, **(S. P. means State Project)**, grading and concrete or asphaltic paving 10.99 mi. S. P. 537-B, Guilford Co., from Ziegler & Dalton Constr. Co., Junction City, Kan., $381,181, 14.14 mi. S. P. 201-B, Carteret Co., from F. Mitchell Constr. Co., Greenville, $501,227, 11.22 mi. S. P. 330, Columbus Co., from Coastal Constr. Co., Florence, S. C., $331,728, 8.23 mi. S. P. 421-B, Franklin Co. and 2.41 mi. S. P. 447, Lee Co., from R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $257,418 and $44,609 respectively; grading, etc., 8.6 mi. S. P. 102, Beaufort Co., from H. M. Beasley, Lumberton, $40,435, 12.52 mi. S. P. 720, Caldwell Co. and 11.96 mi. S. P. 568, Moore Co., from W. C. Carter, Mebane, $60,648 and $40,814 respectively; grading and topsoiling 17.5 mi. S. P. 156, Martin Co., from N. L. Teer, Durham, $129,179, 13.75 mi. S. P. 721, Caldwell Co., from J. T. Plott, Grensboro, $114,260, 12.2 mi. S. P. 162, Nash Co., from J. F. Mulligan Constr. Co., North Wilkesboro, $44,642; grading and concrete paving 16.51 mi. S. P. 686-B, Stanly Co., from Hardaway Contg. Co., 909 Elizabeth Ave., Charlotte, $538,317. Noted Mar. 13.

O., Cleveland—Improving with **(a)** brick **(b)** bituminous concrete, **(1)** 4,910 sq.yd. Harvard Ave., 2,905 lin.ft. stone curb, etc. **(2)** 1,475 sq.yd. Natchez Ave., 1,000 lin.ft. stone curb, etc. **(3)** 1,860 sq.yd. Nathaniel Ave., 4,200 lin.ft. stone curb **(4)** 4,085 sq. yd. Revere Ave., 1,570 cu.yd. excav., 2,650 lin.ft. stone curb, etc. **(5)** 7,545 sq.yd. East 112th St., 3,160 cu.yd. excav., 4,610 lin.ft. stone curb, etc. **(6)** 3,445 sq.yd. Clearare Rd., 2,500 ft. stone curb, etc., from A. M. Pejsa, 3161 Derbyshire Rd., Cleveland Heights **(a1)** $27,502; Roehl Bros. Paving & Constr. Co., Lorain Ave., **(b2)** $7,379; W. E. McHugh, Pavers Exch., **(2)** $7,531 **(b5)** $35,262; Highway Constr. Co., 901 Lorain Co. Bank Bldg., Elyria, **(a3)** $19,373 **(a6)** $15,594; Baldwin Bros., 4,500 Euclid Ave., **(a4)** $23,223 **(a5)** $35,538.

Michigan — State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 13-44, Sects. A and B, St. Joseph Co., 32,070 sq.yd. concrete, from W. Fredrich, Coldwater, $62,294. Noted Mar. 13.

Michigan — State Hy. Dept., Lansing, shaping and surfacing Federal Aid Project 101 C, Van Buren Co., 31,410 sq.yd. concrete, from Kalamazoo Paving Co., Kalamazoo, $55,786. Noted Mar. 13.

Mich., Detroit—Paving with 3½ in. sheet asphalt, from Detroit Asphalt Paving Co., 20 McGraw Bldg., Alwyne Lane $8,354, Diversey Ave. $23,826, Dalrymple Ave. $18,398, Floyd Ave. $31,066, Glynn Court $7,459, Hartwick Ave. $2,931, Merton Rd. $58,322, Manderson Rd. $21,418, Nardin Ave. from Grand River to Dundee Aves. $27,100, Nardin Ave. from Burlingame to Elmhurst Aves. $15,856, 2nd Ave. $14,024, Strathmoor Rd. $55,377.

Illinois—Dept. Pub. Wks. and Buildings, Div. of Highways, Springfield, Apr. 4, paving with 18-ft. concrete, **(0.96 mi. 7-X, LaSalle means 0.96 mi. Route 7, Sect. X, LaSalle Co.)**, 0.96 mi. 7-X, LaSalle, from Trompeter & Sons, Peru, $33,691; 7.45 mi. Combination A, Sects. 18 and 19, Iroquois, from Devine Constr. Co., Watseka, $135,000; 5.26 mi. 9-36, Adams, from List & Weatherly Constr. Co., 416 Railway Exch., Kansas City, Mo., $119,344; 13.51 mi. Combination B, Sects. 9 and 10, Gallatin and Saline, from C. E. Hamilton, Carbondale, $312,000; 16.69 mi. Combination C, Sects. 23, 24 and 25, Champaign, from Harrison Eng. & Constr. Co., Kansas City, Mo., $276,432. Grading 16.86 mi. Combination D, Sects. 11A, 12A and 13A, Adams, 282,535 cu.yd. excav., from McAndrew & Hannahs, $158,500; 7.79 mi. 27-4A, Carroll, 95,180 cu.yd. excav., from Phelan-Shirley Co., 206 South 24th St., Omaha, Neb., $42,428; 5.3 mi. 43A-1A, Menard, 73,550 cu.yd. excav., from Trompeter & Sons, Peru, $38,811. Noted Mar. 27.

Wis., Kaukauna—Paving, etc. **(1)** Wisconsin Ave. **(2)** Dodge St., incl. 13,740 sq. yd. pavement, 5,800 cu.yd. grading, 5,800 lin.ft. curb and gutter, from J. McCarty, Kaukauna, grading **(1)** $0.95 **(2)** $1.08, concrete pavement **(1)** $2.86 **(2)** $2.88, vibrolithic concrete **(1)** $2.80 **(2)** $2.82, curb and gutter $0.95. Noted Jan. 31.

Mont., Livingston—Park Co., gravel surfacing 2.77 mi. Federal Aid Project 59, Sects. A and B, from J. S. Staley, Bozeman, $25,019.

Mont., Polson—Lake Co. improving 3.92 mi. Arles-Ravalli Rd.: gravel surfacing from A. L. Markhus & Co., Missoula, $25,606; one 90 ft. steel pony truss bridge, from D. Graham, Missoula, $12,370.

Tex., Glen Rose—Somervell Co., grading, gravel surfacing and bridging 12.35 mi. State Highway 68, State Aid Project 474, 16 ft., from McClung Constr. Co., Cleburne, $109,740.

Tex., Greenville — Hunt Co., grading, gravel surfacing and bridging 2.61 mi. State Highway 1, Greenville-Commerce Rd., 9,294 cu.yd. roadway and 22,012 cu.yd. borrow excav., 5,888 lb. reinforcing, 6,856 lin. ft. creosoted timber piling, 81,429 ft. treated and 9,639 ft. painted lumber, from Austin Bridge Co., 1813 Clanrence St., Dallas, $43,884; 6,175 cu.yd. gravel to be furnished by county, $15,400. Noted Feb. 14.

Nevada—State Highway Comn., Carson City, concrete paving 1.27 mi. 1st and Ultman Sts. to east city limits of Ely, White Pine Co., from Strange & Vallandingham, Salt Lake City, Utah, $64,215; grading and graveling 8.03 mi. Derby to Fernley, Lyon and Washoe Counties, from King & Malone, Cheney Bldg., Reno, $45,128. Noted Mar. 20.

Calif., Oakland—Improving 5th St. from Oakland Paving Co., 5000 Bway., 202,627 sq.ft. grading $0.04, 194,754 sq.ft. 6 in. concrete with 2 in. Warrenite surface $0.30. Noted Jan. 31.

Calif., San Diego—Improving A, Ash, Beech, Cedar and 7th Sts., incl. 176,272 sq.ft. 1½ in. asphalt concrete on 2½ in. bituminous, 88,382 sq.ft. 4 in. cement concrete, 1,300 sq.ft. 1½ in. asphaltic concrete gutters, 4,101 sq.ft. concrete sidewalk, 1,522 lin.ft. concrete curb, from D. H. Ryan, 1615 Fern St., $45,160. Noted Mar. 20.

CONTRACTS AWARDED

R. I., Providence—Water Supply Bd., City Hall, grading and bituminous concrete paving 4 mi. road in Scituate, to J. H. Sullivan Co., Brighton (Boston P. O.), Mass., $218,565. Engrs. est. $200,000. Noted Apr. 3.

Streets and Roads (Continued)

N. Y., Cohoes—Bd. Contr. & Supply paving Columbia St. between Lancaster St. and Central Ave., to S. Scullen, Cohoes. Engrs. est. $40,000. Noted Feb. 21.

N. Y., Mount Morris—Completing brick pavements on Main and Chapel Sts., to Oliver-Costich Co., Exch. Pl. Bldg., Rochester, $60,702.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, regrading, curbing, recurbing, flagging, reflagging and granite block paving 5th Ave., etc., to Asphalt Constr. Co., 208 Bway., $45,220; granite block repaving 1st Ave., to W. J. Fitzgerald, 547 West 45th St., $464,050; repairing wood block pavement in railroad area, to Casper-Helbock Co., Harlem River and 150th St., $54,100. Noted Mar. 20 and 27.

N. Y., White Plains—F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, improving Anderson Rd., to Frederick Roeber Co., Inc., 507 5th Ave. New York, $149,766. Noted Feb. 28.

N. J., Newark—To J. B. Gilligan-Casey Co., 919 Broad St., sheet asphalt paving 600 sq.yd. Aldine St. $3,186, 900 sq.yd. Mulford Pl. $5,302, 1,150 sq.yd. Patton Pl. $6,934, 11,300 sq.yd. Weequahic Ave. $61,268; to Standard Bitulithic Co., 50 Church St., New York, 2,800 sq.yd. Brookdale Ave. $12,572, 5,100 sq.yd. Clinton Pl. $27,056, 4,500 sq.yd. Maple Ave. $25,348, 4,000 sq.yd. Osborne Terrace $19,095, 2,500 sq.yd. Tremont Ave. $14,843, 3,200 sq.yd. Underwood St. $15,871; to Newark Paving Co., 133 1st St., 5,100 sq.yd. Nye Ave., $33,701. Noted Mar. 20.

N. J., Oaklyn—Improving Kendall Blvd., Manor, Clinton, Landers and Oakland Aves., 30,200 sq.yd. concrete paving, 23,810 lin.ft. combination curb and gutter, to Fish-Rutherford, Inc., Real Estate Trust Bldg., Phila., $115,655.

N. J., Trenton—Paving West Hanover and North Montgomery Sts., to Union Paving Co., 30th and Locust Sts., Phila., $24,045; inside of trolley tracks on above streets, to A. Delucia, 52 Bayard St., $7,050. Noted Apr. 3.

Pennsylvania—State Hy. Dept., Harrisburg, rein.-con. paving 15,222 sq.yd. Route 222, Cambria Co., to Crissey Constr. Co., Johnstown, $85,987; 52,202 sq.yd. Route 271, Sect. 1, Erie Co., to H. W. Horst Co., Horst Bldg., Rock Island, Ill., $288,093; 67,900 sq.yd. Route 79, Sect. 2, Lawrence and Butler Counties, to Garvey Weyenberg Constr. Co., Appleton, Wis., $340,387; 53,570 sq.yd. Route 79, Sect. 1, Butler Co., to Fort Pitt Constr. Co., Martin Bldg., Pittsburgh, $301,739; 21,265 sq.yd. Route 73, Butler Co. and 29,430 sq.yd. Route 69, Armstrong Co., to C. Winters Constr. Co., Renfrew, $91,540 and $96,705 respectively; 35,545 sq.yd. Route 133, Sect. 4, Delaware Co., and 44,311 sq.yd. Route 142, Chester Co., to Ambler Davis Co., Harrison Bldg., Phila., $137,796 and $160,608 respectively, grading Route 130, Delaware Co., to Vicenzo Di Francesco, Llanerch, $24,939. Noted Feb. 28.

Pa., Altoona—Paving 13,070 sq.yd. 27th and 26th Sts., Maple, 4th and 5th Aves., 7th and Walnut Alleys, to L. A. Brua, Hollidaysburg, $44,575; 2,765 sq.yd. 18th St., 8th and 3rd Alleys, to Vipond & Stapleton, Altoona, $9,945; 1,392 sq.yd. Oak Ave., to B. L. McKippil, Hollidaysburg, $6,869; 600 sq.yd. 15th Alley, to S. Dominek, Altoona, $2,433.

Pa., Phila. — Paving 15th St. from Moyamensing to Bigler Sts., to Barber Asphalt Paving Co., 239 North 30th St., $14,331; repaving, setting and resetting curb, in Dist. 3, to W. A. Ryan, 735 Real Estate Trust Bldg., $10,778; repaving, setting and resetting curb in Dists. 5 and 7, to J. J. McHugh, 1617 Race St., $19,911; repaving, resetting and setting curb in Dist. 6, to United Paving Co., 833 Real Estate Trust Bldg., $9,400; improving intersection of 34th, Walnut and Woodland Sts., to Eastern Paving Co., 401 Colonial Trust Bldg., $8,372.

Pa., Phila.—Bureau Highways, Dept. Pub. Wks., paving streets to Union Paving Co., Locust St., 66th Ave. $11,957, Bambrey, Taney, 23rd and 26th Sts. $30,267, Haverford St. from 33rd to 36th Sts. $23,486, Ritner, Wolf and 7th Sts. $48,149, Venango St. $13,843, 13th St. $58,686, 29th St. $51,692; to Barber Asphalt Paving Co., 239 North 30th St., Haverford St. from 60th to 63rd Sts. $48,713; to Eastern Paving Co., 401 Colonial Trust Bldg., Ridge Ave. $74,381, Frankford Ave. $59,900, Vine St. $33,205; to Muzzola Paving Co., 414 North Gross St., Lancaster Ave. $92,491. Noted Apr. 3.

Pa., Pittsburgh — Nicola Realty Co., Farmers Bank Bldg., will grade, pave and curb Pitcairn Pl., 1,500 yd. grading, 1,200 sq.ft. concrete pavement on 8 in. concrete, by day labor. F. G. Ross, 309 4th Ave., engr.

Md., Annapolis—State Rds. Comn., Baltimore, paving Severn River Bridge, near here, 4,800 sq.yd. concrete base, 8,800 sq.yd. bituminous concrete, to Amer. Paving Co., Montebello Ave., Baltimore, $34,635. Noted Apr. 3.

N. C., Statesville — Iredell Co., concrete paving 3½ mi. road from Mooresville towards Statesville, to R. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $200,000.

Alabama—State Hy. Dept., Montgomery, grading 25 mi. Little River-Stockton Rd., 20 ft., Baldwin Co., to Stanley & Singer, La Fayette, $108,973. Noted Apr. 3.

La., Shreveport—Caddo Parish, grading and surfacing with concrete 110,160 sq.yd. various streets to Houston Constr. Co., 1209½ Capitol St., Houston, Tex., $274,307.

Ky., Burgin — Kentucky Hydro-Electric Co., M. E. Taylor Bldg., Louisville, 4,280 ft. approaches to Kennedy Mills Bridge over Dix River, near here, to Tevis & Ingram, Danville, $25,200. Noted Mar. 27.

O., Cleveland—Curbing, guttering and paving, etc., 24,860 sq.yd. East 112th, East 140th and East 176th Sts., bituminous concrete, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $32,685, $46,727 and $43,582 respectively; 7,660 sq.yd. Ferris and Harvard Aves., vitr. brick, to A. M. Pejsa, 3161 Derbyshire Rd., Cleveland Heights, $15,499 and $27,502 respectively. Noted Apr. 3.

O., Cleveland—Grading, curbing and paving East 119th St., to Enterprise Paving & Constr. Co., 3444 Bway., $19,602; Natchez Ave., to Roehl Bros. Paving & Constr. Co., Lorain Ave., $7,231; Revere Ave., to Baldwin Bros., 4500 Euclid Ave., $23,223. Work involves 6,180 lin.ft. 4 in. drain tile curb, 5,910 lin.ft. stone gutter, 3,735 cu.yd. earth excav., 9,110 sq.yd. vitr. brick on concrete. Noted Mar. 13.

O., Columbus—W. H. Duffy, dir. Pub. Serv., to B. F. Patterson, 1214 Neil Ave., grading, laying necessary water services and sewers connections and paving 735 ft. Wildwood Dr., 20 ft., asphaltic concrete $9,832, 379 ft. Terrace Ave., 20 ft., asphalt $4,980, 396 ft. Hibbert Ave., 20 ft., asphalt $4,428; to Franklin Asphalt Paving Co., 209 South High St., 578 ft. Parkwood Ave., asphalt, $7,980, 2,870 ft. Park St., 40 ft., $42,524; to J. G. Clifford, Columbus, 1,540 ft. 8 in. vitr. sewer in alley north of Green Lawn Ave., $3,095. Noted Mar. 27.

O., Louisville—To General Asphalt Paving Co., 1268 Dueber Ave. S. W., Canton, asphalt paving ¾ mi. Silver St., $32,140, engrs. est. $28,250, ½ mi. Mill St., 40 ft. $30,128, engrs. est. $31,275, ½ mi. Walnut St. $27,500, engrs. est. $27,500.

O., Ravenna—Portage Co., paving Kent-Franklin Twp. Rd. through Brady Lake, macadam, to Seiple & Wolf, Youngstown, $54,483. Engrs. est. $60,000. Noted Apr. 3.

Indiana—State Hy. Dept., Indianapolis, surface treatment and macadam on Rds. 5 and 16, Harrison and Floyd Counties, to C. L. Hart, Boonville, $30,490; 23.07 mi. Rds. 13, 2 and 27, Allen, Wells, Grant and Elkhart Counties, to McTurnan, Morris & McTurnan, Fairmount, $144,586; 42.3 mi. Rds. 42, 43, 8, 15, 2, 32, 50 and 7, Porter, Lake, LaPorte and Starke Counties, to L. Martini, La Porte, $186,255; 19.233 mi. Rds. 4, 22, 32 and 26, Lawrence, Monroe, Jefferson and Dearborn Counties, to Crowell & Stone, Columbus, $27,419.

Mich., Detroit—Paving alleys with one course concrete, to Thomas & Currie, 20 McGraw Bldg., Alley 1839 $7,451, Alley 1841 $6,569; to Otis Cement Constr. Co., 806 Hammond Bldg., Alley 1840 $7,272, Alley 1843 $5,640, Alley 1851 $2,089, Alley 1853 $1,035, Alley 1854 $646, Alley 1855 $5,326, Alley 1856 $3,324; to Bishop & Weir, 1305 Lafayette Bldg., Alley 1842 $5,399, Alley 1844 $5,291, Alley 1845 $4,900, Alley 1852 $1,834; to R. J. Powelson & Co., 6415 Iroquois Ave., Alley 1846 $4,767, Alley 1847 $3,410, Alley 1848 $2,613, Alley 1849 $3,117, Alley 1850 $3,539, Alley 1857 $3,191.

Mich., Halfway — Macomb Co. (Mt. Clemens) 4 mi. road connecting Van Dyke and Gratiot Aves., to J. McKay & Son, Detroit, $127,186.

Illinois—Dept. Pub. Wks., Div. Highways, Springfield, paving **(8-24 Livingston means Route 8, Sect. 24, Livingston Co.)**, 8-24 and 8-25 Livingston., to Shanks & Gannon Constr. Co., Watseka, $169,878; 25-15 Cumberland and 25-16 Cumberland and Coles, to Stresenreuter Bros., 3020 South Halsted St., Chicago, $238,800; 8-32 Woodford, to Hedges Constr. Co., Chicago, $60,506; 8-26A Livingston, to I. D. Lain, Bloomington, $13,064; 3-26 Mercer and 3-27 Mercer and Warren, to W. O'Neil Sons Co., Faribault, Minn., $196,994; 19-26 and 19-27 McHenry, to G. Welch, Beloit, Wis., $153,838. Grading 2-74A Lee, to F. M. Johnson, Dixon, $39,516; 34-6A, Pope and Hardin, and 34-7A Pope, to L. Rich Constr. Co., East St. Louis, $146,000; 32-1A, Shelby, and 32-2A Moultrie, to C. I. Jones, Omaha, $19,369. Noted Feb. 15 and 29.

Ill., Monticello—Paving 2 sections State Aid Route 2, 10,041 sq.yd. concrete, 19,955 sq.yd. earth shoulders and 8,2[illegible] cu.yd. excav., to Carnnie & Lyttle, Sullivan, Mo., $25,101. Noted Mar. 27.

Wisconsin—State Hy. Dept., Madison, concrete surfacing, etc. Fond du Lac-Ripon Rd., Sect. A to Cherney Constr. Co., Route 1, Francis Creek, $115,447; Sect. B, to Lampert Constr. Co., 11 Algoma St., Oshkosh, $15,647. Noted Mar. 2[illegible].

Wisconsin—State Hy. Comn., Madison, concrete surfacing, etc., Milwaukee-Menomonee Falls Rd., concrete, to Ja[illegible]us & Winding Concrete Constr. Co., 1 State St., Wauwatosa, $121,896. Noted Mar. 20.

Wis., Antigo — Paving various streets, warrenite bitulithic, to F. P. Caughlin Co., 30 North La Salle St., Chicago, $159,335. Noted Mar. 20.

Wis., Monroe—Improving various streets, to J. O. Legreid, First Natl. Bank Bldg., Stoughton, 19,500 sq.yd. concrete pavement $2.50, 5,000 lin.ft. concrete curb and gutter $0.80, 5,000 lin.ft. concrete sidewalk $0.20 per sq.ft. Engrs. est. $35,000.

Ia., Perry—Resurfacing various streets, to James Horrabin & Co., 1422 Walnut St., Des Moines, 34,000 sq.yd. bitulithic $1.10 per sq.yd., 17,000 sq.yd. wood block $0.59 per sq.yd.; Shocketon Constr. Co., Perry, 700 sq.yd. new 7-in. concrete $3.07. Noted Feb. 7.

Minn., Fergus Falls—Ottertail Co., Job 2301, State Aid Rd. 4, 77,106 cu.yd. excav., to Dieseth & Bergerud Constr. Co., Fergus Falls, $30,598; Job 2401, State Aid Rd. 13, 54,471 cu.yd. excav., 495 cu.yd. loose rock excav., 14,095 cu.yd. overhaul, to G. H. Clear Co., Fergus Falls, $21,623.

Minn., Moorhead—Paving, etc., with rock concrete 11 blocks 10th St. N. between Center and 5th Aves., and 1st St. N., to W. E. Kennedy Co., Fargo, N. D., $56,634. Noted Mar. 6.

Minn., St. Paul — Ramsey Co., grading, paving, etc., Lexington Ave. from County Rd. A to County Rd. E, 45,551 sq.yd. concrete, 18,736 cu.yd. excav., to C. F. Sculley Equipment Co., 211 Dakota Bldg., $143,108. Noted Feb. 28.

Neb., Madison—Madison Co., clay surfacing 9.44 mi. Federal Aid Project 139-A, Battle Creek-Meadow Grove Rd., to H. F. Nightingale, Atkinson, $36,300.

South Dakota—State Hy. Dept., Pierre, grading **(F.A.P. means Federal Aid Project)** 12.8 mi. F. A. P. 171 A, Roberts Co., to P. G. Thompson, Summit, $48,139; 9.42 mi. F.A.P. 169, Pennington Co., to W. R. Larson Constr. Co., 519 Secy. Natl. Bank Bldg., Sioux Falls, $58,437; 2.37 mi. F.A.P. 180 A, Walworth Co., to Dowd Bros. & Schreiber, Watertown, $25,370; 10.23 mi. F.A.P. 167 A, Bon Homme Co., to Sioux Constr. Co., Sioux City, Ia., $26,561; 6.06 mi. F.A.P. 162 B, Haakon Co., to England & England, Murdo, $25,864; 24.55 mi. F.A.P. 149 A, Spink Co., to T. J. Tobin, Madison, $57,726; 7.47 mi. F.A.P. 50 B, Sanborn Co., to Dowd Bros. & Schrieber, Watertown, $28,367. Noted Mar. 20.

Wyoming—State Highway Comn., Cheyenne, 2.2 mi. Federal Aid Project 160 A, Shoshoni-North Rd., Freemont Co., grading and surfacing, to T. E. Madden, Riverton, $8,048, drainage structures, to Peppard & Fulton, Casper, $11,800 (state pays for culverts and treated timber); 10.4 mi. Federal Aid Project 48 A, Orin Junction-East Rd., Converse Co., grading, surfacing and drainage structures, to Tyler & Baker Constr. Co., Rock River, $104,378; 3.8 mi. Federal Aid Project 150 B, Lingle-North Rd., Goshen Co., surfacing and grading, to R. Randolph, Torrington, $27,828, bridges, to Peppard & Fulton, Casper, $6,909, all foregoing 24 ft. Noted Mar. 27.

Montana—State Highway Comn., Helena, Federal Aid Project 196-A, Carlow-Glacier Park section Roosevelt Highway near Cutbank, grading, etc. 16.23 mi., to Fitzgerald & Staunton, 114 1st Ave., S., Great Falls, $94,577; two 33 ft. steel I-beam bridges on concrete abutments, to J. F. Harrington, Missoula, $8,221.

Ark., Camden—Grading, concrete surfacing, concrete curbs and gutters on 1[illegible] blocks, Dist. 6, to C. L. Besler, 231 South Chautauqua St., Wichita, Kan. Engrs. est. $45,000.

Ark., El Dorado—Grading and surfacing with concrete 5,700 ft. Dist. 17, to Plains Paving Co., Wichita Falls, Tex. Engrs. est. $54,000. Noted Feb. 28.

Tex., Angleton — Brazoria Co. grading 10.88 mi. State Highway 19, Federal Aid Project 367-B, 24 ft., incl. 62,777 cu.yd. earth excav., 52,278 cu.yd. borrow, 404 cu.yd. concrete, 35,876 lb. reinforcing, to D. H. Buchanan, Temple, $31,286, engrs. est. $37,052. Surfacing with shell and crushed rock with 1½ in. bituminous, will be let later. Total cost $206,166. H. W. Munson, Jr., Angleton, engr. Noted Mar. 6.

Streets and Roads (Continued)

Tex., Fort Worth — See "Unclassified" 'Road Material" under Bids Desired.

Tex., Houston — Repairs to bituminous streets, to Uvalde Rock Asphalt Co., Milwaukee Bldg., $61,000.

Tex., Rio Grande City—Starr Co. improving 17.58 mi. State Highway 12, Federal Aid Project 337-A; grading, gravel surfacing, etc., to W. L. Pearson & Co., 827 1st Natl. Bank Bldg., Houston, $89,-047; rein.-concrete drainage structures to W. T. Montgomery, Alamo Bank Bldg., San Antonio, $51,287, Project involves 77,-140 cu.yd. earth excav., 87,719 cu.yd. borrow, 1,750 cu.yd. concrete, 37,273 cu.yd. gravel, 2,120 lin.ft. concrete piling, 181,737 lb. reinforcing. Noted Feb. 7.

Okla., Comanche—Grading and paving 9 blocks 3rd St., 7,200 sq.yd. concrete, 2,400 cu.yd. earth and 1,195 cu.yd. rock excav., to S. O. Maxey, Durant, 6-in. concrete $2.78; earth excav. $0.80, total $34,511. Noted Mar. 27.

Okla., Oklahoma City—Grading and paving Durland Ave. and 23rd Sts., 6,100 sq.yd. asphalt, to Western Paving Co., Tradesmen Bldg., Oklahoma City, $28,355. Noted Feb. 7.

Washington—State Hy. Comn., Olympia, grading, etc., State Rd. 11 from Walters to Four Lake, Spokane Co., to J. E. Edwards, South 1423 Adams St., Spokane, $10,547; Methow Valley Highway between Carlton and Twisp. Okanogan Co., to G. A. Banderet, Seattle, 22,010 cu.yd. excav. $0.30, 14,730 cu.yd. loose rock excav. $0.60, 5,490 sq.yd. crushed gravel surfacing $1.75, etc., total $30,743; State Rd. 3 from Walla Walla to Mill Creek, Inland Empire Highway, to H. L. Wilson, Walla Walla, $21,-775; State Rd. 9 from Elma to McCleary, Federal Aid Project 141-A, Grays Harbor Co., to T. M. Morgan, 3202 Laurel Dr., Everett, $168,951; State Rd. 7 between Kittitas and Summit, Kittitas Co., to Campbell Constr. Co., Sunnyside, 20,220 cu.yd. excav. $0.34, 120 cu.yd. loose rock $0.90, 5,680 cu.yd. solid rock $50, 11,950 sq.yd. crushed rock surfacing $1.95, etc., total $42,126. Noted Feb. 28.

Ore., Portland—Asphaltic concrete paving 5,000 sq.yd. Gladstone Ave., to A. D. Kern, Exch. Bldg., $74,974. Engrs. est. $94,092.

Calif., Glendale—Improving portion Park and Adams Sts., to Pacific Paving Co., Metropolitan Theatre Bldg., Los Angeles, 39,700 sq.ft. grading $0.75, 26,200 sq.ft. 3 in. macadam $0.11, 1,315 ft. Class B curb $0.50, 6,700 sq.ft. walks $0.16.

Calif., Pleasanton — Improving various streets, 99,000 sq.ft. grading, 99,000 sq.ft. 5 in. concrete, etc., to Heafey-Moore-McNair, 2030 High St., Oakland, $25,000 or more.

Calif., Porterville—To N. M. Ball, Masonic Bldg., improving D St. between Mill and Vine Sts., also portion Vine St., incl. 117,730 sq.ft. grading and 5 in. concrete, 2,849 lin.ft. concrete curb, 1,092 sq.ft. concrete gutter, etc., $30,414; Orange St. between South Main and J Sts., 128,751 sq.ft. grading and 5 in. concrete, 4,310 lin. ft. concrete curb, 1,019 lin.ft. concrete culvert, $31,204; portion F St., $19,858. Noted Apr. 10.

Calif., Salinas—Improving Galbilan St., to Clark & Henery Constr. Co., Chancery Bldg., San Francisco, 6,150 sq.ft. grading $0.05, 58,820 sq.ft. 2 in. Warrenite bitulithic surface $0.13, 246 tons hard rock to repair base $2, etc.

Calif., San Diego—Improving Cedar and Date Sts., incl. 246,122 sq.ft. 1½ in. sheet asphalt on 3 in. bituminous, 8,636 sq.ft. cement concrete sidewalks, 2,216 lin.ft. concrete curb, 1,095 cu.yd. earth excav., to Griffith Co., 25 14th St., $44,992. Noted Apr. 3.

Calif., San Diego—Improving 22nd St. from A St. to Imperial Ave., incl. 212,811 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, to Griffith Co., 25 14th St., $33,870. Noted Mar. 13.

Calif., Venice—Paving Vernon Ave., etc., 4 and 5 in. concrete, sewers, curbs, gutters and walks, to S. Pearson, 3847 Bway., Los Angeles, $35,650. Noted Apr. 3.

Industrial Works

PROPOSED WORK

Mass., Greenfield—Garage and Service—Owner c/o M. R. Drew, archt., 288 Main St., having plans prepared 5 story, 200 x 210 ft., brick and steel, Federal St. $200,000.

New York—Power House—See "Unclassified."

N. Y., Albany—Plant—Albany News Co., 508 Bway., had plan prepared by W. J. and W. H. Stoneman, archts. and engrs., 416 Bway., 3 story, 87 x 110 ft., rein.-con., brick and steel, plain foundation, Orange St. $250,000.

N. Y., Baldwinsville—Mill—Amer. Knife Co. purchased Amos Mill and plans altering and building additions. $40,000-$50,-000. A. J. Tooley, pres.

N. Y., Buffalo — Sub-station — Buffalo General Electric Co., Electric Bldg., plans brick, concrete and steel, Short St. 75,000.

N. Y., Coney Island (Brooklyn, P. O.)—Repair Shop—Transit Comn., 49 Lafayette St., New York, having plans prepared rein.-con., brick and steel, plain foundation, Coney Island Yards, here. $500,000. Private plans.

N. Y., Elmira—Plant—International Harvester Co. of America, 656 State St., plans new brick, concrete and steel, adjacent to present plant. $100,000. S. S. Houston, mgr.

N. Y., Fort Edward—Power House—Standard Paper Co. having plans prepared power house and equipment. $100,000. Private plans.

N. Y., Gloversville — Factory — H. Van Driessche Co., 7 Water St., plans brick, concrete and steel, to replace one recently destroyed by fire. $60,000-$75,000. C. G. Frank, mgr.

N. Y., Gloversville—Plant—W. C. Smith Glove Co. plans repairing and building additions. $40,000-$50,000.

N. Y., Syracuse—Plant—Onondaga Litholite Co., 102 North Beech St., plans brick, concrete and steel addition. $125,000-$150,000.

Pa., Morrisville—Plant—Vulcanized Rubber Co., having plans prepared by T. B. Stockham, Stockham Bldg., first unit of several additions, 1 story, 44 x 132 ft. Total cost $100,000.

Pa., Pittsburgh—Laundry—Pearl Laundry Co., 2015-2017 Wyandotte St., plans 3 story, fire proof laundry.

Pa., Pittsburgh—Plant—Yellow Cab Motor Fuel Co., 200 South Hiland Ave., having plans prepared 2 story, brick plant. $100,000. Private plans.

Pa., Tullytown—Plant—C. Warner Co., I. O. O. F. Bldg., Wilmington, Del., plans sand dredging plant, here. $600,000.

Tenn., Crab Orchard—Factory—Southland Portland Cement Co. plans plant. $1,000,000. J. A. Parker, Independent Life Bldg., Nashville, secy.

Tenn., Johnson City — Manufacturing — Chamber of Commerce retained Lockwood, Greene & Co., Piedmont Bldg., Charlotte, N. C., to prepare plans manufacturing building, 50,000 ft. floor space.

Tenn., Leewood—Shops and Roundhouse —Louisville & Nashville R.R., 10th St. and Bway., Louisville, Ky., plans roundhouse and shops, here, will exceed $40,000.

O., Circleville—Generating Plant—Columbus Ry., Power & Light Co., 102 North 3rd St., Columbus, purchased 400 acres in Harrison Twp., plans steam operated electric generating plant on portion of site.

O., Cincinnati—Tank Shop—Davis Welding & Mfg. Co., 10 Richmond St., had plans prepared by Lockwood, Greene & Co., 38 South Dearborn St., Chicago, 1 story, 120 x 223 ft., steel. Noted Feb. 24.

O., Cleveland—Factory—Astrup Co., 2937 West 25th St., having plans prepared by Allen-Osborn Co., 700 Rose Bldg., 2 story and basement, 50 x 97 ft., brick and rein.-con., West 25th St. $40,000.

O., Cleveland—Light Plant—Plans light plant improvements, production system $773,000 to $892,100, transmission system $374,700 to $430,000; distribution system $792,600 to $910,000, add 15 per cent for contingencies and miscellaneous, $286,000 to $334,900, extraordinary repair to present superheaters, etc., $393,000 to $529,000, total $2,620,000 to $3,096,000. C. G. Beckwith, City Hall, engr.

O., Cleveland—Factory—D. Round & Son, Stop 3, A. B. C. Line, had plans prepared by H. W. Mauer, 1991 East 66th St., 1 story, 170 x 210 ft., brick and steel. $75,000.

O., Cleveland—Plant—Federal Packing Co., 3200 West 65th St., having plans prepared by M. P. Burt & Co., Falls Bldg., Memphis, Tenn., 2 story, brick and steel addition, West 65th St. $40,000.

O., Cleveland — Shop — Ohio Machine & Boiler Co., University Rd., had plans prepared by A. G. Simon, 716 Hippodrome Bldg., 1 story, 64 x 100 ft., brick and steel addition. $40,000.

O., Lorain—Substation—Ohio Pub. Serv. Co., c/o L. B. Johnson, Elyria, plans 1 story, brick, steel and concrete, Pearl Ave. and East 36th St., here. $200,000. Private plans.

Ind., Evansville — Factory — National Furniture Co. plans to build portion of factory recently destroyed by fire. $75,000.

Ind., Flat Rock — Power Plant — C. E. Newton, Shelbyville, plans steam power plant at canning plant, here. $40,000.

Mich., Detroit—Factory—Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., preparing plans 4 and 5 story, rein.-con. brick, and steel, plain foundation. $200,-000. Owners name withheld.

Mich., Detroit—Factory—Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., preparing plans 1 story 100 x 140 ft., brick and steel, plain foundation, West End Ave. $50,000. Owner's name withheld.

Mich., Ironwood—See "Buildings."

Ill., Abington — Plant — Amer. Sanitary Mfg. Co. plans 2 story, 92 x 94 ft. addition. $50,000.

Wis., Delton — Mill — H. F. Sarrington plans to rebuild 2 story mill to replace one recently destroyed by fire. $40,000. Engineer and architect not selected.

Wis., Madison—Factory—Orange Crush Bottling Co., c/o W. Jorges, Middleton, having plans prepared by P. M. Homer, Pioneer Blk., 2 story, 40 x 77 ft., rein.-con. and timber, plain foundation, here. $40,000.

Wis., Poplar—Cannery—Lange Canning Co., Mill St., Eau Claire, soon takes bids 3 story, 70 x 176 ft., brick and timber, plain foundation. $60,000. Private plans.

Wis., Sheboygan—Factory—Sheboygan Brick Co., c/o F. Heerman, 615 Superior Ave., plans 2 story, brick, rein.-con. and steel factory. $40,000. Engineer and architect not selected.

Wis., Waukesha — Factory — Quality Aluminum Casting Co., c/o A. C. Pankratz, mgr., Lincoln Ave., plans 1 story, 50 x 100 ft., brick and steel addition, plain foundation. $50,000. Private plans.

Wis., Wisconsin Rapids — Shop — Nash-Hardware Co., 2nd and Grand Ave., having plans prepared by A. F. Billmeyer, Wisconsin Rapids, 2 story, 86 x 110 ft., sheet metal and repair shops, brick and steel, plain foundation. Noted Mar. 13.

Neb., Omaha — Sub-Station — Nebraska Power Co., c/o J. E. Davidson, genl. mgr., Electric Bldg., plans power substation and transmission lines. $3,000,000. F. S. Stott, 206 Kennedy Bldg., archt. H. A. McKennon, Omaha, engr.

Mo., North Kansas City—Factory—Amer. Can Co. plans 4 story and basement, 113 x 595 ft., rein.-con., and steel 14th and Campbells Sts. Engineer and architect not selected.

Mo., Springfield—Packing Plant—Springfield Packing Co., 741 South Weller St., soon takes bids 2 story and basement, 105 x 156 ft., rein.-con. and brick. $300,000. Heckenlively & Mark, Landers Bldg., archts. Noted July 12.

Tex., Houston — Planing Mill — Massey Mf. Co., Railroad St. and Yale Heights, plans planing mill, along Ship Channel. $75,000.

Tex., Mexia—Factory—Western Agricultural Chemical Co. plans 2 buildings, concrete and brick. $50,000 plus.

Wash., Longview—Plant—Pacific Straw Paper and Board Co., plans first unit of large paper mill on 15-acre tract, along Cowlitz River, here, incl. 50 x 200 ft. mill building, 50 x 100 ft. rotary room, 40 x 80 ft. warehouse and storage room, 20 x 40 ft. fuel building, 20 x 40 ft. engine room and 30 x 40 ft. office.

Wash., Tacoma — Car Shop — Chicago, Milwaukee & St. Paul R.R., Seattle, plans 2 shops, to employ 150 men. Also plans plant for building freight cars, here. R. J. Middleton, Seattle, asst. ch. engr.

Calif., Los Angeles—Packing Plant, etc. —Cudahy Packing Co., 803 Macy St., had plans prepared 3 and 4 story, rein.-con. and brick packing plant and warehouse. $175,000.

Calif., Modesto—Steam Plant—Modesto Irrigation Dist. having plans prepared steam plant, first unit 1,500 kw., $150,000, completed plant $300,000. H. A. Storrs, ch. engr.

Calif., Pomona—Laundry—H. W. Kueline, c/o United Mortgage & Loan Corp., Van Nuys Bldg., Los Angeles, interested in company which plans heavy mill and brick, Monterey St., here. $75,000 or more.

Que., Verdun—Light Plant—City plans to expend $40,000 extending and enlarging electric light plant. H. Hadley, city engr.

Ont., Almonte—Plant—See "Dams."

Ont., Kitchener—Tannery—J. Lang Sons Leather Co. plans new tannery. $200,000.

BIDS DESIRED

R. I., North Smithfield (Woonsocket P. O.)—Plant—Lockwood-Greene & Co., engrs., 24 Federal St., Boston, Mass., taking bids combing plant, incl. combing building, storehouse, boiler plant and pump house, 260,000 sq.ft. floor space, here, for Branch River Wool Combing Co. $1,000,000. Noted Feb. 7.

Industrial Works (Continued)

N. Y., Long Island City—Housing Station—Apr. 14, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rein.-con., brick and steel, plain foundation, Beach 63rd St. and Thursby Ave.

Pa., Phila.—Plant—Apr. 15, by Harris & Richards, Drexel Bldg., 6 story and basement, 105 x 604 ft. rein.-con. and brick, plain foundation for Geneva Electric Co., Witherspoon Bldg., $1,000,000.

Md., Baltimore — Plant — Schluderberg-Kurdle Co., Baltimore and 5th Sts., taking bids and open same about Apr. 18, 7 story, 60 x 225 ft., rein.-con. and brick, plain foundation, Baltimore and 5th Sts. $350,000. B. C. Comstock, 110 West 40th St., New York City, engr. Noted Feb. 28.

La., New Orleans—Roundhouse—Apr. 15, by Public Belt R.R. Comn., Municipal Bldg., rein.-con. and brick roundhouse, Water and Lyon Sts., $200,000.

O., Geneva—Factory—Apr. 15, by Lockwood, Greene & Co., archts. and engrs., Hanna Bldg., Cleveland, 3 story and basement, 50 x 130 ft., brick and rein.-con., here, for Champion Hardware Co. $100,000. Noted Mar. 6.

O., Zanesville — Factory — Apr. 15, by Mosaic Tile Co., 4 story, 80 x 140 ft., steel and concrete addition, Brighton St. $250,000. Noted Mar. 13.

Ind., Indianapolis—Garage and Repair Station—Bd. Pub. Wks., City Hall, taking bids 2 story and basement. $165,000. F. B. Hunter, 912 State Life Bldg., archt. Noted Mar. 20.

Wis., West Bend—Factory—Lockwood, Greene & Co., engrs., 38 South Dearborn St., Chicago, taking bids and opens same about Apr. 14, 2 story, 82 x 130 ft., brick and timber, plain foundation, for Amity Leather Products Co., West Bend. $50,000.

Minn., Duluth — Grinding Plant and Warehouse — Apr. 18, by R. A. Horr, genl. mgr. Stone-Oredean-Wells Co., 201 South 5th Ave. W., 4 story and basement, 85 x 135 ft., fireproof, 49th Ave. W. $165,000. C. W. Kelly, 505 Lonsdale Bldg., archt. and engr.

Tex., Dallas—Assembly Plant—A. Kahn, archt., 100 Marquette Bldg., Detroit, taking bids and opens same about Apr. 15, 1 story, 301 x 830 ft., also 1 story, 63 x 113 ft. oil house, brick, concrete and steel, plain foundation, East Grand Ave., here, for Ford Motor Co., Highland Park, Mich.

Calif., Oakland—Factory—W. J. Miller, archt., 417 Market St., San Francisco, receiving bids six concrete and brick factory buildings, 80th Ave., here, for Illinois Wire & Cable Co., Sycamore, Ill. $40,000 first unit, complete plant $250,000. Noted Mar. 27.

BIDS RECEIVED

N. J., Morris Plains—Boiler Plant—Commissioner Institutions & Agencies, West Hanover St., Trenton, 55 x 77 ft., brick, steel and concrete, at New Jersey State Hospital, here, general contract from C. J. Smith Constr. Co., 202 Academy St., Trenton, $205,000. Noted Mar. 13.

CONTRACTS AWARDED

Mass., Lynn — Plant — General Electric Co., 1 story, 60 x 280 ft., concrete and steel galvanizing building, to Morton C. Tuttle Co., 862 Park Sq. Bldg., Boston.

Mass., Springfield—Factory—Smith Carriage Co., 2 Park St., 4 story and basement, 100 x 160 ft., brick and steel, Park St., to E. F. Carlson, 244 Main St. Archts. est. $100,000.

R. I., Providence—Factory—S. P. Harris Co., 97 Dyer St., 2 story and basement, 52 x 140 ft., rein.-con., brick and steel, Public St., to O. D. Purington Co., 605 Indian Trust Bldg., $56,000. Archts. est. $58,000. Noted Mar. 27.

Conn., Waterbury—Factory—Waterbury Box Co., Leonard St., 1 story, 25 x 50 ft. addition, also raising present factory and building lower story, 82 x 187 ft., brick, to Clark Constr. Co., 168 Grand St. Archts. est. $75,000.

N. Y., Lowville—Cold Storage—Lowville Cold Storage Co., Shady Ave., 3 story and basement steel and brick veneer addition, to Utica Steam Engine & Boiler Wks., 800 Whitesboro St., Utica, and W. H. Rich & Sons, $100,000. Total cost $160,000.

N. Y., Oswego—Plant—New York Central R.R. Co., Grand Central Terminal, New York City, 25 x 50 x 50 ft., brick, concrete and steel locomotive washout plant, here, to William Ballard Co., City Bank Bldg., Syracuse, $75,000.

N. Y., Waverly—Mill—Waverly Factory Corp., 1 story, 60 x 800 ft., brick, concrete and steel, to Lowman Constr. Co., 312 Railroad Ave., Elmira, $100,000.

Pa., Sharon—Plant—Westinghouse Electric & Mfg. Co., East Pittsburgh, two 1 story steel frame shop buildings, 126 x 1,025 ft. and 92.5 x 664 ft., one 4 story, 90 x 355 ft. concrete factory building, also additions to power house, tracks, viaduct, yard drainage and service lines, etc., to Stone & Webster Inc., 147 Milk St., Boston, Mass. Noted Mar. 13.

Tenn., Dickson—Factory—Dickson Development Co., 2 story and basement, 60 x 130 ft., brick to Cowan Lumber Co., Dickson. Archts. est. $40,000. American Cigar Co., lessee. Noted Jan. 31.

O., Cleveland—Plant—Scripps Publishing Co., 1420 East 9th St., substructure for 3 story (ultimately 10 story) 53 x 163 ft., brick and rein.-con. Rockwell Ave., to N. F. Blair Constr. Co., Penton Bldg. Archts. total est. $200,000. Noted Mar. 20.

O., Toledo—Plant—Libbey-Owens Sheet Glass Co., Nicholas Bldg., 1 story (27 bays, 24 x 136 ft. each), brick, steel and concrete, to A. Bentley & Sons Co., 201 Belmont Ave. Archts. est. $1,000,000. Noted Mar. 13.

Ind., Indianapolis — Plant — Real Silk Hosiery Mills, 624 North Noble St., 2 story (ultimately 4 story), to Lockwood, Greene & Co., 38 South Dearborn St., Chicago.

Mich., Detroit—Factory—A. Kahn, archt., 1000 Marquette Bldg., 5 story and basement, 87 x 100 ft. rein.-con. and brick, plain foundation, Grandy Ave., to W. E. Wood Co., 1805 Ford Bldg., for Mazer Cigar Co., 5041 Grandy Ave. $100,000. Noted Mar. 20.

Wis., Hartland — Factory — West Mfg. Co., 90 2nd St., Milwaukee, will build 2 story, 50 x 90 ft., brick and concrete, plain foundation, by day labor, here. $40,000, W. G. Memmler, 228 3rd St., Milwaukee, archt.

Wis., Milwaukee—Machine Shop—Sterling Tool & Mfg. Co., 495 Bway., 1 story, 42 x 120 ft., brick and timber, plain foundation, 30th St., to Byrne Bros., 3112 Burleigh St., $40,000.

Wis., Sheboygan—Factory—Garton Toy Co., North Water St. and Niagara Ave., 4 story, 60 x 90 ft., brick and rein.-con., plain foundation, to Van Daeselaar Co., 1712 North 2nd St. Archts. est. $50,000.

Wis., Racine — Tannery — E. Eisendrath Tanning Co., West 6th St., 3 story, 40 x 90 ft., brick and timber addition, plain foundation, West 6th St., to Nelson & Co., Janes Blk. Archts. est. $50,000. Noted Feb. 28.

Wis., Sheboygan—Foundry—Jenkins Machine Co., 315 North 8th St., 1 story, 40 x 90 ft., rein.-con., brick and steel, plain foundation, to J. Van Daeselaar Co., 1712 North 2nd St., $40,000. Noted Feb. 7.

Minn., Hibbing — Plant — City Water, Light, Power & Building Comn., additions and alterations to power plant, incl. new stoker, to A. C. Schirmer Co., Hibbing, $47,077; extension to underground heating mains, 800 ft., to C. A. Waltz, Hibbing, $6,122; couplings to Johnson-Stewart, Hibbing, $5,000.

Minn., Minneapolis — Barn — Franklin Co-operative Creamery Assn., 2108 Washington Ave. N., foundation for 2½ story, 94 x 155 ft., rein.-con. and brick, 2541-51 23rd Ave. S., to Union Constr. Co., 310 2nd Ave. S., $15,000. Total $60,000. Noted Oct. 4.

Mo., Kansas City—Sub-Station—Kansas City Power & Light Co., 1330 Grand Ave., 1 story and basement, 61 x 107 ft., rein.-con., brick and stone, 6th and Penn Sts., to Fogel Constr. Co., 619 Reliance Bldg. Archts. est. $40,000. Noted Mar. 6.

Mo., St. Louis—Plant—Mechanics Iron Wks., 901 South Ewing Ave., will build 1 and 2 story, 98 x 180 ft., rein.-con. and corrugated iron, Edmund St., by day labor. $40,000. Private plans.

Calif., Huntington Beach — Factory — Western Cooperage Co., 1919 Bay St., Los Angeles 140 x 218 ft. barrel and stave house, 90 x 150 ft. factory, 25 x 40 ft. boiler house, brick and steel, here, to Austin Co. of California, Bartlett Bldg., Los Angeles, $55,000.

Calif., Monrovia—Factory—Colby Management Corp., Pacific Electric Bldg., Los Angeles, foundry, machine shops and assembling plant, each 100 x 300 ft., steel frame and concrete, here, to Union Iron Wks., 5125 Santa Fe Ave., Los Angeles.

Calif., Oakland—Factory—Fageol Motors Co., Hollywood and 107th Aves., 1 story, brick and concrete, to E. T. Leiter & Son, Call Bldg., San Francisco, $42,000.

Calif., Oakland—Substation—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, will build 2 story, concrete, 51st St. and Shattuck Ave., here, by day labor. $55,000.

Calif., San Francisco — Factory — John Center Co., Balboa Bldg., 1 story, rein.-con., Hampshire St., to C. W. Gompertz, 180 Jessie St., $45,250. Noted Apr. 10.

Buildings

PROPOSED WORK

Mass., Boston—Exchange—New England Telephone and Telegraph Co., Oliver St., plans brick and steel, Harrison Ave. $1,000,000.

Mass., Boston—Storage—Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, Pa., having plans prepared by French & Hubbard, archts. and engrs., 210 South St., Boston, 6 story, 80 x 200 ft., brick and steel, plain foundation, C St., here. $150,000.

Mass., Franklin—High School—School Com. having plans prepared by Ritchie Parsons & Taylor, 15 Ashburton Pl., Boston, 2 story, brick and steel. $255,000-$280,000. Noted Mar. 15.

Mass., Holyoke — Church — Holy Cross Church, J. C. Ivers, pastor, plans new church, Dwight St., $300,000. Present church will be remodeled for parochial school.

Mass., New Bedford—Exchange—New England Telephone and Telegraph Co., Oliver St., Boston, plans exchange, brick and steel, here. $150,000.

Conn., Stamford — Apartment — Owner, c/o Margon & Glaser, archts., 2804 3rd Ave., New York City, having plans prepared 4 story and basement, 140 x 166 ft., brick and steel, South St., here. $250,000.

Conn., Wallingford — Chapel — Choate School, North Elm St., had plans prepared by R. A. Cram, 33 West 42nd St., New York City, 1 story, brick and stone. $150,000. Noted Jan. 10.

N. Y., Buffalo—High School—Bd. Educ., Telephone Bldg., having preliminary plans prepared by Kidd & Kidd, 524 Franklin St., rein.-con., brick and stone, Fillmore Ave. To exceed $600,000.

N. Y., Buffalo—School—Bd. Educ., Telephone Bldg., having preliminary plans prepared by F. A. Spangenberg, 250 Delaware Bldg., Vocational School, rein.-con. and brick. To exceed $400,000. Noted Apr. 3.

N. Y., Buffalo — School — St. Nicholas Parish plans 3 story and basement addition, Verplanck St. $150,000. J. F. McGloin, 18 Walker St., pastor.

N. Y., Dansville—Lodge—Building Com. Phoenix Lodge of Masons plans marble, brick, concrete and steel, Main St. $175,000-$200,000.

N. Y., Le Roy—School—Bd. Educ. soon takes bids new school. $255,000 bonds voted. H. B. Ward, mayor.

N. Y., Ogdensburg — Schools — Voted $350,000 bonds school building program. J. C. Howard, chn. Building Comn. Bd. Educ. Noted Feb. 28.

N. Y., Penn Yan—School—Election Apr. 29, $162,000 bonds to purchase site for new school, Liberty St. A. T. Beardslee, village pres. Engineer and architect not selected.

N. Y., Rochester—Office—Rochester Gas & Electric Corp., 34 Clinton Ave. N., plans office building. $1,000,000. Gordon & Kaelber, Sibley Bldg., Rochester, and McKim, Mead & White, 101 Park Ave., New York City, archts.

N. Y., Rochester — Hospital — Rochester Homeopatic Hospital, 224 Alexander St., soon takes bids brick, steel and stone addition. $350,000. H. G. Balcom, 10 East 47th St., New York City, engr. York & Sawyer, 100 East 42nd St., New York City, archts. Noted Nov. 1.

N. Y., Rome—High School—Bd. Educ. plans new high school, Linden and Turin Sts. $295,000-$300,000. F. W. Marks, pres.

N. Y., Watertown — High School — Bd. Educ. plans North Side high school. $350,000-$400,000. F. S. Tisdale, supt.

N. J., Asbury Park—Convention Hall—City having preliminary plans prepared by Warren & Wetmore, 16 East 47th St., New York City, convention hall. $750,000.

N. J., Newark — Warehouse — L. Bamberger & Co., Market St., rejected bids 5 story, rein.-con. and steel, plain foundation, Plain St. $1,000,000. Plans will be revised. A. Merkt & Co., 175 5th Ave., New York City, archts. and engrs. Noted Mar. 20.

N. J., Plainfield—School—Bd. Educ. having plans prepared by J. T. Rowland, Jr., archt. and engr., 100 Sip Ave., Jersey City, brick, steel and stone, plain foundation, Woodland Ave. $200,000.

N. J., Trenton—Store—Goldbergs Dept. Store, Front and Broad Sts., had plans prepared by W. W. Slack & Son, 146 East State St., and L. S. Kaplan, 1st Natl. Bank,

Buildings (Continued)

4 story, 51 x 90 ft., brick and steel addition, East State St. $150,000.

Pa., Camp Hill—Clubhouse—Manufacturers Club, Broad and Walnut Sts., Phila., having revised plans prepared by Seeburger & Rubenold, Weightman Bldg., Phila., and soon takes new bids, 2½ story, 60 x 130 ft., Broad and Walnut St. Noted Mar. 6.

Pa., New Castle — Church — St. Marys Roman Catholic Congregation, Beaver St., having plans prepared by J. P. Brenot, Transit Bldg., Oil City, 1 story and basement, 65 x 150 ft. stone. $150,000.

Pa., Phila. — Apartment — Rose Constr. Co., North Amer. Bldg., having plans prepared by Ballinger & Co., 12th and Chestnut Sts., 15 story and basement, 63 x 173 ft. brick and steel, 21st and Walnut Sts. $2,250,000.

Md., Baltimore—Club—Maryland Country Club, F. C. Schanberger, pres. c/o G. R. Callis, Jr., archt., Hearst Tower, having plans prepared 3 story, brick, plain foundation, Park Heights and Strathmore Ave. $150,000.

W. Va., Clarksburg—Church—Church of Immaculate Conception rejected bids for church. Will readvertise. $250,000. E. J. Weber, Knights of Columbus Bldg., Pittsburgh, Pa., archt. Noted Feb. 28.

W. Va., Huntington—Store and Club—McMahon-Diehl Co., 1017 3rd Ave., plans 4 story, rein.-con. and brick, 10th St. and 3rd Ave. $150,000.

W. Va., Martinsburg — Apartment — M. Cox, 606 West King St., plans 6 story, 65 x 156 ft., West King St. $200,000.

N. C., Charlotte—Schools—City election May 6. $1,000,000 bonds, new schools. Noted Nov. 8.

Ala., Huntsville — Hospital — City plans hospital. Committees appointed by Chamber Commerce raising $300,000 for same.

La., New Orleans — School — Orleans Parish School Bd., City Hall, having plans prepared by E. A. Christy, city archt., City Hall, 3 story and basement, 30 room, brick, Esplanade and White Sts. $250,000. Will let contracts about May 1.

Tenn., Memphis—Terminal—Illinois Central R.R., 135 East 11th Pl., Chicago, plans mail terminal, here. $250,000. F. L. Thompson, ch. engr.

Tenn., Nashville—School—Fisk University, 17th Ave. N., plans additions. $1,000,000.

Ky., Bowling Green—Station—Louisville & Nashville R.R., 10th St. and Bway., Louisville, takes bids about July 15, station, here. $300,000. W. H. Courtnay, ch. engr. Noted May 31.

O., Cleveland — Apartments — M. B. Abrams, Society for Savings Bldg., plans ten 3 story, brick, East 106th St. and St. Clair Ave. $1,500,000. Private plans.

O., Cleveland—Engineering—White Co., 842 East 79th St., having plans prepared by Watson Co., 4614 Prospect Ave., 2 story, 150 x 160 ft., brick, steel and concrete, 825 East 79th St. $200,000.

O., Cleveland — Restaurant and Commercial—Colonnade Co., 802 Bulkley Bldg., having plans prepared by Howell & Thomas, 4500 Euclid Ave., 2 or 3 story, 69 x 180 ft., brick and steel, Euclid Ave. and East 107th St. $175,000.

O., Columbus—Theatre and Office—Keith Theatrical Enterprises, 1564 Bway., New York City, soon takes bids brick, steel and stone, plain foundation, Broad St., here. $1,000,000. T. W. Lamb, 644 8th Ave., New York City, archt.

O., Dayton—Store and Apartment—Huffman Realty Co., 305 Callahan Bank Bldg., plans four 2 story and basements, 145 x 425 ft., rein.-con. and brick, plain foundations, Ludlow St. $500,000. Private plans.

Mich., Ironwood—Church—St. Ambrose Congregation having plans prepared by E. Brielmaier & Sons, 432 Bway., Milwaukee, Wis., 2 story, brick and stone, plain foundation, also 40 x 50 ft. brick power plant. $150,000.

Ill., Joliet—Sanitarium—Comrs. Will Co., c/o B. D. Jones, chn., Manhattan, soon takes bids 2 story, brick and concrete, Richard Rd., here. $150,000.

Ill., Waukegan—Office—J. A. Miller, 206 Washington St., having preliminary plans prepared 5 story and basement, 125 x 132 ft., rein.-con., brick and steel. $175,000. Private plans.

Ill., Rogers Park (Chicago P. O.)—High School—St. Scholastica Academy, 7430 Ridge Blvd., having plans prepared by E. Brielmaier & Sons, 432 Bway., Milwaukee, Wis., 3 story and basement, brick and concrete, plain foundation, Ridge Blvd. $450,000.

Wis., Green Bay—Office and Store—H. Herrick, 200 North Washington St., rejected bids 7 story and basement, 46 x 65 ft., brick, plain foundation, Cherry St. New bids later. $150,000. Oppenhamer & Obel, Nicollet Bldg., archts. Noted Mar. 27.

Wis., Jefferson—High and Grade School—School Bd., R. K. Henry, clk., plans to rebuild 2 story and basement, brick, tile and concrete, plain foundation, West Side. $200,000. Engineer and architect not selected.

Wis., Kenosha—High School—School Bd. E. F. Powers, secy., had plans prepared by J. D. Chubb, 109 North Dearborn St., Chicago, 3 story and basement, 248 x 250 ft., brick, tile and concrete, plain foundation. $1,000,000.

Wis., Milwaukee—Apartment, etc.—Mal Investment Co., 376 East Water St., having plans prepared by Leenhouts & Guthrie, 424 Jefferson St., 2 and 4 story, apartment, store and garage, brick and concrete, plain foundation, 27th and Wells Sts. $350,000.

Wis., Milwaukee—Grade School—School Bd. having plans prepared by Van Ryn & De Gelleke, 114 Grand Ave., 3 story and basement, brick, tile and concrete, plain foundation, Locust and 51st Sts. $400,000.

Wis., Oshkosh — Church — Sacred Heart Congregation, M. Schmitz, 1318 6th St., having preliminary plans prepared by E. Brielmaier & Sons Co., 432 Bway., Milwaukee, 2 story, brick and stone, plain foundation, Knapp St. $175,000.

Minn., Minneapolis—School—Bd. Educ., 305 City Hall, plans 3 story and basement, rein.-con., brick and tile, Lynhurst Dist. $650,000. Bureau of Buildings, Bd. Educ., archts.

Minn., St. Paul — School — Dept. Educ., City Hall, rejected bids opened Mar. 25, 3 story and basement, 120 x 160 ft., Albert St. and Pascal Ave. $300,000. Noted Apr. 3.

Minn., St. Paul — School — Dept. Educ., rejected bids opened Mar. 18, 2 story and basement, rein.-con., brick and tile, North St. Anthony Park. L. R. S. Ferguson, City Hall, comr. Noted Mar. 27.

Kan., Great Bend—High School—Election Apr. 8, $212,000 bonds, 2 story and basement, 114 x 116 ft., rein.-con. and brick. T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, archts. Noted Mar. 31.

Mo., Joplin — Apartment — H. R. Valfer plans 3 story and basement, rein.-con., brick and stone, plain foundation, 2nd and Byers Sts. $150,000. Private plans.

Mo., St. Louis—Garage—G. Seeley, c/o Bottorff-Giles Co., 4914 Delmar Bldg., soon takes bids 4 story and basement, 100 x 152 ft., rein.-con., brick and stone, Walnut St. $300,000. Private plans.

Mo., St. Louis—Hotel Apartment—Edward Realty & Investment Co., International Life Bldg., soon takes bids 8 story and basement, 100 x 177 ft., rein.-con., brick, stone and terra cotta, Enright and Hamilton Sts. $700,000. Engineers and architects names withheld.

Ark., Hot Springs—Hospital—St. Josephs Infirmary, Mother Bernard of Sisters of Mercy, plans rein.-con., brick and terra cotta addition, 100 beds. $200,000. Architect not selected.

Tex., Ft. Worth—Church, etc.—Baptist Seminary, Seminary Hill, plans new church, $175,000, administration building $500,000, both brick and concrete. L. E. Scarborough, pres. Engineer and architect not announced.

Tex., Ft. Worth—Club and Office—Ft. Worth Club, A. G. Carter, 6th and Main Sts., having plans prepared by Sanguinet, Staats & Hedrick, 1st Natl. Bank, 8 or 11 story and basement, 100 x 200 ft., concrete, steel and brick, 7th and Throckmorten Sts. $1,500,000.

Tex., Ft. Worth—Garage—W. L. George, 2316 5th Ave., having plans prepared by W. G. Clarkson, 1st Natl. Bank Bldg., 2 story, 100 x 100 ft., 1st and Taylor Sts. $150,000.

Tex., Fort Worth—Store—J. I. Burgess, Jarvis Heights, having plans prepared by W. G. Clarkson & Co., 607 1st Natl. Bank Bldg., 6 story (ultimately 9 story) and basement, 95 x 100 ft., rein.-con., brick and stone, 5th and Houston Sts. $300,000. Sanger Bros., Elm, Main, Lamar and Austin Sts., Dallas lessee. Noted Mar. 13.

Tex., Medina Lake—Hotel—Lake Medina Lodge & Country Club, 411 Gunter Bldg., San Antonio, having plans prepared by Seutter & Simons, Moore Bldg., San Antonio, 3 story, 90 x 180 ft., rein.-con. and stone, plain foundation. $175,000.

Okla., Enid—Y. M. C. A. plans 4 story, rein.-con. and brick. $250,000. W. M. Lee, chn. building commission. Architect not selected.

Okla., Lawton—Convention Hall—City preparing plans 3 story and basement, 100 x 150 ft., brick, plain foundation, 4th St. $150,000. W. V. Mountain, Lawton, engr. Architect not selected.

Okla., Okmulgee—Club—Local Lodge of Elks, 6th St. and Muskogee Ave., soon takes bids 4 story, 50 x 140 ft., rein.-con., brick and stone. $180,000. Smith & Senter, 401 Commerce Bldg., Okmulgee, archts.

Okla., Wewoka—Court House—Seminole Co. takes bids about May 1, 2 story and basement, 90 x 150 ft., rein.-con., plain foundation. $150,000. Monnott & Reid, Empire Bldg., Oklahoma City, archts.

Ore., Eugene — Office — F. M. White, archt., Sherlock Bldg., Portland, preparing plans and takes bids about May 6, 6 story (ultimately 8 story), 60 x 160 ft., rein.-con. and timber, plain foundation, 9th Ave. between Oak and Pearl Sts., here, for W. Minor, 1884 Alder St., Eugene. $175,000.

Ore., Eugene—School—Bd. Educ. takes bids about May 26, 2 story, 61 x 267 ft., and 2 story, 168 x 170 ft., rein.-con. and timber, plain foundation. $250,000. F. M. White, Sherlock Bldg., Portland, archt.

Ore., Portland—Apartment and Store—Leadbetter Estate, c/o F. W. Leadbetter, 795 Park St., plans 6 story, 80 x 180 x 480 x 500 ft., Washington, Morrison, 19th and 20th Sts. $450,000-$500,000.

Calif., Bakersfield — Hotel — California Real Estate & Finance Corp., Securities Bldg., Los Angeles, plans 4 story, probably brick, V and 19th Sts., here. $300,000.

Calif., Fresno—Store, Club and Lodge—B. P. O. E. Lodge 439, plans fireproof. $150,000 or more.

Calif., Lemoore—School, Gymnasium and Shops—Lemoore Union High School Dist. having working plans made by W. H. Weeks, 369 Pine St., San Francisco, rein.-con. $150,000.

Calif., Los Angeles—Church—Christian Church, c/o R. H. Orr, archt., Corporation Bldg., having working plans prepared 3 story, basement and sub-basement, masonry, Wilshire Blvd. To exceed $250,000.

Calif., Los Angeles — Garage — P. S. Wright Co., 3981 West 6th St., plans 8 story, rein.-con., Westlake section. $150,000 or more.

Calif., Los Angeles—Schools—Los Angeles School Dist. having plans prepared by Architectural Dept. Bd. Educ., for McKinley Industrial Home School, 8 classrooms, also 9th St. School, 12 rooms, both brick. To exceed $150,000.

Calif., Los Angeles—Theatre and Loft—J. Toplitsky, H. W. Hellman Bldg., representing owners, having preliminary plans prepared by G. A. Lansburgh, Junior Orpheum Bldg., 12 story, 138 x 148 ft. steel and rein.-con., South Bway. $1,000,000. Junior Orpheum Circuit, Junior Orpheum Bldg., lessee.

Calif., Los Angeles—Theatre and Loft—Bway. Properties Co. having plans prepared by G. A. Landsburgh, Junior Orpheum Bldg., 13 story, 138 x 148 ft., rein.-con., 838 South Bway. $1,000,000.

Calif., Los Angeles — Warehouse — A. Wohlfarth, c/o A. C. Martin, archt., Higgins Bldg., having plans prepared 8 story and basement, 50 x 150 ft., rein.-con., Pico St.

Calif., Oakland — Courthouse — Alameda Co., election May 6, $4,500,000 bonds, $1,500,000 for site, balance for building. G. E. Gross, clk. Bd. Supervs. Engineer and architect not selected. Noted Jan. 4.

Calif., Oakland—Hospital—Alameda Co. election May 6, $2,000,000 bonds, completing Highlands Hospital. G. E. Gross, clk. Bd. Supervs. H. H. Meyers, Kohl Bldg., San Francisco, archt.

Calif., Oceanpark (Santa Monica, P. O.)—Theatre—Raymond Amusement Co., c/o A. F. Priest, archt., Fay Bldg., Los Angeles, having plans prepared rein.-con. $200,000.

Calif., Sacramento—Store—Eastern Outfitting Co., 1017 Market St., plans fireproof, J St. $150,000 or more. Engineer and architect not selected.

Calif., San Diego — Auditorium — City having plans prepared by L. Rogers and E. W. Stevenson, 533 Spreckels Bldg., concrete and steel auditorium, for San Diego High School, 2,500 seating capacity. $300,000.

Calif., San Diego—Office—Syndicate of physicians having plans prepared by L. Rogers and F. W. Stevenson, 533 Spreckels Bldg., 10 story, 100 x 100 ft., rein.-con. and steel, 4th and Beach Sts. $500,000.

Calif., San Francisco—Apartment—O. E. Anderson, 483 15th Ave., having plans prepared by Baumann & Jose, 251 Kearny St., 6 story and basement, rein.-con., Jones St. near Geary St. $175,000.

Buildings (Continued)

Calif., San Francisco—School—Boys Aid Society, c/o Meyer & Johnson, archts., 742 Market St., having plans prepared fireproof group school buildings. To exceed $150,000.

Calif., San Francisco—Hotel, Theatre and Store—Kutner Interests, Claus Spreckels Bldg., plan 17 story and basement, fireproof, Market, Larkin, Hayes and Fell Sts. From $4,000,000 to $5,000,000. Engineer and architect not announced.

Calif., Stockton—Auditorium—A. L. Banks, city clk., takes bids about Apr. 16, 400 to 500 tons structural steel for auditorium. Total cost $450,000. Noted Nov. 15.

Calif., Sunnyvale—High School—Westside Union High School Dist. plans to vote on $150,000 or more bonds for fireproof high school.

Calif., Torrance—Office—City plans to vote on $150,000 bonds for office building. A. H. Bartlett, city clk.

Que., Montreal—College—St. Marys College, Bleury St., plans campaign to raise $2,000,000 for new college on St. Catherine Rd.

Ont., St. Catharines—Hospital—G. and M. Hospital having plans prepared by Nicholas & MacBeth, St. Catharines, 3 story and basement, rein.-con., brick and steel, plain foundation. $325,000.

Ont., Smiths Falls—Church—Westminster Presbyterian Church having plans prepared by Gordon & Helliwell, Confederation Life Bldg., Toronto, 1 story and basement, rein.-con., brick and steel, plain foundation. $150,000.

Ont., Ottawa—Seminary—Roman Catholic Episcopal Corp., St. Patrick St., having plans prepared seminary, King Edward Ave. $500,000. Private plans.

BIDS DESIRED

Conn., Norwalk—Theatre—J. Tracy Co. will build by separate contracts 2 story and basement, 75 x 152 ft., brick and steel, Main St., under supervision of A. S. Meloy, archt., Stratford. Cost plus basis. $180,000-$200,000.

Conn., Stratford—High School—Apr. 16, at office of School Com., Town Hall, high school. F. I. Cooper Corp., 983 Main St., Hartford, archts. Noted Nov. 8.

N. Y., Amsterdam—Community Hall—E. W. Loth, archt., 253 Bway., Troy, taking bids new community hall, here, for St. Stanislaus Church Parish. To exceed $150,000.

N. Y., Buffalo—School—Apr. 23, by Bd. Educ., Telephone Bldg., P. S. 31, 3 story and basement, 160 x 200 ft., rein.-con., brick and stone, Lovejoy St. To exceed $400,000. Associated Buffalo Architects, 232 Delaware Ave., archts.

N. Y., Central Islip—Cottages—Apr. 23, by State Hospital Comn., Albany, Cottages 4-7 inclusive for Senior Assistant Physicians, at State Hospital, here. S. W. Jones, Albany, state archt.; adv. E. N.-R. Apr. 10.

N. Y., Le Roy—School—Apr. 22 (extended date), by Bd. Educ., 2 story and basement, 43 x 59 x 63 x 167 ft., brick and steel, plain foundation. Tooker & Marsh, 101 Park Ave., New York City, archts. Noted Mar. 27.

N. J., Bridgeton—Hospital, etc.—Apr. 14, by Stearns & Woodnut, archts., Stephen Girard Bldg., Phila., 3 story and basement, 40 x 140 ft. hospital and 42 x 90 ft. power house, brick and steel, plain foundation, Irving St., here, for Bridgeton Hospital Assn. $150,000. Noted Dec. 20.

N. J., Cedargrove—Hospital—May 1, by G. C. Bergen, purch. agt. Essex Co., Court House, Newark, reception hospital, and its tunnels, corridors, etc., designated as Group 1, here. F. S. Sutton, 402 Broad St., Newark, archt. Runyon & Carey, 845 Broad St., Newark, engrs. Noted Jan. 24.

N. J., Orange—High School—Apr. 19, by Bd. Educ., Main and Cleveland Sts., new high school. E. Sibley, Edgewood Lane and Bluff Rd., Palisade, archt. Noted Oct. 4.

N. J., Trenton—School—Apr. 14, by Hamilton Twp. Bd. Educ., 1770 Nottingham Way, 2 story and basement, 87 x 132 ft., for Kuser School. $150,000. W. A. Klemann, 1st Natl. Bank, engr.

Pa., Camp Hill—Clubhouse—Apr. 14, by Seeburger & Rabenold, archts., Weightman Bldg., Phila., 2½ story and basement, 60 x 130 ft. stone and frame, plain foundation, for Manufacturers Club, Broad and Walnut Sts. $150,000. Noted Mar. 6.

Pa., Elizabethtown—Home—Apr. 18, by E. A. Wightman, archt., Heed Bldg., Phila., 3½ story and basement, 65 x 110 ft. rein.-con., steel and tile, plain foundation, for Masonic Home Assn., Elizabethtown. $250,000. Noted Mar. 6.

Pa., Forty Fort—High School—Apr. 14, by School Dist., 2 story and basement, 125 x 234 ft. brick and steel, plain foundation, $300,000. R. Herr, Simon Long Bldg., Wilkes Barre, archt.

Pa., Hazelton—Exchange—Apr. 15, by J. T. Windrim, archt., Commonwealth Bldg., Phila., 2 story and basement, 80 x 150 ft., brick, plain foundation, here, for Bell Telephone Co., 17th St. and Parkway, Phila.

Md., Baltimore—Store—Apr. 25, by Smith & May, archts., Calvert Bldg., 9 story and basement, 122 x 156 ft., brick and steel, plain foundation, Lexington and Howard Sts., for Bernheimer Leader Stores, Lexington and Howard Sts. $750,000. Noted Aug. 30.

Ohio—Schools—Apr. 29, by Bd. Educ. Harrison Twp. School Dist., R.R. 1, Dayton, 2 story, brick and concrete at Ft. McKinley, and 1 story brick addition to school at Forest Park. $200,000. W. M. McCluer, 401 Canby Bldg., Dayton, archt. Noted Nov. 15.

O., Akron—Municipal—Apr. 18, by city, 9 story and basement, 95 x 110 ft., brick and steel, Church and High Sts. $900,000. Good & Wagner, 209½ Water St., archts. A. G. Simon, 716 Hippodrome Bldg., Cleveland, engr. Noted Jan. 24.

O., Springfield—Temple—Apr. 25, by Bd. Trustees Masonic Temple Assn., 5 story and basement, 100 x 150 ft., stone, brick and concrete, 4,500 seating capacity. $600,000. Miller & Reeves and H. D. Smith, 20 South 3rd St., Columbus, archts. Noted May 3.

Mich., Detroit—Bank—A. Kahn, archt., 1000 Marquette Bldg., taking bids 5 story and basement, 65 x 74 ft., rein.-con., brick and steel, plain foundation, Griswold St., for First State Bank, Griswold and Lafayette Aves. $400,000. Noted Feb. 28.

Mich., Detroit—Clubhouse—Stratton & Snyder, archts., 1103 Union Trust Bldg., taking bids and opens same about Apr. 15, 2 story and part basement, 50 x 250 ft. rein.-con., brick and tile, plain foundation, Vernier Rd., here, for Lochmoor Club, 203 Lakeshore Dr., Grosse Pointe Shores. $200,000.

Mich., Detroit—Hotel—L. Kamper, archt., Kamper Bldg., Cass Ave., taking bids and opens same about Apr. 15, 10 story and basement, 60 x 100 ft. rein.-con., brick and steel, plain foundation, Park Blvd., for L. W. Tuller, Tuller Hotel.

Mich., Detroit—Mercantile—Weston & Ellington, archts., 1507 Stroh Bldg., taking bids and opens same about Apr. 21, 12 story and basement, 95 x 137 ft. rein.-con., brick and steel, plain foundation, John R St., for Central Detroit Realty Co., c/o archts.

Mich., Detroit—School—Apr. 14, by Bd. Educ., 2 story and basement, 83 x 163 ft., rein.-con., brick and steel, plain foundation, Courtland Blvd. and Broad St. $160,000. Malcomson & Higginbotham, 1217 Griswold St., archts.

Mich., Monroe—School—Apr. 18, by C. Kiburtz, secy. Bd. Educ., 2 story and basement, 9 room, rein.-con., brick and steel addition, plain foundation, Lincoln School site. $150,000. Warren Holmes-Power Co., Lansing, archts.

Ill., Anna—High School—Apr. 15, by G. R. Corlis, secy. Bd. Educ., 2 story and basement, 85 x 130 ft. $175,000. J. A. Scribbins, 22 West Monroe St., Chicago, archt.

Ill., Edwardsville—Hospital—C. H. Dorris, Collinsville, secy. Madison County Tuberculosis Sanitarium, taking bids and opens same about May 1, 2 and 3 story, rein.-con., brick and stone. $250,000. Private plans. Noted July 5.

Wis., Kohler—Clubhouse—Kohler Co. taking bids 2 story and basement, brick and concrete addition, plain foundation. $150,000. Brust & Philipp, 405 Bway., Milwaukee, archts.

Wis., Milwaukee—Apartment—S. N. Loftus, 3220 Grand Ave., taking bids 3 story, brick and tile, plain foundation, Grand Ave. $150,000. Private plans.

Wis., Milwaukee—Business—M. Tullgren & Sons, archts., 415 East Water St., taking bids 3 story and basement, 62 x 120 ft., brick and concrete, plain foundation, North Ave., for Persion Furniture Co., 385 3rd St. $150,000.

Wis., North Milwaukee—High School—Apr. 15, by Joint School Dist. 1, E. Neumann, clk., 2 story and basement, brick and tile, plain foundation, Custer Ave. $150,000. Van Ryn & De Gelleke, 114 Grand Ave., Milwaukee, archts.

Mo., Hannibal—Schools—Apr. 18, by E. E. Mangels, clk. Hannibal School Dist., Hannibal Trust Bldg., remodeling and additions to Douglass and South Grade Schools. $150,000. Beuttler & Arnold, 405 Grain Exch., Sioux City, Ia., archts.

Mo., St. Louis—Hotel—P. J. Bradshaw, archt., International Life Bldg., taking bids 17 story and basement, rein.-con., steel, brick and terra cotta, 8th and St. Charles Sts., for Mayfair Investment Co., 312 North 8th St. Noted Mar. 20.

Tex., Austin—Office—W. T. Caswell, Littlefield Bldg., taking bids 13 story, basement and subbasement, brick, steel and concrete, West 7th and Colorado Sts. $1,000,000. Sanguinet Staats & Hedrick, 1st Natl. Bank, Ft. Worth, archts.

Tex., Houston—Bank and Office—Houston Land & Trust Co., 119 Main St., taking bids remodeling present building, 3 new stories, concrete and brick. $200,000. Sanguinet Staats & Hedrick, 1st Natl. Bank, Ft. Worth, engrs.

Okla., Muskogee—Hospital—Apr. 19, by Soldiers Relief Comn., 2 story and basement, 80 x 150 ft., rein.-con. and brick, plain foundation, near here. $150,000. Noted Mar. 6.

Okla., Norman—Medical and Engineering—Apr. 15, by C. Rice, chn. State Bd. Affairs, Capitol Bldg., Oklahoma City, 100 x 160 ft., rein.-con. and brick, plain foundation, on Campus State University, here. $200,000. Layton, Smith & Forsythe, 906 Baniff Bldg., Oklahoma City, engrs.

Calif., Grass Valley—Hotel—E. Sharpe, archt., 60 Sansome St., taking bids 6 story, rein.-con., Main and North Sts., for Golden Capitol Hotel Co., 125 Mason St. $200,000.

Calif., Los Angeles—Store and Office—Curlett & Beelman, archts., Union Bank Bldg., taking bids, steel for 12 story and basement, 100 x 150 ft., Flower and 7th Sts., for Sun Realty Co., 1116 Los Angeles St. Noted Mar. 13.

Calif., San Jose—Club and Office—Binder & Curtis, archts., 255½ South 1st St., taking bids and open same about Apr. 16, 10 story, Class A, steel and concrete, North 1st St., for Commercial Club, c/o architects. To exceed $150,000.

Calif., Santa Clara—School—Roman Catholic Archbishop, 1100 Franklin St., San Francisco, will build 2 story, rein.-con., here, under supervision of H. C. Miller, constr. mgr., c/o St. Clare School. $150,000. Noted Sept. 20.

N. B., St. John—Hotel—Apr. 23, by Admiral Beatty Hotels Ltd., St. John, 8 story, 110 x 160 ft. rein.-con., brick and steel, plain foundation, King Sq., $750,000. Ross & McDonald, Belmont St., Montreal, Que., archts. Noted Jan. 17.

BIDS RECEIVED

N. Y., Buffalo—School—Bd. Educ., 1400 Telephone Bldg., Mar. 26, general contract P. S. 71, 2 story and basement, 190 x 215 ft., rein.-con. and brick, Lang Ave., from G. Schaaf, 258 Kingsley St., $368,340; heating and ventilating from J. J. Bresnahan, Inc., 41 Pearl St., $67,774. Noted Mar. 6.

Pa., Bloomsburg—Church and Sunday School—Trustees St. Matthews Lutheran Church, N. S. Wolf, pastor, 1 story and basement, 44 x 85 ft. with 2 story, 56 x 101 ft. wing, North Market St., from H. A. Moore Co., Milton, $124,301. Noted Mar. 13.

Wis., Oshkosh—Temple—Masonic Executive Com., c/o F. A. Fuller, 50 West Polk St., 4 story and basement, 90 x 96 ft., brick, stone and concrete, plain foundation, from C. R. Meyer & Sons, 50 State St., $174,000. Noted Mar. 13.

Calif., Huntington Park (Branch of Los Angeles)—School—Huntington Park Union High School Dist., school of arts, brick, general contract from Edwards, Wildey & Dixon, Black Bldg., Los Angeles, $168,000. Noted Mar. 20.

Calif., Sacramento—Store and Office—H. H. and W. S. Hart, c/o F. A. Foale, Ochsner Bldg., (a) 5 story (b) 2 story (c) 1 story and basement (ultimately 12 story), Class A steel, brick and terra cotta, K St., from W. Murcell, Ochsner Bldg., (a) $285,600 (b) $134,846 (c) $91,460; Campbell Constr. Co., Nicholaus Bldg., (a) $297,532 (b) $125,692 (c) $89,800. Noted Mar. 6.

CONTRACTS AWARDED

Mass., Ware—Church—Lady of Mt. Carmel Church, 90 x 170 ft., pressed brick and stone, 2 towers, plain foundation, to J. Miles & Sons Co., Springfield. Noted July 26.

Mass., Worcester—Store and Office—City General Corp., 6 story and basement, 111 x 127 ft., brick and steel, to E. D. Ward Co., 82 Foster St., $755,000.

R. I., Slocum—Administration and Service—Exeter School, 2 story, 70 x 200 ft., brick and steel, to A. F. Smiley Co., 308

Buildings (Continued)

Main St., Pawtucket, $134,000. Archts. est. $150,000. Noted Mar. 27.

Conn., Middletown—Nurses Home—State Pub. Health Comn., Hartford, 2 story, brick, here, to S. Mazzotta, 230 Pearl St., $155,000. Noted Mar. 20.

N. Y., Brooklyn—Apartment—P. Schoengeld, c/o Cohn Bros., archts. and engrs., 361 Stone Ave., will build 6 story, brick, steel and stone, plain foundation, South 2nd and Hooper Sts., by day labor. $350,000.

N. Y., New York—Apartment—S. Alkoff, c/o J. M. Felson, archt. and engr., 1133 Bway., will build 5 story, brick, steel and stone, plain foundation, Bronx Park S., near Bryant Ave., by day labor.

N. Y., New York — Apartment — Hillpin Building Corp., c/o J. M. Felson, archt. and engr., 1133 Bway., will build 5 story, brick, steel and stone, plain foundation, Walton Ave., by day labor. $300,000.

N. Y., New York — Apartment — Orden Building Corp., c/o J. M. Felson, archt. and engr., 1133 Bway., will build 5 story, brick, steel and stone, plain foundation, Mosholu Parkway, by day labor. $200,000.

N. Y., New York—Apartment—Schatz & Zuker, c/o C. Kreymborg, archt. and engr., 2534 Marion Ave., will build 6 story, brick, steel and stone plain foundation, Vyse Ave., by day labor. $200,000.

N. Y., Plattsburg—Office and Store—A. H. Marshall Co., 3 story and basement, brick, stone, concrete and steel, Margaret and Bridge Sts., general contract to E. K. Fenno, 204 North Beach St., Syracuse. Total cost $150,000-$160,000.

N. Y., Potsdam—Bank—Peoples Bank of Potsdam, 2 story, marble, litholite, brick, concrete and steel, Elm and Raymond Sts., to S. Nicolette, Potsdam, $160,000.

N. Y., Utica — Church — St. Anthonys Parish, new church, Buffalo St., to E. C. Richards, $150,000.

N. J., Somerville—Hospital—Crow, Lewis & Wick, archts., 200 5th Ave., New York City, 3 story, 43 x 184 ft., brick, steel and limestone, plain foundation, Rehill Ave., here, to J. Lowry, Inc., 171 Madison Ave., New York City, for Somerville Hospital. $354,500. Noted Feb. 21.

Pa., Doylestown — Theatre — A. O. Martin, archt., Hart Bldg., 1 story, 53 x 140 ft. brick and steel, plain foundation. Main and Donaldson Sts., to F. V. Warren Constr. Co., 1913 Arch St., Phila., to exceed $150,000, for I. O. O. F. Lodge 193.

Pa., McKees Rocks — Exchange — Bell Telephone Co., 7th Ave., Pittsburgh, 2 story and basement, 45 x 113 ft., Chartiers Ave., here, to A. and S. Wilson Co., 541 3rd Ave., Pittsburgh. Archts. est. $150,000.

Pa., Phila. — Apartment — Stetler & Dysher, archts., 1015 Chestnut St., 4 story and basement, 80 x 100 ft., Walnut St. between 45th and 46th Sts., to H. Gill 2515 Germantown Ave., $250,000. Owner's name withheld.

Pa., Upper Darby (Phila. P. O.)—School and Chapel—P. F. Getz, archt., 1634 North 6th St., 2 story and basement, 57 x 160 ft. and 20 x 64 ft. stone, plain foundation, Hampden and Sansom Sts., to J. McShain, 1610 North St., Phila., for St. Alices Roman Catholic Parish, $150,000.

Md., Baltimore—Hotel—Emerson Hotel, Calvert and Baltimore Sts., will build 16 story, 40 x 104 ft., brick and steel, plain foundation, Calvert and Baltimore Sts., by day labor. W. H. Parker, c/o Emerson Hotel, will supervise construction. $550,000. Noted Mar. 13.

La., New Orleans — Hospital — Diebert Memorial Hospital, 4 story, 45 x 300 ft. main building, with 2 and 3 story wing, rein.-con. and steel, on Derby Tract Site, to G. J. Glover, Whitney Bldg., $400,000. Noted Oct. 11.

La., New Orleans — School — Orleans Parish School Bd., 3 story, 150 x 300 ft. rein.-con. and brick, Carrolton Ave. and Belfast St., to Rouprich Constr. Co., 405 Louisiana Bldg., $331,090. Noted Mar. 27.

Tenn., Memphis — Jail — Shelby Co., 4 story, concrete, brick and stone, Washington Ave., general contract to Kaucher-Hodges Co., Exch. Bldg., $398,000; plumbing to Prichard Bros., 433 Madison Ave., $45,000. Noted Mar. 20.

Tenn., Nashville—Apartment—Prickett & Thomas, Stahlman Bldg., 8 story and basement, concrete, stone, brick and steel, 7th and Cedar Sts.; frame steel work, to Nashville Bridge Co., Shelby Ave. Archts. est. $500,000. Noted Jan. 10.

Tenn., Nashville—Exchange—See "Unclassified."

Ky., Greenville—High School—Bd. School Comrs., 3 story and basement, 60 x 150 ft., to J. Cole, Paducah. Archts. est. $150,000. Noted Mar. 20.

Ohio—School—Bd. Educ. Harrison Twp. School Dist., Dayton, 2 story and basement, rein.-con. and brick, plain foundation, to J. W. Boren & Sons, 34 Huffman Ave., Dayton, $150,000. Noted Nov. 15.

O., Barberton — School — Bd. Educ., 10 room addition to Hyland School, to W. W. Serber, Barberton, $104,400. Noted Mar. 20.

O., Columbus—Hospital—C. E. Steele, secy. Bd. Trustees Ohio State University, constructing Starling-Loving Hospital, 4 story and basement, 120 x 150 ft., rein.-con. and brick, on campus, to E. H. Latham, 60 East Broad St., $339,217. Noted Mar. 20.

O., Toledo—School—Bd. Educ. Raymer School, 3 story and basement, rein.-con. and brick, plain foundation, to Gettins Kopitke Co., Wabash St., $349,200. Noted Mar. 20.

Mich., Detroit—Clubhouse—Y. M. C. A. (colored branch), c/o Donaldson & Meier, archts., 1314 Penobscot Bldg., 6 story and basement, 95 x 144 ft., rein.-con., brick and steel, plain foundation, Elizabeth St., to Walbridge-Aldinger Co., 2356 Penobscot Bldg. Archts. est. $450,000.

Mich., Mt. Clemens—School—F. Newberry, secy. Bd. Educ., Dist. 3, 2 story and basement, 12 room, rein.-con., brick and steel, plain foundation, Mack Ave. and Defer Rd., to M. Bartholomaei Sons & Co., 1574 East Warren Ave., Detroit. Noted Mar. 13.

Ill., Chicago—Hospital—St. Lukes Hospital, 1439 South Michigan St., 19 story, 50 x 200 ft., fireproof, 1439 South Michigan St., to Dahl-Stedman Co., 11 South LaSalle St. Archts. est. $2,500,000.

Ill., Edwardsville — High School — Bd. Educ., general contract 3 story, rein.-con. and brick, to A. Fahrig, Edwardsville, $134,500.

Wis., Milwaukee — Church — St. Leo Congregation, c/o P. Theisen, pastor, 2442 Locust St., 1 and 2 story, 88 x 160 ft., brick and concrete, plain foundation, 24th St., to H. Schmitt & Son, 430 Farwell Ave., $250,000. Noted Feb. 14.

Wis., Mineral Point—School—Bd. Educ., 2 story, 90 x 113 ft., rein.-con., brick and steel, plain foundation, to L. S. Wagner & Son, Co., Monroe, $150,000. Noted Mar. 6.

Wis., Wyocena—Asylum—Columbia Co., 2 story and basement, 73 x 161 ft., brick, rein.-con. and steel, plain foundation, to Hoeppner-Bartlett Co., Eau Claire. Noted Mar. 6.

Neb., Gordon — School — Bd. Educ., 3 story and basement, 63 x 96 ft. concrete and brick, to Swanson & Sudik, Gordon. Archts. est. $150,000. Noted Mar. 13.

Mo., Columbia—Hotel—Bd. Control Residence Hall Methodist Women, general contract 3 story and basement, 40 x 65 x 125 ft., brick and stone, plain foundation, to Simon Constr. Co., Columbia, $170,000.

Ore., Eugene—Hotel—Eugene Hotel Co., 6 story, 100 x 100 ft., rein.-con., 9th and Pearl Sts., to A. Lowland, Eugene, $300,000. Noted Nov. 22.

Calif., Colma—School—Jefferson Union High School Dist., 1 and 2 story, 15 rooms and auditorium, rein.-con., general contract, to Sample & Cody, Call Bldg., San Francisco, $122,500. Noted Apr. 3.

Calif., Los Angeles—Apartment—H. C. Jensen, 1728 Westmoreland Blvd., will build 3 story and basement, 140 x 150 ft., brick, Logan St. and Sunset Blvd., by day labor and sub-contracts. Private plans.

Calif., Los Angeles—Hotel and Store—Metropolitan Hotel Co., c/o L. L. Smith, archt., Byrne Bldg., 14 story and basement, 92 x 150 ft., rein.-con., South Main St., to Weymouth-Crowell Co., 2104 East 15th St. To exceed $650,000. Noted Nov. 22.

Calif., Los Angeles—Loft and Store—A. C. Martin, Higgins Bldg., representing owner, 5 story and basement, brick, Figueroa St., to H. M. Baruch, I. W. Hellman Bldg., $152,800.

Calif., Los Angeles — Loft — Ninth & Bway. Bldg. Co., 11 story, 100 x 150 ft., rein.-con., Bway. near 9th St., to MacDonald & Kahn, Inc., Loews State Bldg., $457,000.

Calif., Los Angeles—Theatre, Store, Office and Apartment—West Coast Theatres, Inc., Knickerbocker Bldg., 190 x 250 ft., rein.-con., Vermont Ave., to Macdonald & Kahn, Mercantile Arcade Bldg., cost plus basis, about $300,000. Noted Jan. 17.

Calif., San Francisco—Apartment—D. J. Clancy, 2884 Folsom St., will build 6 story and basement, rein.-con., Washington and Franklin Sts., by day labor and sub-contracts. $150,000. Baumann & Jose, 251 Kearny St., archts.

Ont., Minic—High School—Bd. Educ., 2 story and basement, 8 room, concrete, brick and tile, general contract to Witchall & Sons, 156 St. Helens Ave., Toronto. Noted Jan. 10.

Ont., Richmond Hill—School—Bd. Educ., 8 room, concrete, brick and steel: masonry, stone and steel to Britnell Contg. Co., Baxter Ave., Toronto; electric work to Richardson & Cross, 81 King St. E., Toronto; heating and plumbing to Bennett & Wright, 72 Queen St. E., Toronto. Noted Feb. 14.

Ont., Toronto—Office—Imperial Life Assurance Co., 34 Victoria St., 8 story and basement, 40 x 100 ft. rein.-con., brick and steel, plain foundation, Victoria St., to Carswell Constr. Co., 58 Wellington St. E. Archts. est. $300,000. Noted Mar. 27.

Que., Montreal—Theatre—A. Lawland, Park Ave., 3 story, 100 x 100 ft., rein.-con. brick and stone, to Lege & Lamoureux, St. Denis Bldg., $150,000. Noted

Que., Outremont—Garage—J. O. Villeneuve & Co., St. James St., Montreal, 4 story, 90 x 167 ft. rein.-con. garage, Bernard and De L'Eppe Aves., to L. A. Otto & Co., Cathcart St., Montreal., $150,000.

Federal Government Work

PROPOSED WORK

Me., Bar Harbor — Compass Station — Spec. 4966—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans compass station here.

Mass., Chelsea — Porches and Walks — Spec. 4965—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans porches and walks at Naval Hospital, here.

S. C., Charleston—Electric Crane—Spec. 4962—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans to purchase electric traveling crane.

Fla., St. Petersburg—Jetty—U. S. Engineer, Jacksonville, plans jetty here.

Ky., Uniontown—Yellow Pine—U. S. Engineer, P. O. Box 72, Louisville, opens bids about Apr. 15, 120,000 ft. yellow pine No. 2 common, for Dam 49, f.o.b. Owensboro.

O., Cincinnati—Dwellings—U. S. Engineer, Cincinnati, takes bids about May 1, lock keepers dwellings at Dams 34, 36 and 38, Ohio River. Noted Mar. 27.

Mich., Detroit—Dredging—U. S. Engineer, Detroit, takes bids about May 1, dredging in Russell Island Shoal, St. Clair River.

Minn., St. Cloud—Screening Buildings—Spec. 4964—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans screen buildings at U. S. Veterans Hospital here.

China, Pekin—Radio Station—Spec. 4963—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans radio station and storage battery house, here. Bids will be opened at local yard.

BIDS DESIRED

N. Y., Ft. Hamilton (Sta. Brooklyn)—Waterworks — Apr. 17, at office Constructing Quartermaster, Room 510, 39 Whitehall St., New York, addition to water supply system, here; adv. E. N.-R. Apr. 10.

Mich., Detroit—Motor Launch—Apr. 29, by U. S. Engineer Office, Detroit, constructing wooden motor launch; adv. E. N.-R. Apr. 10.

California — Road — Apr. 16, by C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., Main St., San Francisco, surfacing 12 mi. Mineral Sect. Red Bluff-Susanville Natl. Forest Rd., Tehama Co., 17,800 cu. yd. crushed stone.

Calif., Bakersfield—Post Office—May 8, by Treas. Dept. at office Supervising Architect, Wash., D. C., 1 story, 73 x 127 ft., here; adv. E. N.-R. Apr. 3 and 10.

CONTRACTS AWARDED

Del., Wilmington—Dike and Sluice—U. S. Engineer, Wilmington, dike and sluice in Delaware River, to Triest Contg. Co., 247 Park Ave., New York City, $472,950. Noted Jan. 10.

Unclassified

PROPOSED WORK

Hydro-Electric Development—New York—Pauls Smiths Power, Light & Ry. Co., Saranac Lake, plans hydro-electric development consisting steel and concrete dam, concrete power house, 3,000 ft. steel penstock and generating equipment, on Racquette River at Racquette Falls. To exceed $350,000.

Transmission Line — New York — Binghamton Light, Heat & Power Co., 172 Washington St., Binghamton, plans extending 3 phase high tension transmission line to Sanitoria Springs. To exceed $25,000. R. L. Peterson, genl. mgr.

Transmission Line—New York—Elmira Water, Light & R.R. Co., Madison Ave., Elmira, plans 3 phase, 2,200 volt high-tension transmission line to Burdett. To exceed $25,000.

Sea-wall — Buffalo, N. Y. — Buffalo & Crystal Beach Corp. plans 1,000 lin.ft. rein.-con. sea-wall. $50,000-$60,000.

Unclassified (Continued)

Ornamental Lighting System—Herkimer, N. Y.—Bd. Village Trustees plans ornamental street lighting system on Main St. $25,000-$30,000. J. F. Smith, village pres.

Hydro-electric Development — Oswego, N. Y.—Battle Island Power Co., having surveys and plans made hydro-electric development Oswego River, Dam 6. $450,000.

Steel Hull Railroad Car Floats—Maryland—Baltimore & Ohio R.R., Baltimore and Charles Sts., Baltimore, plan to purchase 4 steel hull railroad car floats, 39 x 285 ft. Several hundred thousand. J. H. Clark, c/o Baltimore & Ohio R.R., 2 Wall St., New York City, supt. floating plant.

Gas Line — West Virginia — Associated Coal & Gas Co., Welch, plans 35 mi. gas pipe line from Mingo Co., W. Va., to Clay City, Ky. $50,000. W. W. Whyte, pres

Revetment—Louisville, Ky.—Jefferson Co. plans revetment of River Rd. on bank of Ohio River, 5,000 cu.yd. stone riprap. To exceed $25,000. T. Drane, co. surv.

Transmission Line—Cleveland, O.—See "Industrial Works."

Hydro-Electric Development—Flat Rock, Ind.—Flat Rock Hydro-Electric Power Co., c/o C. C. Shipp, promoter, 309 East Walnut St., Indianapolis, plans hydro-electric development on Flat Rock River. $600,000.

Track Elevation — Indianapolis, Ind. — Cleveland, Cincinnati, Chicago & St. Louis R.R., 457 Transportation Bldg., plans elevating tracks from Market St. to Massachusetts Ave. To exceed $40,000. C. A. Paquette, Union Central Bldg., Cincinnati, O., ch. engr.

Grand Stand—West Allis, Wis.—State Bd. Agriculture, J. Jones, comr. Madison, had plans prepared rein.-con. addition to grand stand at State Fair Park, here. $100,000. A. Peabody, Capitol, Madison, archt. and engr.

White Way—Topeka, Kan.—Plans election $50,000 bonds, white way lighting system on 42 blocks, West 5th, West 6th, East 6th, West 7th and East 10th Sts. W. E. Baldry, City Hall, engr.

Pipe Line—Texas—Magnolia Petroleum Co., Beaumont and Magnolia Bldg., Dallas, plans 400 mi. oil pipe line from Luling to Beaumont. $1,000,000. Private plans.

Flood Prevention — Bay City, Tex. — Matagorda Co. and City plan flood prevention along Colorado River, to include dam or levees. $685,000 to $900,000. Election Apr 20, to vote on $685,000 bonds. W. C. McNabb, co. judge.

Park Improvements—Dallas, Tex.—City Comn. soon takes bids park improvements, ornamental gateway, shelter houses, walks, etc., Tension Park. $35,000. Lang & Witchell, Amer. Exch. Natl. Bank, archts. E. A. Kingsley, city engr.

Flood Control—Los Angeles, Calif.—Los Angeles Flood Control Dist. plans to vote on $32,301,000 bonds for flood control works.

Harbor Improvements—Goderich, Ont.—Dept. Pub. Wks., Ottawa, Ont., having plans prepared deepening and making improvements to harbor, $50,000. A. Craig, Royal Bank Bldg., London, engr.

Turntable—North Bay, Ont.—Temiskaming & Northern Ontario Ry., North Bay, plans 90 ft. turntable in yards, here. $30,000. S. B. Clement, ch. engr.

Tunnel — British Columbia — British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, soon takes bids constructing Alouette Stave Tunnel, 3,400 ft. long, 14 ft. in diam., 1,000 cu.yd. concrete, 4,500 cu.yd. rock excav. in shafts and intake, etc.

BIDS DESIRED

Fire Alarm System—New York, N. Y.—Apr. 15, by Dept. Pub. Welfare, Municipal Bldg., local fire alarm system in New York City Childrens Hospital and Schools Dist. of Randalls Island. B. S. Coler, comr.

Subway—New York, N. Y.—Apr. 25, by Transit Comn., 49 Lafayette St., Sect. 2 of Route 70, a part of Rapid Transit Railroad. G. McAneny, chn.

Hot Water Supply System—Perrysburg, N. Y.—Apr. 15, by Comn. Parks & Buildings, City Hall, Buffalo, hot water supply system in J. N. Adam Memorial Hospital, here. $25,000. J. H. Meahl, City Hall, Buffalo, comr.

Park—Trenton, N. J.—Apr. 11, embellishment of North Trenton Park. $25,000. J. E. English, City Hall, engr. Noted Mar. 27.

Stadium—Morgantown, W. Va.—Apr. 15, by West Virginia University, stadium, 2 stands, 102 x 360 ft. and 82 x 360 ft. Osborn Eng. Co., 7016 Euclid Ave., Cleveland O., engrs. Noted Feb. 14.

Ferry House, etc.—New Orleans, La.—Apr. 17, by Bd. Port Comrs., New Court Bldg., concrete and steel ferry house, facade, coping walls, and paving, at foot of Canal St. $90,000.

Bulkhead and Filling—Chicago, Ill.—Apr. 16, by South Park Comrs. 57th St. and Cottage Grove Ave., constructing portion of inner bulkhead in Lake Michigan, also filling to grade area enclosed by bulkhead. E. H. Whitty, secy.; adv. E. N.-R. Apr. 10.

Transfer Shed, etc.—Corpus Christi, Tex.—May 20, by City Comrs., large timber transfer shed and accessories, $150,000, also wharf, treated timber on special piers, in conjunction with deep water project, $700,000. R. J. Cummins, 732 Bankers Mortgage Bldg., Houston, and E. E. Sands, 5418 Austin St., Houston, engrs.

Road Material—Fort Worth, Tex.—City taking bids for road oils, asphalt and surfacing materials. Will repair streets by day labor. $60,000. D. L. Lewis, city engr.

Seawall — California — See "Streets and Roads."

BIDS RECEIVED

Freight Yards, etc.—Caswells (Knoxville P. O.). Tenn.—Southern Railway System 4th & Sycamore Sts., freight yard with cut off track coal yards and coal handling equipment, to The Foundation Co., 120 Liberty St., New York City. Est. cost $3,000,000.

CONTRACTS AWARDED

Extension Lines, etc.—Nashville, Tenn.—Cumberland Telephone & Telegram Co., Telephone Bldg., will construct new exchange, cables, conduits, and install switchboards and equipment, etc., by company forces. $338,000. K. C. Hardcastle, mgr.

Elimination of Grade Crossing—Cleveland, O.—Pennsylvania Co., Pennsylvania Sta., Pittsburgh, Pa., elimination of grade crossing from Cedar to Holton Aves., 5,000 cu.yd. concrete retaining wall, 250,000 cu.yd. dirt fill, to H. E. Culbertson Co., Hanna Bldg.

Swimming Pool, etc.—Two Rivers, Wis.—Bd. Educ., swimming pool, bleachers, shower rooms, lockers, etc., to Greer & Butler, 420 Milwaukee St., Milwaukee. Noted Mar. 13.

Transmission Line—Kansas—Cities of Grainfield and Grinnel. transmission line from Grainfield to Grinell, to Dwight Chapin Co., Kansas City, Mo., $28,450. Noted Mar. 20.

Swimming Pool—St. Joseph, Mo.—City, open air concrete swimming pool, at Noyes Blvd. athletic field, to Rainert Bros., 1208 North 5th St., $38,493.

Grain Elevator—Amarillo, Tex.—W. S. Kergan, 20,000 bbl. grain elevator, concrete, on Polk St., to Star Eng. Co., 209-11 North St. Francis St., Wichita, Kan., $75,000.

Electrolier System—Los Angeles, Calif.—Ornamental lighting system on Brooklyn Ave., to H. H. Walker, 1800 West 12th St., $44,818. Noted Apr. 3.

Steel Hull, etc.—Portland, Ore.—Port of Portland, 916 Spalding Bldg., steel hull for dredge, and installing deisel engines. to Wallace Equipment Co., 11th S. W. and West Hanford Sts., Seattle, Wash., and Albina Marine Iron Wks., Lewis and Loring Sts., $165,000. Engrs. est. $250,000. Noted Feb. 14.

Power Development—Halifax, N. S.—Nova Scotia Power Comn., Halifax, power development at Ruth Falls, 1½ mi. concrete lined canal, to E. F. Powers Constr. Co., St. John, N. B., $200,000, concrete dam, to W. Cooke, North Sydney, $60,000.

Material and Equipment

PROPOSED WORK

Road Oil, etc.—Cincinnati, O.—Hamilton Co., Court House, plans to purchase 208,000 gal. road oil, 10,000 cu.yd. sand, 153,800 gal. Grade 2 tar, will also clean 1,051,000 sq.yd. road. $88,391. E. A. Gast, Court House, engr.

Filters, etc.—Binghamton, N. Y.—Binghamton Gas Co., 40 Chenango St., plans filters and filtration system to remove oil from entire plant residuum. To exceed $25,000.

Rail Bonds, Track Bolts and Track Spikes—Eureka, Calif.—City plans to purchase 2,600 solid terminal rail bonds, concealed type, twin conductors, center crimp 10 in. spacing between 7-8 terminals; 3 tons ¾ x 3½ in. and 2 tons ¾ x 3¼ in. track bolts; 15 tons $\frac{9}{16}$ x 5 in. thick track spikes for Municipal Ry. J. W. Griffith, supt. pub. wks.

Sprinkler and Flusher—Verdun, Que.—Plans to expend $10,000 for new sprinkler and flusher. H. Hadley, city engr.

BIDS DESIRED

Road Oil—Hartford, Conn.—Apr. 22, by Bd. Contract & Supply, at office of Mayor, Municipal Bldg., road oil. P. McGovern, secy.; adv. E. N.-R. Apr. 10.

Cement—Buffalo, N. Y.—Apr. 17, by Commissioner Pub. Parks & Buildings, City Hall, 4,000 bbl. cement.

Paving Materials—Chicopee, Mass.—Apr. 11, by E. Bourbeau, supt. streets, furnishing granite curbing, granite block, wood block, trap rock, sewer castings, asphalt, tar, road oils, cement and tar walks, etc., which may be ordered by Supt. of Streets from Apr. 15, 1924, to Apr. 15, 1925.

Paving Materials—Springfield, Mass.—Apr. 16, by Bd. Supervs. Dept. Streets and Eng., at office of City Clerk, Administration Bldg., furnishing asphaltic cement, asphalt for penetration construction, asphalt for resurfacing or road binding, asphaltic and non-asphaltic road oils, hot and cold tars, castings, etc. R. P. Marsh, supt. Dept. Streets and Eng.

Crusher—Johnstown, N. Y.—Johnstown Crushed Stone Co. in market for rotary jaw crusher. C. Stoller, purch. agt.

Sand Grit, etc.—Long Island City, N. Y.—Apr. 15, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 5,000 cu.yd. sand grit or broken stone chips of trap rock to Bureau Highways.

Asphalt Binder—New York, N. Y.—Apr. 16, by E. W. Buckley, comr. Purch., Municipal Bldg., asphalt binder, tar road oil and pitch to Depts. Plant & Structures, Parks—Bronx, and Parks-Queens.

Tie Plates—New York, N. Y.—Apr. 11, by Transit Comn., 49 Lafayette St., supply of tie plates (order 6) for use in construction of Rapid Transit Railroads. G. McAneny, chn.

Asphaltic Binder — Plattsburg, N. Y. — Apr. 18, by Common Council, 50,000 gal. asphaltic binder. Prices to be given on car load, barrel and gallon. I. L. Wood, city clk.

Trucks—St. George, N. Y.—Apr. 14, by J. A. Lynch, pres. Richmond Boro, Boro Hall, one 1½ ton and one 2 ton automobile trucks with dump bodies.

Road Planer—Troy, N. Y.—Bd. Contr. & Supply in market for 1 road planer for gravel roads. C. R. Wales, secy.

Stone, etc.—Trenton, N. J.—Apr. 21, by State Hy. Comn., 24,535 tons 2½ in., 475 tons 1½ in. and 3,195 tons ¾ in. stone, 11,040 tons Grade A, 900 tons Grade B and 7,750 tons dustless screenings, 2,130 tons ¾ in. washed gravel or crushed stone, 3,045 tons crushed slag, dustless screenings, 296,815 gal. Grade B or UB tar, 20,705 gal. Grade X or U3 tar, 31,185 gal. Grade LK asphalt and 13,500 gal. Grade SCO asphalt, 167,100 gal. asphalt cement emulsion, Grade "AE" etc. A. L. Grover, ch. clk.

Crushed Stone, etc.—Wilmington, Del.—Apr. 15, by President of Levy Court, New Castle Co., crushed stone, gravel, slag, road tar, oils and asphalt for 1924. C. E. Grubb, co. engr.

Road Material—Louisiana—Apr. 22, by State Highway Comn., Baton Rouge, 8,460 cu.yd. sand clay gravel containing not less than 60% stone on ¼ in. screen, or 2,820 cu.yd. washed gravel and 5,640 cu.yd. clay gravel containing 40% stone on ¼ in. screen, f.o.b. Winnsboro, also 7,802 cu.yd. washed gravel or 10,398 cu.yd. 60% sand gravel or 3,466 cu.yd. washed and 7,932 cu.yd. 40% sand clay gravel, f.o.b. East Felisiana. J. M. Fourmy, engr.

Condensors, etc.—Cleveland, O.—Apr. 25, condensors and condensor auxiliaries for 15,000 kw. steam turbo and steam turbo generator.

Hoisting Engine, etc.—Columbus, O.—Boyajohn & Barr, Brunson Bldg., in market for 1 hoisting engine and 2 concrete mixers.

Steam Roller — Madison, Wis. — Taking bids one 12 ton 3 wheel steam roller with scarifier. E. E. Parker, city engr. Noted Mar. 27.

Brick, Portland Cement, etc.—St. Paul, Minn. — Apr. 15, by H. W. Austin, city purch. agt., 1,144 sq.yd. 3-in. vertical fibre brick and 250 bbl. portland cement for paving South Wabasha St. between Water St. and Wabasha St. Bridge; 64,946 lb. straight reinforcing steel and 13 tons c.i. flange pipe and specials for Water Dept. G. M. Shepard, city engr.

Concrete Mixer, etc.—St. Louis, Mo.—General Eng. & Mfg. Co., 1523 South 10th St., in market for small size concrete mixer and jaw crusher.

Elevating Grader—Temple, Tex.—D. H. Buchanan taking bids elevating grader.

Logging Donkeys — Colfax, Calif. — W. McKean, P. O. Box 326, in market for double drum logging donkeys (new or used).

CONSTRUCTION NEWS

Engineering News-Record, April 17, 1924

Construction Barometer and Proposals will Appear Next Week as Usual

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. Y., Ballston Spa—See "Unclassified."

N. Y., Fulton—Election May 7, $200,000 bonds, additions and improvements to water supply.

N. Y., Saratoga Springs — Plans new water system from Hunt, Jenny and Effner Lakes. $500,000. C. R. Knapp, Arcade Bldg., Bway., mayor.

N. Y., Syracuse — Bureau Water plans new East Reservoir. $480,000. P. F. Durkin, supt.

N. Y., Whitehall—Bd. Village Trustees had plans prepared Pike Brook and Pine Lake gravity water supply system. $280,000.

W. Va., Salem—Voted $75,000 bonds, improvements and extensions to water system.

Ga., Elberton—Voted $40,000 bonds for waterworks and sewers.

O., Cleveland—See "Sewers."

O., Columbus—See "Streets and Roads."

Ill., Blandinsville — Having preliminary plans prepared pumping, plant, tank on tower and distribution system, will exceed $15,000. Caldwell Eng. Co., Jacksonville, engrs.

Ill., Carthage—Soon takes bids waterworks and distribution system. $150,000. Caldwell Eng. Co., 502 Ayres Bldg., Jacksonville, engrs.

Ill., Jacksonville — Election Apr. 15, $100,000 bonds, 4,000 ft. 16-in. Class B mains, 500,000 ga. elevated tank, 3 m.g. steam turbine, chain grate stoker, etc. Caldwell Eng. Co., Jacksonville, engrs. Noted Feb. 28.

Ill., Newton—Having preliminary plans prepared filtration plant. $50,000. Caldwell Eng. Co., 502 Ayres Bldg., Jacksonville, engrs.

Ill., Oquawka—Having preliminary plans prepared waterworks, pumps, reservoir, distribution mains, etc. $20,000. Caldwell Eng. Co., 502 Ayres Bldg., Jacksonville, engrs.

Ill., Rushville—City Clerk takes bids about June 1, water distribution system and force main. $37,000. Caldwell Eng. Co., Jacksonville, engrs. Noted Dec. 13.

Ia., Marshalltown—Voted $300,000 bonds iron removal plant, low lift pumping station, 6 mi. pipe extension. O. G. Herm, Marshalltown, engr. Noted Mar. 6.

Minn., Rochester — See "Contracts Awarded."

Kan., Reserve — Voted $15,000 bonds, waterworks and distribution system. Shockley Eng. Co., 800 Graphic Arts Bldg., Kansas City, engr.

Mo., South West City—Plans waterworks, reservoir, distribution system and electric light plant. To exceed $25,000. Engineer not announced.

Ark., Springdale — Making preliminary plans 12 in. c.i. mains to replace present 6 in. mains, will also extend service into new territory. $40,000.

Tex., Blooming Grove—Election Apr. 29, $42,000 bonds for well and system. Elrod Eng. Co., 3124 Elm St., Dallas, engr.

Tex., Cisco — Making plans filteration plant and standpipe. $50,000. Elrod Eng. Co., 3124 Elm St., Dallas, engr.

Tex., Dallas—North Highlands Impvt. Dist., c/o C. K. Bullard, Magnolia Bldg., takes bids about May 1, 13,600 ft. 4- to 6-in. c.i. pipe, etc. Myers & Noyes, Mercantile Bank Bldg., engrs. $37,500.

Tex., Ralls—Election Apr. 30, $50,000 bonds, waterworks improvements. J. Haney, mayor.

Tex., Yorktown—Making plans 1 m.g. reservoir. $50,000. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Okla., Newkirk—Plans election $150,000 bonds for new wells, reservoir, 15,000 ft., 8- and 10-in. mains, etc. Musson & Gayle, Grain Exch. Bldg., Oklahoma City, engrs.

Okla., Texola — Plans election $40,000 bonds, water plant and electric light plant. Engineer not selected.

Calif., Redwood City—Plans to purchase deep well pumping plant, 250 g.p.m. from 2 wells, to replace 2 existing air pumps. C. L. Dimmitt, city engr.

Calif., San Diego—See "Buildings."

Ont., Birchcliff — Scarboro Twp. voted $30,000, extending waterworks, 11,000 6 in. c.i. mains, hydrants, etc. C. E. Fraser, Stop 19, Kingston Rd., Toronto, engr.

BIDS DESIRED

R. I., Providence—May 21, at office of Water Supply Bd., City Hall, purification works and adjacent portions of Scituate aqueduct, near Kent, in Scituate, 10 mi. west of Providence. B. T. Potter, chn.; adv. E. N.-R. Apr. 17.

N. J., Berlin—Apr. 21, by Twp. Com., c.i. pipe, special castings, valves, fire hydrants, pipe laying and standpipe. W. H. Boardman, 426 Walnut St., Phila., engr.

N. J., Maple Shade—Apr. 30, by Chester Twp. Com., P. S. 2, constructing waterworks, Contr. 1. Remington & Vosbury, 509 Cooper St., Camden, engrs.; adv. E. N.-R. Apr. 17.

Fla., Cocoa—Apr. 21, at office of E. E. Grimes, mayor, material and equipment for waterworks and sewerage system, 800 bbl. cement, 125 cu.yd. brick sand, 175 cu.yd. concrete sand, 400 tons crushed rock or washed gravel, 50,000 lb. reinforcing, two 750 g.p.m. centrifugal pumps, one for direct connection to motor, other for direct connection to gas engine; 100,000 gal. steel tank on 75 ft. tower, 944 ft. 8- to 36-in. B & S Class A pipe; 1,212 ft. 10 in., 10,726 ft. 8 in. and 21,156 ft. 6 in. B & S Class B pipe or 150 lb. De Lavaud, 18 tons c.i. fittings, 16,000 ft. 1½ in. and 5,000 ft. ¾ in. galvanized pipe, 40,000 lb. virgin pig lead, 880 ft. 36 in., 195 ft. 21 in., 215 ft. 18 in., 620 ft. 12 in., 3,950 ft. 10 in., 26,825 ft. 8 in. and 624 ft. 6 in. sewer pipe, etc. I. B. Smith, Titusville, engr. Noted Feb. 28.

O., Cincinnati—Apr. 24, by Director Pub. Serv., constructing reservoir for Eastern Hills, incl. 70,000 cu.yd. earth excav., 18,000 cu.yd. rein.-con., 6,000 cu.yd. mass concrete, 500 lin.ft. 8 in., 550 lin.ft. 24- to 30-in. iron pipe, 2,000 lin.ft. 8- to 12-in. vitr. pipe, 13,000 sq.yd. gunite, 20,000 sq.yd. sodding, etc. $720,000. J. A. Hiller, city engr.

O., Cleveland—Apr. 23, 60 in. c.i. mains in west side, Sect. 2. To exceed $150,000. A. V. Ruggles, City Hall, engr.

Ill., Danville—City taking bids ten 12 x 14 in. tainter gates, two 4 x 4 sluice gates, concrete dam and abutments with earth fill on one end and concrete roadway over top, involving 10,000 cu.yd. concrete, 7,000 cu.yd. excav., etc. $125,000. H. M. Ely, supt. Mead & Seastone, Journal Bldg., Madison, Wis., engrs.

Wis., Two Rivers—See "Sewers."

Kan., Junction City—Apr. 22, by T. M. Dorn, city clk., 3 deep wells, 24-in. diam., 200,000 gal. concrete reservoir, well houses, pipe and pipe line connections, 75 hp. oil engine unit switchboard and transformers, 3 vertical motor driven pumps. Burns & McDowell, 402 Interstate Bldg., Kansas City, Mo., engrs. Noted Apr. 3.

Neb., Hay Springs—Apr. 22, by R. Gustafson, city clk., waterworks system. $20,000. Henningson Eng. Co., Natl. Bank Bldg., Omaha, engrs. Noted Apr. 3.

Mo., Malden—Apr. 20, by Malden Compress Co., 100,000 gal. tank on 100 ft. tower, 1,500 ft. 8 in., 2,200 ft. 6 in. and 1,000 ft. 4 in. c.i. pipe, etc. Private plans.

Mo., St. Louis—May 13, by Bd. Pub. Serv., 208 City Hall, intake and engine pits at site of new waterworks at Howard Bend on Missouri River; adv. E. N.-R. Apr. 17.

Tex., Grenham — Apr. 30, by Mayor, 900,000 gal. purification plant, incl. basins, mixing tanks. $70,000. Municipal Eng. Co., Praetorian Bldg., Dallas, engr.

Tex., Mart—Taking bids complete waterworks, incl. 4 mi. main and earth dam. $50,000. Koch & Fowler, Central Bank Bldg., Dallas, engrs. Noted Jan. 31.

Ont., Toronto—May 13, by W. W. Hiltz, mayor, City Hall, furnishing 30 in. c.i. pipe for mains, Tender 43; 30 in. stop valves, Tender 44; one 25 m.g. 3 stage centrifugal pump with steam turbine, Tender 45. $60,000. R. C. Harris, city engr.

BIDS RECEIVED

N. Y., Binghamton—Bd. Contr. & Supply, mains in Court, Ely and Robinson Sts., from La Roche & Brown, Binghamton, $25,010; Vestal Ave., from C. W. Rose, 616 Chenango St., $12,417. Noted Apr. 10.

Md., Baltimore—Bd. Awards, Apr. 9, installing motor-operated pumps and c.i. piping in Pumping Station 1, from H. A. Kries & Sons Co., 6 West Lombard St., $9,956. Noted Apr. 3.

O., Cleveland—Bd. Comrs. Cuyahoga Co., 13,000 ft. 6 and 8 in. c.i. mains, Impvt. 550, from Amato Constr. Co., 5910 Kinsman Rd., $81,789. Noted Mar. 27.

Wis., Milwaukee—Water pipe and special castings, from U. S. Cast Iron Pipe & Fdry. Co., 122 South Michigan, Chicago, 3,205 tons plain straight pipe $54.50 per ton, 338 tons lugged straight pipe $74.50, 175 tons special castings $150; 3 chlorinating control machines for Riverside Pumping Station, from Wallace & Tiernan Co., 180 North Market St, Chicago, $5,855. Noted Apr. 3.

CONTRACTS AWARDED

Md., Baltimore—Bd. Awards, valves and water boxes for Water Dept., to W. P. Taylor Co., Ellicott Sq., Buffalo, N. Y., $30,750.

La., Ferriday — P. H. Corbett, mayor, waterworks system, pumphouse, to C. J. Montgomery, Kaplan; c.i. pipe and specials to Natl. Cast Iron Pipe Wks., Tarrant City, Birmingham, Ala.; valves, hydrants, boxes, etc., to Dixie Mill Supply Co., 901 Tchoupitoulas St., New Orleans; tank and tower to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, Ill.; deep well to Gray Artesian Well Co., Pensacola, Fla.

O., Cleveland—Bd. Comrs. Cuyahoga Co., 11,006 ft. 6, 8 and 12 in. c.i. mains in Lee Rd. and Lee Center Subdivision, Impvt. 553, to A. Marra Constr. Co., Ulmer Bdg., $49,381. Noted Apr. 10.

O., Cleveland—Cuyahoga Co., 11,000 ft. 6 and 8 in. c.i. mains, Biddulph Rd. Impvt. 49, to Hadded-Mall Co., Schofield Bldg., $15,050. Noted Apr. 3.

O., Canton—F. Bordner, Massillon Rd., 1 mi. 12 in. mains in 11th St. S. W. and Bellflower Ave., also 1 mi. 2 and 6 in. mains in West Manor addition, to Garaux Bros. Co., Gen. Del., Canton, $50,000.

O., Toledo—Dept. Pub. Welfare, Columbus, complete water system at Toledo State Hospital, to J. L. Skeldon Eng. Co., 725 Nicholas Bldg., about $18,000.

Minn., Minneapolis—Furnishing four 48-in., ten 30-in., twenty 24-in., ten 20-in. and ten 8-in. gate valves; one 6 x 6 in. and ten 5 x 5 in. sluice gates; six 14-in., nine 12-in., five 8-in. and five 4-in. mud valves, to Rensselaer Valve Co., 53 West Jackson Blvd., Chicago, and Chapman Valve Mfg. Co., 120 South 9th St., Minneapolis. Noted Feb. 28.

Minn., Rochester — Public Utility Bd., laying 7,100 lin.ft. mains (labor only), excavating and backfilling, to W. C. Fraser, 1836 Marshall Ave., St. Paul, $ 7,900; drilling 4 wells, 12-in. diam., 50 ft. deep, to A. Nelson, Rochester, $3,580. Will soon take bids pumping equipment, 3 motor driven pumps, concrete water tower. Noted Apr. 3.

Kan., Manhattan — Kansas Agricultural College, centrifugal pumps, to Fairbanks, Morse & Co., 900 South Wabash Ave., Chicago, air compressors, to Sullivan Mchy. Co., 124 South Michigan Ave., Chicago. Engrs. est. $15,000.

Tex., Cisco—For 16,500 ft. 14 in. c.i. pipe and miscellaneous fittings, etc., to U. S. Cast Iron Pipe Co., Scollard Bldg., Dallas, approximately $61 per ton. Noted Dec. 20.

Sewers

PROPOSED WORK

N. Y., Binghamton—Council and Bd. Pub. Wks. plan storm sewer in Beaver St. (part of Brandywine sewer). To exceed $25,000. B. Winsor, comr. Pub. Wks.

N. Y., Gloversville—Plans sanitary sewer in Bleecker St., will extend present sewer to West State St. $32,000. W. H. Marple, city clk.

N. Y., Jamestown — Bd. Pub. Welfare had plans prepared disposal plant, $175,000. H. Burdette, Cleveland, O., sanitary engr.

Sewers (Continued)

Pa., Meyerdale—See "Streets and Roads."

Pa., Williamsport—Plans election, $35,000 bonds, for sewers.

Ga., Elberton—See "Waterworks."

Ky., Winchester—Plans sewerage system. To exceed $25,000. Commissioner Pub. Property, engr.

O., Cleveland—W. E. Holland Co., engrs., 1620 Euclid Ave., takes bids this spring vitr. sewers and c.i. mains in Lorain Ave. and Rocky River Dr., for L. J. Ursem Realty Co., 9759 Lorain Ave. $40,000.

O., Columbus—See "Streets and Roads."

O., Youngstown — Voted $75,000 bonds, sanitary sewerage system and disposal works, consisting of setling tanks of 2 story type, and chlorination plant. I. Turner, city engr. Noted Jan. 17.

Mich., Detroit—Having plans prepared 356 ft. Swain Ave. outlet sewer, 341 ft. double barrel section and 15 ft. single cylinder 3 ft. barrel, from Jefferson Ave. to Harbor Line, Sewer Arm 3939, in Dexter Blvd. and Dorris Ave., 1,600 ft. 3 ft. 6 in. brick cylinder and 904 ft. 15-24 in. vitr. crock, Storm Sewer 3854, in Philip Ave., 2,370 ft. 12-18 in. vitr. crock pipe, Storm Sewer 3855, in Manistique Ave., 2,431 ft. 12-18 in. vitr. crock, Storm Sewer 4102, in Three Mile Dr., 5,894 ft. 12-20 in. vitr. crock, Sewer 4094, 4,920 ft. 12-20 in. vitr. crock, Sewer 4097, 6,384 ft. 12 in. to 2 ft. 6 in. x 3 ft. 9 in. egg shape, Sewer 4103, 1,019 ft. 12-24 in. vitr. pipe, Sewer 4104, 2,137 ft. 18-24 in. vitr. pipe. G. Jerome, city engr.

Mich., Royal Oak—Having plans prepared sewage disposal plant and pumping station, both 2 m.g. capacity. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engr.

Ill., Dallas City—Had preliminary plans prepared sanitary and storm sewerage system. $40,000. Caldwell Eng. Co., 502 Ayres Bldg., Jacksonville, engrs.

Tex., El Paso—Election Apr. 30, $100,000 bonds, sewer system improvements, laying additional mains, etc. Address Mayor Dudley.

Tex., Ft. Worth—Election Apr. 29, $28,000 for sanitary sewers. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Tex., Winters—Voted $50,000 bonds for sewers, etc. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs. Noted Mar. 13.

Mo., Cameron — Soon takes new bids sewers, disposal plant and 2 pumping stations, etc. $250,000. Former bids rejected. Black & Veatch, 701 Mutual Bldg., Kansas City, engrs. Noted Mar. 20.

Mo., St. Louis—Plans 12- to 66-in. vitr. clay and rein.-con. or brick sewers in district between Prairie, Finney, Dayton and 22nd Sts., Rocky Branch Relief 1, $580,000; outlet sewer in Sullivan and Vandeventer Sts. with connecting sewers in district between Ashland, Prairie, Easton and Taylor Sts., Rocky Branch Relief 2, $690,000. W. W. Horner, 300 City Hall, engr.

Calif., Coronado (Branch San Diego)—Plans to vote on $25,000 bonds for sewers, storm drains, etc. in Flats Dist. T. J. Allen, city mgr.

Calif., San Diego—See "Buildings."

Calif., San Francisco — City and San Francisco Co. having plans prepared Visitacion Valley sewer system, $25,000 or more; Sunset-Central Dist. sewer system, $165,000; College Hill tunnel sewer project, $300,000 or more. M. M. O'Shaughnessy, city engr.

Calif., San Juan Capistrano—San Juan Capistrano Sanitary Dist. had plans prepared 1,301 ft. 6 in., 7,000 ft. 8 in. and 1,745 ft. 10 in. sewer pipe, etc.

Calif., South San Francisco (Branch San Francisco)—Having plans prepared vitr. and concrete sewers. To exceed $25,000. G. A. Kneese, Courthouse, Redwood City, engr.

Calif., Tulare — Having plans prepared, "Elrod" process sewage treatment plant, storm and sanitary sewers. Elrod Eng. Co., Mills-Fraser Bldg., Santa Monica, engrs. Noted Jan. 3.

Ont., Toronto—Plans storm relief sewers in Cawthra Ave., $51,000, Queen St. E. and Neville Pk., $22,000, Jackman Ave., $26,000. R. C. Harris, city engr.

Ont., Welland—Making plans new sewerage system. $500,000. Willis-Chipman, Mail Bldg., Toronto, engrs.

BIDS DESIRED

N. Y., Brooklyn—Apr. 23, by E. Riegelmann, boro pres., Boro Hall, repairing sewers in Benson Ave. and Bay 7th St.; sewers in Bay Parkway, 7th Ave. east and west sides, 65th, Bay 34th, 73rd and 80th Sts., Ft. Hamilton Parkway between 76th and 77th Sts., and Ft. Hamilton Parkway between 84th and 85th Sts.

N. Y., Brooklyn—Apr. 23, by E. Riegelmann, boro pres., Boro Hall, Sect. 2C, modification and extension of biological plant, 26th Ward disposal works.

N. Y., Hamburg—May 6, by Bd. Village Trustees at office of R. F. Piper, village clk., 8 South Buffalo St., sanitary sewerage system, Imhoff tank, sludge drying bed, chlorination chamber and settling tank. G. C. Diehl, 577 Ellicott Sq., Buffalo, civil engr.; adv. E. N.-R. Apr. 17. Noted Apr. 10.

N. J., Sayreville—May 7, by F. Hartman, mayor, and Boro Council, Boro Hall, vitr. tile and c.i. outfall sewers, also c.i. force mains. W. S. Coulter, 114 Liberty St., New York City, consult. engr.; adv. E. N.-R. Apr. 17. Noted Apr. 10.

Pa., Butler—May 6, by C. G. Chase, clk. City Council, sewers in Projects 1, 2 and 3. F. M. Harper, city engr. P. S. Wickerham, consult. engr.; adv. E. N.-R. Apr. 17.

Pa., Pottstown—Apr. 26, at office of Secretary Boro Council, 47,000 ft. 4- to 30-in. vitr. sanitary sewers. Gannett, Seelye & Fleming, Engineers Inc., Harrisburg, engrs.; adv. E. N.-R. Apr. 17.

W. Va., Clarksburg—See "Streets and Roads."

Fla., Cocoa—See "Waterworks."

O., Cleveland—Apr. 24, sewers in Berdelle Ave. S. E., Harvard Ave. S. E., Kazimier Ave. S. E., Kensington Rd. S. W., Krakow Ave. S. E., Loretta Ave. S. W., Marcella Rd. N. E., Rahbun Ave. S. E., South Hills Blvd., Thrush Ave. S. W., Wheelock Rd. N. E., East 68th and East 108th Sts. R. Hoffman, City Hall, engr.

Wis., Two Rivers — Apr. 30, by J. Doleysh, city clk., 5,292 lin.ft. 8- to 12-in. vitr. sewers and 7,090 lin.ft. 4- and 6-in. c.i. water mains in various streets. D. H. Ames, City Hall, engr.

Neb., Fremont—Apr. 23, 38,800 ft. 27 in. rein.-con. and 3,100 ft. 24 in. vitr. clay sewers. $69,000. L. M. Roessler, city engr.

Neb., Omaha—Apr. 25, by H. Beal. city engr., City Hall, 6,307 ft. rein.-con. sewers, etc., in Dist. 854. Noted Feb. 21.

Ark., Rogers—See "Streets and Roads."

Calif., Santa Ana—May 6, by L. J. Wester, secy. La Mabra Sanitary Dist. of Orange Co., sewage collection system and treatment works, incl. 1,625 lin.ft. 15 in., 3,093 lin.ft. 12 in., 5,857 lin.ft. 10 in. and 2,238 lin.ft. 8 in. sewer pipe, laid; 42 manholes; 165 wyes; one sewage treatment plant complete, "Elrod" process. Elrod Eng. Co., Mills Fraser Bldg., Santa Monica, consult. engrs.

BIDS RECEIVED

N. Y., New York — H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Edison and Hobart Aves., from McDonald & Wilson Co., $31,160 and $3,225 respectively; Sedgwick Ave., from Sunrise Constr. Co., Inc., $7,679; East 194th St., from C. E. Farrell Contg. Co., 1981 Pilgrim Ave., $8,110. Noted Apr. 3.

O., Cleveland—Bd. Comrs. Cuyahoga Co., 22,000 ft., 8- to 48-in. vitr. sewer in Miles Rd. Impvt. 501, from Amato Constr. Co., 5910 Kinsman Rd., $130,712. Noted Mar. 27.

Mich., Detroit—Dept. Pub. Wks., 5,294 ft. Six Mile Rd. Sewer Sect. 9, from G. R. Cooke Co., 1260 Penobscot Bldg., $122,147; 5,468 ft. Seven Mile Rd. Sewer, Sect. 9, from W. Blanck & Co., 827 Ford Bldg., $128,246. Noted Mar. 27.

Ill., Chicago—South Park Comrs., sewers on South Park Ave., from F. D. Christopher, c/o South Park Comrs., $63,772.

Ill., Harvey—Bd. Local Impvt., Mar. 17, 36,000 ft. 10-18 in. sewers in following: Special Assessment Dists. 168 and 169, from Kraay & Livers, Harvey. $21,530 and $16,797; Dist. 170 from Christensen Bros., Urbana, $36,157. Noted Mar. 13.

Calif., Alhambra — Sewer system, incl. 1,276 ft. 12 in. and 42,800 ft. 8 in. vitr. pipe, 1,430 wyes, etc., from Culjak & Bebek, 182½ North Brannick St., Los Angeles, $96,510. Noted Apr. 3.

CONTRACTS AWARDED

O., Cleveland—Cuyahoga Co., 23,000 ft. 8- to 42-in. vitr. sewers, in Biddulph Rd. Impvt. 50, to Hadded-Mall Co., Schofield Bldg., $116,461. Noted Apr. 3.

O., New Philadelphia — Director Pub. Serv. sanitary sewer together with laterals in Bway. and High St., to C W. Mauer, Dover, $30,419. Engrs. est. $35,000. Noted Mar. 27.

Mich., Detroit—Dept. Pub. Wks. vitr. crock sewers, Lateral 4080 to T. Po[illegible]elli, Wolverine Hotel, $14,969; Laterals 4084, 4091, and 4092 to Western Constr. Co., 1208 Ford Bldg., $3,953, $3,426 and $3,375 respectively; Laterals 4093 and 40[illegible] to A. Rossi, 1337 Brady St., $369 and $3,248 respectively.

Ill., Chicago—Sanitary Dist. of Chicago, 910 South Michigan Ave., equipment for North Side Sewage Treatment Wks. Div. E, meters to General Electric Co., 230 South Clark St.; Div. B, thickeners to Dorr Co., Inc., 38 South Dearborn St. Noted Mar. 20.

Wis., Beloit—Sanitary sewers in various streets, to United States Constr. Co., Iowa Falls, Ia., $48,452. Noted Mar. 27.

Wis., Janesville—Will lay 17,771 lin.ft. 10- to 30-in. storm sewer in various streets, by day labor. C. V. Kerch, city engr.

Ia., Marshalltown — Sanitary sewers, 50,038 ft. 6- to 10-in. pipe, 70 manholes, 36 lampholes, etc., to E. L. Royer Constr. Co., 1322 32nd St., Des Moines, $42,007. Noted Mar. 27.

Ia., Mt. Pleasant — See "Streets and Roads."

Neb., Haigler — Constructing sewers to C. L. Hansen, Charles City, Ia., $35,910.

Tex., Floydada—Disposal plant, mains, etc., to Sherman Machine & Iron Wks., 18-32 East Main St., Oklahoma City, $49,577. Noted Apr. 3.

Calif., Pasadena—Constructing 6,500 lin. ft. 22 in. vitr. sewer in Arroyo Blvd., to C. E. Green, Western Mutual Life Bldg., Los Angeles, $33,065. Noted Apr. 10.

Ont., Long Branch — Teobicoke Twp. (Islington) laying 80,000 ft. 8-48 in. vitr. pipe, here, to Dufferin Constr. Co., 210 Victoria St., Toronto, $98,000; furnishing pipe to Ontario Sewer Pipe & Clay Products Ltd., Mimico.

Waste Disposal

PROPOSED WORK

Ky., Winchester—Comnr. Pub. Property plans garbage incinerator for 20,000 population.

Minn., Mankato—City plans incinerator. $25,000. F. W. Bates, city clk.

Calif., Los Angeles—Plans to vote on $600,000 bonds, incinerator. J. A. Griffin, city engr.

BIDS DESIRED

Pa., Munhall—May 20, by Boro. Council, garbage and refuse destructor; adv. E. N.-R. Apr. 17.

O., Steubenville—Apr. 21, by R. P. Price, dir. Pub. Serv., 70 ton 24 hr. refuse and garbage incinerator. $23,800. B. M. Smith, clk.

BIDS RECEIVED

N. Y., East Chester (Greycourt P. O.)—E. A. Mathews, clk. Town Bd., Village Hall, Tuckahoe, incinerator plant, chimney and building, on White Plains Rd., here, building from M. Miller Constr. Corp., 709 6th Ave., New York, $68,000; equipment from Decarie Incinerator Co., New York. Noted Mar. 20.

Bridges

PROPOSED WORK

Fla., Palatka—Putnam Co. having plans prepared concrete memorial Bridge over St. Johns River, here. $500.000. D. B. Luten, 1056 Lemcke Ave., Indianapolis, Ind., engr. Noted Dec. 20.

La., New Orleans—Louisville & Nashville R.R., 10th St. and Bway., Louisville, Ky., plans one 282 ft. and two 272 ft. spans, steel truss railroad bridge (Chef Menteur Bridge), near here. $1,500,000. W. H. Courtenay, ch. engr.

La., Shreveport—See "Unclassified."

O., Sandyville — Tuscarawas Co., Court House, (New Philadelphia), plans steel and concrete bridge over Sandy Creek, here. $25,000. R. A. Stingel, Court House, New Philadelphia, engr.

Washington—Grant Co. (Ephrata) and Kittitas Co. (Ellensburg) plan steel toll bridge 1,700 ft. over Columbia River at Vantage on North Central Highway. $350,000-$500,000.

Ont., Chatham — Chatham and Dover Twps. having plans prepared concrete and concrete and steel bridges on township roads. $35,000. W. G. McGeorge, Chatham, engr.

BIDS DESIRED

N. Y., Buffalo—Taking bids 100 ft. 2 steel plate girder bridge, rein.-con. substructure, Stevenson St. $60,000. C. E.

Bridges (Continued)

Babcock, Municipal Bldg., engr. Noted Mar. 20.

New Jersey—May 7, by Bd. Freeholders Monmouth Co. (Freehold), 200 ft. concrete enclosed steel span, 26.4 ft. roadway, 11 ft. footpaths, over Deal Lake between Wanamassa and Asbury Park. $100,000. G. K. Allen, Jr., 60 Broad St., Red Bank, engr.

W. Va., Williamson—Apr. 29, by Mingo Co., Bridge 106, two 65 ft. rein.-con. arches across Pigeon Creek, at Burch; Bridge 108, 40 ft. rein.-con. deck girder, masonry abutments, across Rockhouse Fork, near Burch; Bridge 109, 50 ft. rein.-con. through girder, masonry abutments across Rockhouse Fork, near Puritan; Bridge 110, 50 ft. rein.-con. through girder, masonry abutments, across Rockhouse Fork. L. G. Bray, pres.

Fla., Jacksonville—Apr. 21, by Harrington, Howard & Ash, engrs., Orear Leslie Bldg., Kansas City, Mo., 2 rein.-con. bridges, 1,600 ft. long with steel draw spans, for city. $450,000. Noted Feb. 14.

Ind., Indianapolis—May 5, by Bd. Pub. Wks., constructing 7 span bridge over White River at Kentucky Ave. and 5 span bridge over White River at Oliver Ave.; adv. E. N.-R. Apr. 17.

Ind., Petersburg — Apr. 25, by Comrs. Pike Co., several small highway bridges in Logan, Patoka and Clay Twps. To exceed $25,000.

South Dakota—See "Streets and Roads."

Missouri—Apr. 22, by State Hy. Dept., Jefferson City, one 180 ft. and two 80 ft. steel truss spans, 2 rein.-con. piers, etc., over Lamine River, Cooper Co. B. H. Piepmeier, state highway engr.

Tex., Baird—See "Streets and Roads."

Tex., Memphis—See "Streets and Roads."

Tex., San Angelo — Apr. 29, by J. T. Mathison, judge Tom Green Co., 340 ft. bridge; 120 ft. steel span, rein.-con. girder approaches, pile bents, masonry substructure, concrete piers, over Middle Concho River 12 mi. west of here. T. J. Kelley, co. engr. Noted Apr. 10.

Wash., Chehalis — See "Streets and Roads."

Calif., Los Angeles—Apr. 28, by Supervs. Los Angeles Co., bridge over Rio Hondo on Telegraph-Anaheim Rd., incl. eight 60 ft. wooden trusses, creosoted piles, wooden floor beams, 27 ft. roadway, (piles and floor beams to be furnished by county). $40,000.

BIDS RECEIVED

Delaware—See "Streets and Roads."

Tennessee — Dept. Hys. & Pub. Wks., Nashville, four 40 ft. rein.-con. span bridge over Sulphur Fork and one 40 ft. span over Wartrace Creek, State Aid Project 158, Robinson Co., from Moore Constr. Co., Hopkinsville, Ky., $22,922; six 40 ft. rein.-con. spans at Sta. 96-30, Federal Aid Project 82, Anderson Co., from Knoxville Roofing & Paving Co., Knoxville, $25,753. Noted Mar. 27.

O., Akron — City, steel and concrete bridge, Belmont Ave., from Independent Bridge Co., May Bldg., Pittsburgh, Pa., $104,420, engrs. est. $110,000.

Mich., Ludington—State Hy. Dept., Lansing, two 75 ft. span through concrete girder bridge, here, Mason Co., from Donalds & Hull, Dryden, $46,230.

Kan., Iola—Allen Co., 2 bridges incl. 140 ft. arch ½ mi. from Humbolt, Federal Aid Project 168, from Fry Bros., Iola, $29,402 and $3,819. Noted Mar. 20.

Neb., Broadwater—R. L. Cochran, state engr., Lincoln, seven 100 ft. concrete and steel truss spans over Platte River, Federal Aid Project 79C, south of here, from Western Bridge & Constr. Co., 748 Peters Trust Bldg., Omaha, $73,300. Engrs. est. $75,000.

B. C., Vancouver—City Council, reconstructing portion of Connaught Bridge, 720 ft. long, 56 ft. wide, steel with creosoted timber deck and bitulithic pavement, or alternate of rein.-con., from P. P. Brown, London Bldg., concrete $151,000 and $152,000; from Canadian Bridge Co., Hamilton, Ont., steel $138,138. Noted Mar. 13.

CONTRACTS AWARDED

Connecticut—State Hy. Comn., Hartford, 2 rein.-con. slabs in Canaan, to J. DeMichiel & Bro., 56 High St., Torrington, $14,692; rein.-con. T-beam bridge and 7-in. trap rock macadam approaches, in Easton, to Leverty & Hurley, 1014 Wood Ave., Bridgeport, $18,312. Noted Apr. 3.

North Carolina — See "Streets and Roads."

North Carolina—State Hy. Comn., Raleigh, **(S. P. means State Project)** rein.-con. bridges and culverts on S. P. 156, Martin Co., to J. A. Peterson, Montgomery, Ala., $65,690, on S. P. 721, Caldwell Co., to Harris & Spaulding, Lenoir, $41,162, on S. P. 56-B, Moore Co., to E. A. Wood & Co., Andrews, $42,500; rein.-con. bridge over Deep River on S. P. 404-C, Chatham Co., to Atlantic Bridge Co., Roanoke, Va., $68,389, bridge over Pee Dee River, S. P. 610, Anson and Richmond Counties, to Hardaway Contg. Co., 909 Elizabeth Ave., Charlotte, $291,500. Noted Apr. 10.

Alabama—State Hy. Dept., Montgomery, bridge on Federal Aid Project 136, Clay Co., to Nixon & Phillips, Lineville, $57,631; on Federal Aid Project 129, Sect. B, Henry Co., to J. K. and J. B. Miller, Baronton, Ga., $25,144. Noted Oct. 25.

Tennessee—Dept. Hys. & Pub. Wks., Nashville, one 40 ft. concrete span over Wartrace Creek, and four 40 ft. spans over Sulphur Fork Creek, Robertson Co., to Moore Constr. Co., Hopkinsville, Ky., $22,921; six 40 ft. spans, 20 ft. wide, over Bull Run River, at Sta. 96 plus 30, Federal Aid Project 82, Anderson Co., to Knoxville Roofing & Paving Co., Knoxville, $25,753. Noted Apr. 17.

O., Akron — Summit Co., 170 ft. steel girder bridge, 44 ft., over canal on Kenmore-Mogadore Rd., in Kenmore, also 66 ft. steel bridge, 22 ft., over Tinklers Creek on Cleveland-East Liverpool Rd. north of Twinsburg, to H. Gilbert, 19 North Martha Ave., $27,284 and $23,225 respectively, engrs. est. $27,980 and $30,000 respectively; concrete bridge over Furnace Run on Richfield-Hudson Rd., west of Richfield, to A. F. Wible, 789 Chalker St., $29,762, engrs. est. $32,180; 170 ft. concrete arch bridge, 26 ft., over Tinklers Creek on Cleveland-East Liverpool Rd., north of Twinsburg, to H. O. Putnam, Barberton, $31,100, engrs. est. $34,150.

O., Youngstown — Director Pub. Serv., steel superstructure for Belmont Ave. bridge, to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa., $104,798. Noted Mar. 13.

Neb., Grand Island—Hall Co., 4 concrete and steel bridges on Hastings-Grand Island Rd., Federal Aid Project 215, to Allied Constr. Co., 1803 Douglas St., Omaha, $118,880. Noted Mar. 27.

South Dakota—State Hy. Dept., Pierre, 2 bridges, total length 64 ft., on Federal Aid Project 167 A, Bon Homme Co., and 3 bridges, 106 ft., on Federal Aid Project 162, Haakon Co., to Federal Bridge Co., 1002 B. T. Bldg., Des Moines, Ia., $7,224 and $12,510 respectively; 5 bridges, 204 ft., on Federal Aid Project 95 A, Faulk Co., 120 ft. viaduct on Federal Aid Project 50 B, Sanborn Co., and 78 ft. viaduct on Federal Aid Project 171 A, Roberts Co., to Schreiber Eng. Co., Watertown, $22,076, $9,635 and $7,929 respectively; 30 ft. viaduct on Federal Aid Project 169, Pennington Co., to Concrete Eng. Co., Rapid City, $3,025; 2 bridges, 100 ft., on Federal Aid Project 145, Beadle Co., to Jahnig & Davis, Britton, $9,665. Noted Mar. 20.

Ark., Pine Bluff—Jefferson Co. 4 bridges over Plum Bayou on Plum Bayou Rd., one 100 ft. and three 40 ft. spans, rein.-con. and standard steel, to Luten Bridge Co., Mercantile Bldg., Knoxville, Tenn. $20,000. Noted Mar. 20.

Ore., Portland—Comrs. Multnomah Co., Court House, Sellwood Bridge, 1,880 ft., 5 spans and approaches, concrete substructure, steel and concrete superstructure, over Willamette River, to Union Bridge Co., Porter Bldg., $377,500, engrs. est. $350,000; Ross Island Bridge, 3,723 ft., 6 arch spans, concrete, over Willamette River, to Parker & Banfield, 62 East 3rd St., N., $1 960,316, engrs. est. $1,500,000; Burnside Bridge, 2,307 ft., 3 spans and approaches, steel superstructure, over Willamette River, to J. A. Tillman & Co., Seaside, $2,820,000, engrs. est. $3,000,000. Noted Mar. 6.

Dams

PROPOSED WORK

New York—See "Unclassified."

Ont., Almonte—Almonte Electric Light Comn. having plans prepared and soon takes bids concrete dam, here. $30,000. C. Barber & Sons, Meaford, engrs.

BIDS DESIRED

Tex., Mart—See "Waterworks."

CONTRACTS AWARDED

B. C., Powell River—Powell River Co., raising concrete dam and constructing pile wharf and sheds, to Armstrong, Morrison Co. Ltd., 543 Granville St., Vancouver, $350,000.

Railways

CONTRACTS AWARDED

Washington — Bloedel-Donovan Lumber Co., Bellingham, constructing 17 mi. logging railroad on Olympic Peninsula between Clallam Bay and Beaver Bench, incl. 150 ft. and 100 ft. truss bridges, and one 280 ft. tunnel, to P. Welch, Old Natl. Bank Bldg., Spokane. Noted Apr. 10.

California—See "Industrial Works under Fresno."

British Columbia—Canadian Natl. Ry., Windsor Sta., Montreal, Que., plans railroad from Derrholme at mile 58.3 on Barly Sound line to Cowichan Bay, 8 mi. $358,000, extending Barly Sound main line from mile 74 to 100, $348,300.

Quebec — Canadian Natl. Ry., Windsor St., Montreal, 6 mi. railroad from Donnacona to point on Natl. Transportation R.R., to Federal Constr. Co., 526 Victoria St., Montreal, $280,400.

Excavation, Drainage, Irrigation

PROPOSED WORK

Ia., Red Oak — Montgomery Co. (Red Oak) and Page Co. (Clarinda) had plans prepared joint drainage ditch from Federal road south of Villisca to Primary Rd. 18 at county line intersection west of Nodaway River. $23,000.

Tex., Wharton — Wharton Co. election Apr. 26, $600,000 bonds, drainage ditches, levees, etc. B. M. Griffith, Wharton, temporary engr.

Wash., Covington—Western Land & Irrigation Co. plans to irrigate 200 acres, $15,000, and $5,760 acres $50,000, involving 5 mi. main ditch and small electric power plant to develop 100 hp., near here.

Calif., Colusa—Jimeno Ranch, c/o G. Farnsworth, Colusa, had plans prepared 11,000 ft. canals, 5 ft. wide; 4,750 ft. of 36 in. pre-cast rein.-con. pipe line; one 14 ft., 13 sec.ft. capacity and one 10 in. 7 sec.ft. capacity pumping plants, each with maximum lift of about 33 ft., operated by one 100 hp. and one 50 hp. electric motors. $75,000. F. H. Tibbetts, Alaska Commercial Bldg., San Francisco, consult. engr.

Calif., Redlands—Moreno Mutual Water Co. having plans prepared diverting additional water from Santa Ana River through Bear Valley-Moreno Pipe Line to irrigate 5,000 acres, incl. dam to store 10,000 acre ft., also additional canals and laterals. Private plans.

Calif., Sacramento — Recl. Dist. 1660, California Fruit Bldg., had plans prepared double barrel concrete conduit under levee 3 x 5 ft. diam., 150 to 250 ft. long; furnishing and installing pumping plant, incl. six 24 in. vertical centrifugal double suction pumps, six 150 hp. motors, gate valves and pneumatic pressure system for operating valves. Pumping plant to discharge into concrete conduit. J. Crowley, dist. consult. engr.

BIDS DESIRED

N. Y., Buffalo—Apr. 18, by Comn. Pub. Wks., dredging and refilling trench across City Ship Canal at Michigan St., also trench across Buffalo River, installing 16 in. pipe in above. $25,000. B. J. Boyle, Municipal Bldg., comr.

N. Y., Buffalo—Apr. 22, by Commissioner Pub. Wks., Municipal Bldg., dredging Buffalo Inner Harbor to completed contract depth for maintenance of channel to June 30, 1925. To exceed $25,000. C. E. P. Babcock, Municipal Bldg., engr.

CONTRACTS AWARDED

New York—J. A. Delaney, comr. Docks, Pier "A" foot of Battery Pl., New York City, dredging channel, constructing dikes, and placing fill on west island in connection with improvement of Jamaica Bay, Queens Boro, Contrs. 1818 B and C, to W. H. Geoghegan Realty Co. Noted Mar. 6.

Ia., Audubon—Audubon Co., 899,503 cu. yd. excav. D. D. 4, to J. H. Boyce & Sons, Omaha, Neb., $0.07 per cu.yd. Est. cost $108,503.

Ia., Emmetsburg — Palo Alto Co. D. D. 147, furnishing 6,100 lin.ft. 20- to 36-in. tile for Sect. 1 and 7,900 lin.ft. of 8- to 24-in. tile for Sect. 2, to Graettinger Tile Wks., Graettinger, $10,547; labor, to Ceylon Cement Tile Co., Ceylon, Ia., $4,555. Noted Mar. 20.

Miss., Vicksburg — Warren Co. Levee Dist. dredging Muddy Bayou and digging channel 1 mi., etc., to McWilliams Co.,

Excavation, Drainage, Irrigation (Continued)

Exch. Bldg., Memphis, Tenn., $0.30 per cu.yd. Noted Mar. 27.

Ark., Jonesboro—Dist. 27, Craighead Co. one 7 mi. and one 2 mi. laterals in north east part of county, east of Brookland, and will empty into St. Francis River at Clauch, to A. V. Wills & Sons, Title Guaranty Bldg., St. Louis, Mo. Engrs. est. $40,000. Noted Mar. 27.

Ark., Pine Bluff—Consart D. D., 411,000 cu.yd. main canal, 270,000 cu.yd. lateral ditches, 173,000 cu.yd. new canal and 12.6 mi. cleaning deep bayou, to McWilliams Dredging Co., 1537 McCormick Bldg., Chicago, $137,000. Noted Mar. 20.

Tex., Austin—University of Texas, excavation for concrete stadium, to List Gifford Co., North Texas Bldg., Dallas, $25,000. Noted Jan. 31 under "Unclassified.'

Ore., Bend — Jordan Valley Irrigation Dist., ditches, laterals and small headworks, to Morrison-Knudson, Railroad and Reclamation Aves., Boise, Idaho, $360,000. Engrs. est. $379,000.

Streets and Roads

PROPOSED WORK

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, received no bids Apr. 9, 75,000 gal. asphaltic oil for hot application upon streets to be designated in amounts of not less than 1,000 gal. at any time. Noted Apr. 3.

N. Y., Mohawk—Plans new pavements on various streets. $50,000-$60,000. A. J. Budlong, village pres.

N. Y., Norwich—Making plans paving Division and other streets. To exceed $25,000. E. F. Musson, city engr.

N. Y., St. Johnsville—Plans paving various streets. $60,000-$75,000. Address F. Waltamath, c/o Municipal Comn.

N. Y., Seneca Falls—Plans 1.2 mi. concrete and brick pavement. $70,032. E. P. Byrne, chn. Bd. Village Trustees.

N. J., New Brunswick — Middlesex Co. plans concrete paving 4 mi. Old Bridge-Mattawan Rd., $200,000, and 1 mi. road from Marshall school to Bound Brook, 18 ft. M. F. Larson, New Brunswick, engr.

N. J., Pennington—City plans concrete paving 1 mi. Main St., 35 ft. 6 in. $95,000. H. F. Harris, Court House, Trenton, engr. County and State aid.

Pa., Meyersdale — Boro. Council takes bids about May 1, paving 4,000 ft. Large St., incl. sewers and 1,500 ft. concrete and stone retaining wall. L. H. Rowe, boro. engr.

Tennessee—Tennessee Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading, etc., 5.52 mi. Lenoir City, Knox Co. Rd., 18 ft., Loudon Co. J. G. Creveling, highway comr.

Ky., Hazard—Perry Co. soon takes bids 5 mi. Kentenia Highway. $100,000.

Ky., Whitesburg—City soon takes bids constructing streets. $25,000.

O., New Philadelphia—Tuscarawas Co. takes bids in 30 days, improving ½ mi. Baltic St., 40 ft., in Sugar Creek, brick, $30,000; 2 mi. Dover-New Cumberland Rd., 20 ft., in Fairfield Twp., macadam, $50,000. C. A. Stingel, New Philadelphia, engr.

O., Steubenville—Plans paving Market St. $81,913. C. N. Teaff, Steubenville, engr.

O., Warren—Trumbull Co. plans ¾ mi. Austintown-Warren Rd., 16 ft., Weathersford Twp., penetrated bituminous macadam, $28,000; 3.3 mi. Niles-Warren River Rd., 18 ft., rein.-con. or brick on concrete, $125,000.

O., Warren — Trumbull Co. soon takes bids reconstructing 2.9 mi. Niles-Ashtabula-Inter-County Highway 150, present 10 ft. concrete to be widened to 16 ft. and covered with asphalt top. $68,000-$75,000. 3.3 mi. Warren-Sharon Intercounty Highway, present 13 ft. 2 in. brick to be widened to 18 ft. with asphalt top. $89,000. 6.3 mi. Warren-Salem Intercounty Highway, penetrated bituminous top. $140,000; paving about 1 mi. Perkins-Jones Rd., 18 ft., $31,000, and 1.2 mi. Austintown-Warren Rd., 18 ft., $50,000, rein.-con. or brick on concrete.

O., Youngstown — Mahoning Co. soon takes bids resurfacing and widening 1 mi. Lincoln Highway, from 16 to 20 ft. $40 000.

Michigan — State Hy. Dept., Lansing, plans grading and surfacing 1.5 mi. State Trunk Line Rd. 21-23, Shiawassee Co., concrete, sheet asphalt or bituminous concrete. G. C. Dillman, ch. engr.

Michigan—By State Hy. Dept., Lansing, takes bids about May 15, grading and surfacing 10.702 mi. State Trunk Line Rd. 28-8, B, Houghton Co., 105,312 cu.yd. excav., 29,235 tons stamp sand, 10,046 sq.yd. gravel, also 2,057 mi. State Trunk Line Rd. 28-11, Ontonagon Co., 5,618 tons stamp sand, and 19,306 sq.yd. gravel. G. C. Dillman, ch. engr.

Mich., Detroit—Plans paving streets with 3½ in. sheet asphalt, 2,300 sq.yd. St. Jean Ave. $13,800, 11,500 sq.yd. Thomas Ave. $68,470, 2,400 sq.yd. Sterritt Ave. $13,920, 12,000 sq.yd. Warren Ave. E. Sect. 1, $71,400, 35,000 sq.yd. Warren Ave. E. Sect. 2, $207,700, 40,000 sq.yd. Warren Ave. E. Sect. 3, $237,300, 15,500 sq.yd. American Ave. $91,310, 18,000 sq.yd. LaBelle Ave. $105,560, 1,600 sq.yd. Barry Ave. $4,850, paving 8 alleys with one course 6 in. concrete, $28,588. G. Jerome, city engr.

Ill., Champaign—Soon takes bids grading and concrete surfacing, concrete curb and gutter, Washington and Poplar Sts. $57,158. F. C. Lohman, City Hall, engr.

Ill., Galesburg — Plans paving, curbing and guttering South Cedar, East North and West North Sts., brick, asphalt filler, on concrete, $71,553. A. L. Richey, City Hall, engr.

Ill., Granite City—Soon takes bids grading and surfacing with brick on concrete or rein.-con., 17,500 ft. Washington Ave. and 24th St. $170,000. W. W. Kerch, 1st Natl. Bank Bldg., engr.

Kan., Coffeyville—City soon takes bids grading and surfacing with vertical fibre brick on 5-in. concrete, 3,600 ft. Elm, Beach, Washita, Roosevelt, West 9th, East 11th and 15th St. and 2 alleys, 30 ft. $35,000. C. Potteck, city clk.

Kan., Phillipsburg — Phillips Co. soon takes bids grading, etc., 8.86 mi. Federal Aid Project 204, 18 ft., incl. one 20 ft. and one 30 ft. bridge; 5.25 mi. Federal Aid Project 210, 20 ft., incl. one 30 ft. and one 90 ft. bridge. W. E. Freeman, co. engr.

Mo., Fornfelt—Takes bids in about 60 days grading and gravel surfacing 3.5 mi. general streets, 16 ft., $25,000.

Mo., Kirksville—Soon takes bids curbing and paving 12 blocks, rein.-con. B. Crabtree, Cameron, engr.

Mo., Odessa—Soon takes bids grading, concrete curbing, guttering and surfacing 3,200 ft. streets in down-town district, concrete or asphaltic concrete. $30,000.

Mo., St. Louis — Bd. Pub. Serv., 208 City Hall, soon takes bids paving 8,745 sq.yd. St. Louis Ave., willite on concrete, $50,000; concrete curbing, guttering and paving 14,465 sq.yd. Madison St., asphalt on concrete, $75,000; concrete sidewalks in Forest, Carondelet, Gravois and Benton Parks, $13,000. W. W. Horner, city engr.

Tex., Rock Springs—Edwards Co. making plans grading, hard surfacing and bridging 48 mi. road from point 4 mi. west of here to State Highway 30 in. Valverde Co., 18 ft. $404,260. W. E. Simpson Co., Natl. Bank Commerce Bldg., San Antonio, engrs.

Okla., Tahlequah — Plans grading and paving 8 blocks Shawnee and Muskogee Sts., 8,800 sq.yd. concrete, 4,900 lin.ft. curbing, 3,100 cu.yd. earth and 300 cu.yd. rock excav. $36,000. Benham Eng. Co., Gumbel Bldg., Kansas City, Mo., engrs.

Nevada—State Highway Comn., Carson City, having plans prepared gravel surfacing 18 mi. highway from Campbell to railroad section, Lander Co.; 10 mi. road from Eureka to county line, Eureka Co. G. W. Borden, state highway engr.

Oregon—State Hy. Dept., Portland, rejected bids improving Cove Island City Highway, Union Co. $276,000. Will revise and readvertise.

Calif., Monterey—Plans to vote on $27,000 bonds, paving portion Lighthouse Ave. H. D. Severance, city engr.

Calif., San Diego—See "Buildings."

Ont., Kitchener—Waterloo Co. plans 18,000 sq.yd. concrete pavements on county roads. $60,000. L. S. Lichty, County Bldg., engr.

Ont., Toronto—York Twp. plans concrete sidewalks with concrete curb on 2½ to 3 mi. Regent St., Atlas, Mulberry and Locusa Aves., $25,000. F. B. Goldike, 40 Jarvis St., Toronto, engr.

Ont., Toronto—Having plans prepared 10 mi. 4 ft. 6 in. to 8 ft. concrete sidewalks on following: Davenport Rd. $1,981, Anderson Ave. $14,024, Colen Ave. $14,450, Duplex Ave. $3,284, Eastbaume Ave. $14,116, Hillsdale Ave. $14,002, Oriole Parkway $7,181, Clendenan Ave. $3,059, St. Germain Ave. $3,564, Boulton Dr. $11,571, Cottingham Rd. $4 349, Glen Edyth Dr. $10,625, Roycraft Dr. $7,652; 75,000 sq.yd. asphalt pavements on concrete on following: Gloucester St. $24,918, Wabash Ave. $31,696, Dundas St. $47,806, Simpson Ave. $15,733, Orchard Park Blvd. $14,197, Fleet St. $263,715, Davenport Rd., Cottingham Rd. $12,387, Roycraft Dr., Glen Edyth Dr. $31,087, Boulton Dr. $30,708; grading Glen Edyth Dr. $8,312, Cottingham Rd. $2,341, Boulton Dr. $32,401, Roycroft Dr. $32,370, and lane between Delaware and Concord Aves. $12,250; concrete pavement on lane north of College St. $27,028. R. C. Harris, city engr.

Ont., Willowdale — North York Twp., plans gravel and macadam road work, $40,000. H. D. Goode, twp. clk.

BIDS DESIRED

Massachusetts—Apr. 22, by W. F. Williams, comr. Dept. Pub. Wks., Div. Highways, Boston, paving 27,465 ft. road 20 ft., bituminous macadam, in Chelmsford $250,000; reconstructing 14,308 ft. concrete road, 20 ft., in Lowell and Chelmsford $200,000.

Mass., North Adams—Apr. 18, by J. L. Temple, comr. Pub. Wks., paving West Main St., 12,500 cu.yd. excav., 4,000 cu.yd concrete surfacing, 2,700 sq.yd. concrete sidewalks, etc. $60,000.

N. Y., Brooklyn—Apr. 23, by E. Riegelmann, boro pres., Boro Hall, asphalt paving Eldert Lane, Hubbard Pl., Ave. M, Quentin Rd., Bay 37th, East 7th, 56th, 78th, and 81st Sts.; grading, curbing and flagging East 7th and 81st Sts.; curbing and asphalt paving East 9th St.; recurbing and asphalt paving East 35th St.; grading Shepherd Ave.; curbing and flagging Shepherd Ave.

N. Y., Fulton—May 2, by Common Council, at office of M. C. Baker, city clk., asphaltic concrete paving, etc., West 4th and 5th Sts. H. S. Andrews, city engr.; adv. E. N.-R. Apr. 17.

N. Y., St. George—Apr. 22, by J. A. Lynch, pres. Richmond Boro, Boro Hall. concrete curb and gutter on south side of Lincoln Ave.; concrete and dish gutters where not already done on both sides of Ocean Ave.; concrete curb with steel guard, etc. where not already done on Maryland Ave.; also grading Bay Terrace.

N. Y., Watertown — Apr. 28. concrete curbing, guttering and paving various streets. To exceed $25,000. P. B. Sutton, city engr. Noted Feb. 28.

N. J., Freehold—Apr. 23, by Monmouth Co., replacing gravel top and constructing slag base on 3.67 mi. Allentown-Imlaystown Rd. G. K. Allen, Jr., 60 Broad St., Red Bank, engr.

N. J., Newton—See "Material and Equipment."

Pa., Ebensburg — Apr. 25, by Comrs. Cambria Co., 3,463 ft. rein.-con. highway on Ebensburg-Carrolltown Rd., Cambria Twp. H. F. Dorr, Trust Bldg., engr.

Pa., Ebensburg—Apr. 25, by Boro. Council, curbing and paving 969.3 ft. rein.-con. pavements on Julian St. and Highland Ave. S. E. May, boro. engr.

Pa., Huntingdon—May 1, by Boro Council, paving 3,044 lin.ft. Warm Springs Ave., Moore and 6th Sts., one course rein.-con. J. W. Oates, boro. engr.

Pa., Red Lion—May 12, paving 19,000 sq.yd. streets, asphaltic, concrete, rein.-con. or sheet asphalt. J. A. Michels, boro. engr.; adv. E. N.-R. Apr. 17

Md., Baltimore—Apr. 23, by Bd. Awards, streets listed in Contr. 254-OANA, 22,085 sq.yd. concrete, $40,000; Contr. 255-OCNA, 18,240 sq.yd. concrete, $33,000. R. K. Compton, 214 East Lexington St., chn. paving comn.

Md., Somerset (Glen Echo, P. O.)—Apr. 24, by J. W. Stohlman, mayor, 328 Dorset Ave., Somerset, Chevy Chase, paving 1.37 mi., concrete; adv. E. N.-R. Apr. 17.

W. Va., Clarksburg—Apr. 21, by city at office D. H. Hamrick, clk., paving and improving Linden, Hewes and Broaddus Aves., Bway., Dodge Court, South 2nd, McDowell, Milford and College Sts., also sewering Grove Ave., 11,000 lin.ft. curbing, 4,325 cu.yd. grading, 2,510 cu.yd. rein.-con., 740 cu.yd. concrete, 5,000 sq.yd. brick paving, 400 lin.ft. sanitary sewers. T. S. Long, city engr.

W. Va., Huntington—Apr. 24, Bd. City Comrs., grading, curbing and paving Auburn, Camden and Piedmont Rds., Monroe, Jefferson, Hite and 9th Aves., 5th and 34th Sts., etc. A. B. Maupin, city engr.

N. C., Wilson — Apr. 30, by S. Lucas, mayor and Bd. Comrs. paving, curbing, guttering, sewers and water mains in various streets. R. D. Gladding, Wilson, engr.; adv. Apr. 20.

S. C., Anderson—Apr. 22, by Anderson Co. Hy. Comn., 31,343 cu.yd. common and 2,000 cu.yd. rock excav., 14,702 cu.yd. top soil surfacing, 47.53 cu.yd. concrete, also bridge over Beaver creek, bids on 3 types rein.-con. consists of five 22 ft. spans, creosoted timber framed bend type, eight 14 ft. spans; creosoted timber pile bent, eight 14 ft. spans. E. D. Sloan, Court House, Greenville, engr.

Ga., Clayton—Raburn Co. taking bids surfacing road from Habersham Co. line to North Carolina State line. To exceed $75,000.

Streets and Roads (Continued)

Alabama — May 5, by State Hy. Dept., Montgomery, 4.989 mi. Alexander-Jackson Gap Rd., Federal Aid Project 78, Sects. B and C, Tallapoosa Co., 39.71 acres clearing, 110,540 cu.yd. earth and 31,878 cu.yd. rock excav., 16,799 sta.yd. overhaul, 14,750 cu.yd gravel, 8,205 lin.ft. 18- to 24-in. pipe, 418.78 cu.yd. concrete, 37,334 lb. reinforcing, etc. W. S. Keller, state highway engr.

Miss., Greenwood — Apr. 25, by Comn. Council, at City Hall, 54,244 sq.yd. 3 in. vertical fibre brick on 4 in. Portland concrete, 54,244 sq.yd. 4 in. Puzzolan slag concrete base, 19,963 cu.yd. grading, etc. $150,000. W. S. Hawkins, City Hall, engr.

La., Bastrop—Apr. 29, by Police Jury Morehouse Parish, 14.2 mi. Route 7, Sects. A and C.

O., Columbus—Apr. 22, by W. H. Duffy, dir. Pub. Serv., asphalt paving and widening 1,908 ft. Grant Ave., from 32 to 44 ft. wide. $36,494.

O., Mansfield—Apr. 23, by Secretary Bd. Control, improving Glenn Ave., North Diamond, East 1st, McPherson, East 5th, Bowman, Buffalo and Elizabeth Sts., 27,500 sq.yd. grading, 23,600 sq.yd. paving, 9,500 lin.ft. concrete curb and gutter. W. C. Statler, city engr.

Ind., Columbia City—Apr. 28, by City Council, paving Chicago St., 3,260 sq.yd. concrete on concrete. $26,181; Elm St., 10,700 sq.yd. concrete on concrete, 7,237 lin.ft. concrete curb and brick gutter, $56,291.

Ind., Ft. Wayne—Apr. 22, by Comrs. Allen Co., improving Marion Twp. Rd. 2. $35,000.

Ind., Goshen—Apr. 19, by Comrs. Elkhart Co., grading and gravel surfacing 15,753 ft. Twp. Rd. E-1, 24 ft. $27,800. C. L. Kinney, Goshen, engr.

Ind., Indianapolis—Apr. 25, by Comrs. Marion Co., paving East 10th St., 33,446 sq.yd. concrete on concrete. $87,226. J. J. Griffith, Indianapolis, co. engr.

Ind., South Bend—Apr. 28, by St. Joseph Co., paving with concrete on concrete 37,056 sq.yd. J. C. Rerick Rd., $91,360, 36,858 sq.yd. C. E. Keltner Rd., $95,850, 41,532 sq.yd. A. Crofat Rd., $107,985. P. R. Gillin, South Bend, engr.

Michigan—Apr. 19, by R. W. Roberts, Schirmer Bldg., Saginaw, engr. for Saginaw Co. Rd. Comn., grading and surfacing 3.92 mi. Assessment Dist. Rd. 36, 2 course gravel, also 4.047 mi. Assessment Dist. Rd. 55 B, stone macadam surface treated.

Michigan—Apr. 23, by State Hy. Dept. at office Comrs. Berrien Co., St. Joseph, grading and surfacing State Trunk Line Rd. 58-4, 26,120 cu.yd. excav., 62,408 sq. yd. concrete, bituminous concrete or sheet asphalt.

Michigan—Apr. 24. by State Hy. Dept., at office Comrs. Monroe Co. (Monroe), shaping and surfacing 2.841 mi. Federal Aid Project 50, Sect. B2, 33,334 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—Apr. 24, by State Hy. Dept. at office Comrs. Monroe Co., Monroe, shaping and surfacing 1.356 mi. Federal Aid Project 50, Sect. B4, 15,851 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—Apr. 28, by State Hy. Dept., at office Oakland Co. Rd. Comrs., Pontiac, grading and surfacing 0.398 mi. Federal Aid Project 70, C, 9,403 sq.yd. asphalt, concrete or bituminous concrete, also 0.939 mi. Federal Aid Project 70, C, 10.556 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—Apr. 28, by State Hy. Dept. at office Livingston Co. Rd. Comrs., Howell, grading and surfacing 1.392 mi. Federal Aid Project 15, A, Livingston Co., 16,330 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—Apr. 29, by State Hy. Dept., at office R. Comn. Wexford Co. at Cadillac, grading and gravel surfacing 2.856 mi. State Trunk Line Rd. 42-1, Sects. A and B, 26,725 sq.yd. gravel, also 0.492 mi. State Trunk Line Rd. 55-4, Sect. B, 6,352 sq.yd. asphaltic concrete or bituminous concrete.

Michigan—Apr. 30, at office H. J. Davies, superv. engr., State Hy. Dept., at Escanaba, grading and surfacing 5.02 mi. Federal Aid Project 169, Marquette Co., 47,177 sq. yd. gravel or waterbound macadam; paving with gravel, waterbound macadam or bituminous macadam 121,204 sq.yd. State Trunk Line Rd., 25-5, Sects. A and B, Alger Co., 55,552 sq.yd. State Trunk Line Rd. 25-7, Schoolcraft Co., 132,478 sq.yd. State Trunk Line Rd. 25-8, Schoolcraft Co., 9,950 sq.yd. State Trunk Line Rd. 25-2, Sect. B, Chippewa Co., 125,131 sq.yd. State Trunk Line Rd. 25-15, Sects. B and C, Chippewa Co., 37,492 sq.yd. State Trunk Line Rd. 25-13, Schoolcraft Co.

Michigan—May 1, by State Hy. Dept. at office Comrs. Calhoun Co., Marshall, grading and surfacing State Trunk Line Rd. 29-12, 21,285 sq.yd. concrete, bituminous concrete or sheet asphalt. Cement furnished by State.

Michigan—May 1, by State Hy. Dept., at office Iron Co. Rd. Comrs., Crystal Falls, grading and surfacing 1.932 mi. State Trunk Line Rd. 12-42 B, 20.712 sq.yd. bituminous macadam.

Michigan—May 2, by State Hy. Dept. at office Ontonagon Co. Rd. Comrs., Ontonagon, grading and surfacing 7.34 mi. State Trunk Line Rd. 26-12, 19,953 tons stamp sand, or 68,564 sq.yd. gravel, etc.

Michigan—May 2, by State Hy. Dept., at office Comrs. Huron Co., (Bad Axe), grading and gravel surfacing 4.038 mi. State Trunk Line Rd. 27-19, Huron Co., 38,527 sq.yd. gravel, 15,664 cu.yd. excav.

Michigan—May 5, by State Hy. Dept., at office Ogemaw Co. Rd. Comrs., West Branch, grading and surfacing 0.493 mi. State Trunk Line Rd. 55-13, 5,786 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—May 6, by State Hy. Dept., at office Gogebic Co. Rd. Comrs., Bessemer, grading and gravel surfacing 7.463 mi. State Trunk Line Rd. 12-41, 32,727 cu.yd. excav., 71,311 sq.yd. gravel.

Michigan—May 6, by State Hy. Dept., at office Comrs. Cass Co. (Cassapolis), grading and surfacing 2.763 mi. State Trunk Line Rd. 40-5, Sects. A and B, 29,325 sq. yd. asphalt, concrete or bituminous concrete, 9,355 cu.yd. excav.

Michigan—May 7, by State Hy. Dept., at office Comrs. Roscommon Co. (Roscommon), grading and surfacing 6.474 mi. State Trunk Line Rd. 76-4, Sect. C, 60,719 sq.yd. gravel, 23.154 cu.yd. excav.

Wis., Two Rivers — Apr. 21, by J. Doleysh, city clk., new paving, etc., various streets (1) 14,250 sq.yd. one course concrete, two course concrete or vibrolithic concrete, 2,850 lin.ft. concrete curb and gutter, 4,000 cu.yd. earth excav., (2) 5,500 sq.yd. tar macadam or asphaltic macadam, 1,800 cu.yd. earth, 3,650 lin.ft. concrete curb and gutter. D. H. Ames, City Hall, engr.

Minn., Faribault — May 6, by F. M. Kaisersatt, aud. Rice Co., gravel surfacing 4.25 mi. Job 2401, State Rd. 48; 4 mi. Job 2402, State Rd. 53; 8.5 mi. Job 2406, State Rd. 30; 6 mi. Job 2408, State Rd. 28; 7.3 mi. Job 2409, State Rd. 22; 8.65 mi. Job 2410, State Rd. 6; 3 mi. Job 2411, State Rd. 29, $60,000. J. C. McElherne, Faribault, engr.

Minn., Granite Falls—Apr. 24, by G. H. Wilson, aud. Yellow Medicine Co., gravel surfacing 13 mi. Job 2403, State Rd. 9, 13,000 cu.yd. gravel; 4 mi. Job 2405, State Rd. 4, 4,000 cu.yd. gravel; 6 mi. Job 2406, State Rd. 5, 6,000 cu.yd. excav. $25,000. F. Van Krevelen, Granite Falls, engr.

Minn., Ortonville—May 6, by D. B. Hudson, aud. Big Stone Co., 7 mi. Job 2401, State Rd. B, 37,400 cu.yd. excav., 36,000 cu.yd. overhaul, 870 lin.ft portable culverts; 5 mi Job 2402, State Road A, 48,000 cu.yd. excav., 1,100 lin.ft. portable culverts. $25,000. F. W. Engdahl, Ortonville, engr.

Minn., St. Paul—Apr. 28, by G. J. Ries, aud. Ramsey Co., Project 24-51, grading and paving White Bear Rd., Whitaker St., Bald Eagle Blvd. and Park Ave., 37,000 sq. yd. concrete or asphaltic concrete on concrete base, etc. $85,000. P. N. Coates, 900 Guardian Life Bldg., co. surv. Noted Apr. 3.

Minn., White Bear—Apr. 28, by State Hy. Dept., St. Paul, improving State Project 1-36, Sect. 1, here, between Auto Club and Stewart Ave., 15,100 sq.yd. paving, various types, 11,000 cu.yd. excav., 7,800 lin.ft. concrete curb and gutter. $50,000. State Hy. Dept., 1246 University Ave., St. Paul, engrs.

Neb., Hastings — Apr. 28, paving 10 blocks. $40,000. P. T. Naylor, city engr.

South Dakota—May 13 and 14 by State Hy. Dept., Pierre, grading 292 mi. highways and building bridges F. D. Hudgins, state engr.

South Dakota — May 14, by State Hy. Dept., Pierre, graveling **(F. A. P. means Federal Aid Project)** 6.19 mi. F. A. P. 20B, Walworth Co., 6.06 mi. F. A. P. 50C, Sanborn Co., 13.31 mi. F. A P. 61B, Brule and Aurora Counties, 6.58 mi. F. A. P. 86, Sanborn Co., 13.41 mi. F. A. P. 90, Hutchinson Co., 11.06 mi. F. A. P. 98, Lincoln Co., 15.14 mi. F. A. P. 116, Hutchinson Co., 9.94 mi. F. A. P. 122, Deuel Co., 9.03 mi. F. A. P. 129, Turner Co., 5.46 mi. F. A. P. 137, Lake Co., 7.47 mi. F. A. P. 140, Lawrence and Meade Counties, 7.82 mi. F. A. P. 144, Union Co., 173,400 cu.yd. gravel. F. D. Hudgins, state engr.

North Dakota—May 6, by State Hy. Comn., Bismarck, paving 1.5 mi. road between Mandan and Missouri River Bridge. $60,000.

Missouri—Apr. 22, by State Hy. Dept., Jefferson City, improving highways in Benton, Cooper, Morgan, Perry and Madison Counties, 180,256 sq.yd. gravel, 131,543 cu.yd. earth and 38,037 cu.yd. rock excav.; 5 mi. road in Cedar Co., 35,328 sq.yd. gravel; road in Webster, Barry, Dade, Cooper, Lafayette, Clark and Linn Counties, 702,708 cu.yd. earth and 71,115 cu.yd. rock excav. B. H. Piepmeier, state highway engr. Noted Apr. 10.

Mo., St. Louis — May 6, by Bd. Pub. Serv., 208 City Hall, paving 32,610 sq.yd. Ohio St., Bell, Chouteau and Manchester Aves., asphalt, $130,720, 2,645 sq.yd. Beacon St., asphalt or warrenite, $14,720, 1,785 sq.yd. Wyoming St., warrenite, $9,600, 12,450 sq.yd. Arlington, Margaretta and San Francisco Sts., bitulithic, $66,040; grading and asphalt paving 2,700 sq.yd. Sulphur St., $18,520. W. W. Horner, city engr.

Ark., Rogers — May 6, by Bd. Comrs. Rogers Paving Impvt. Dist. 6, c/o E. C. Lone, secy., grading, curbing, guttering, paving and storm sewers in various streets. E. F. Peterson, Texarkana, engr.; adv. E. N.-R. Apr. 17.

Tex., Baird—Apr. 25, by V. B. Gilbert, judge Callahan Co., grading, bridging and surfacing with bituminous macadam 9.62 mi. Sect. A, Bankhead Highway, Federal Aid Project 52-A, 18 ft. $259,068. Noted Mar. 27.

Tex., Corpus Christi—May 6, by H. R. Sutherland, judge Nueces Co. gravel surfacing and bituminous topping 5.23 mi. highway, 18 ft. $70,000. C. E. Cook, co. engr.

Tex., Memphis—Apr. 29, by A. C. Hoffman, judge Hall Co., grading and bridging 5.5 mi. State Highway 18, State Aid Project 473-B, 24 ft. $41,390. C. L. Hasie, Box 168, co. engr. Noted Apr. 10.

Colorado—Apr. 22, by State Hy. Dept., Denver, gravel surfacing 12.046 mi. Federal Aid Project 248-A, 15,300 cu.yd. borrow fill, 42,000 cu.yd. earth and 1,600 cu.yd. rock excav., 444 cu.yd. concrete, 126,800 lin.ft. gravel, etc. $134,789. L. D. Blauvelt, State Office Bldg., Denver, engr.

Wash., Chehalis — Apr. 25, by Comrs. Lewis Co., paving Permanent Highway 12 and Pike Hill Gap, 14,001 sq.yd. concrete, also 100 ft. span on concrete piles and abutments. R. L. Greene, Chehalis, engr.

California — May 5, by State Highway Comn., Sacramento, paving 8.3 mi. highway between Vacaville and Batavia, Solano Co., 0.4 mi. cement concrete, 7.9 mi. asphaltic concrete; grading 9.4 mi. between east boundary and San Juan Bridge, Orange Co. R. M. Morton, state highway engr.

Ont., London — Apr. 26, by C. Talbot, engr., County Bldg., 2 mi. concrete on Sarnia Rd. for Suburban Rds. Comn., $80,000.

B. C., Vancouver — Apr. 29, by City Clerk, paving street in front on Canadian Natl. Depot, Main St. $80,000. F. L. Fellowes, city engr.

BIDS RECEIVED

New Hampshire—State Hy. Comn., Concord, Apr. 9, Project 190 in Keene, from R. J. Keating, Fitchburg, Mass., 885 cu.yd. B. C. gravel $2.25, 649 cu.yd. S. C. gravel $2.75, etc., total $16,068; Project 186, in Milford, from A. D. Bridges Sons Inc., Hazardville, Conn., 762 tons S. C. bituminous macadam, $4.50, bridge at station 13-50, etc., $15,266; Project 188, in Walpole, from P. C. Ricci, Burlington, Vt., 837 cu. yd. B. C. gravel $2.75, 614 cu.yd. S. C. gravel $3.25, etc., total $13,864; Project 188 in Walpole, (2 sections), from R. E. Bull, 151 Harrison Ave., Fitchburg, Mass., 837 cu.yd. B. C. gravel $2.80, 614 cu.yd. S. C. gravel $3, etc., total $14,973. Noted Apr. 3.

Connecticut — State Hy. Comn., Hartford, Apr. 7, paving 4,550 ft. road in Pomfret, 3-in. bituminous macadam on 5-in. stone base, from Peckham Rd. Corp., 6 Crane Ave., White Plains, N. Y., $20,007; 3,200 ft. Main St. in East Hartford, sheet asphalt, from E. Balf Co., 14 Haynes St., Hartford, $74,653 (for oil asphalt) and $78,760 (for Bermudez asphalt); 900 ft. in Oxford, 7-in. water bound macadam, and 2 concrete bridges, from F. B. Hastings, Bridgeport, $15,020; 1,440 ft. in Seymour, rein.-con., from T. J. Fleming, 27 Chestnut Ave., Waterburg, $18,056; 3,540 ft. Orange Ave. in West Haven, concrete, and 18,283 ft. in Clinton and Westbrook, rein.-con., from C. W. Blakeslee & Son, 58 Waverly St., New Haven, $24,823 and $190,294 respectively; 16,300 ft. Boston Post Rd., concrete, in Darien, from Bridgeport Constr. Co., 355 Ridgefield Ave., Bridgeport, $206,930; 24,568 ft. South Canaan Rd. in Canaan and North Canaan, from J. DeMichiel & Bro., 58 High St.,

Streets and Roads (Continued)

Torrington, $141,572; 3,326 ft. road, waterbound macadam, and concrete bridge on Middletown Ave., New Haven, from D. V. Firone & Co., New Haven, $45,359; 8,800 ft. Whisconeer Hill Rd., in Brookfield and Newtown, 8-in. native stone macadam, from W. J. Montgomery & Co., Inc., 72 Canner St., New Haven, $44,671. Noted Apr. 3.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Apr. 9, grading, curbing and flagging Clarendon Rd., from T. B. Scott, 671 Halsey St., $2.874; grading sidewalk space, curbing and flagging Quentin Rd., from G. Mandatto, 129 29th St., $2,016, 80th St., from R. Lynster, 1364 Sterling Pl., $1,085; grading 60 ft. width centrally located Empire Blvd., from C. Bennett Contg. Co., 414 Rutland Rd., $29,820; asphalt paving West 37th St., from M. J. O'Hara, 1228 Park Ave., New York, $7,565. Noted Apr. 3.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., Apr. 8, grading, regrading, curbing, etc., Bway., from Garafano Contg. Co., $54,387; grading, curbing, laying sidewalks and crosswalks, on Tryon Ave., from Interstate Contg. Co., $11,187; sheet asphalt paving boro line of Bronx, from C. D. Beckwith, Inc., 2875 Bway., $159,720; paving West 188th St. and Walton Ave., both sheet asphalt, also Bailey Ave., bituminous concrete, from Brusstar Constr. Co., Harlem River and 150th St., $4,654, $32,303 and $52,481 respectively; grading, curbing, laying sidewalks, etc., on Worthen St., from Clementi Contg. Co., 1195 Spoffard St., $15,490. Noted Apr. 3.

New Jersey—State Hy. Dept., Trenton, Apr. 14, concrete paving 29,505 sq.yd. Route 9, Sect. 12, Plainfield to Westfield, Union Co., from T. Camillo & Co., 335 Spring St., Westfield, $122,946; 67,905 sq. yd. Route 6, Sect. 14, Bridgeton to Marlboro, Cumberland Co., from Acchione & Camuso Co., 804 South 12th St., Phila., $255,284. Noted Mar. 27.

Delaware—State Hy. Dept., Dover, constructing 0.265 mi. Marsh Rd. Underpass, Contr. CN-7A, from Van Auken & Robbins, Thendara, N. Y., 2,500 cu.yd. excav. $3, 1,400 cu.yd. rock excav. $3, 660 cu.yd. stone concrete $19.05 or 600 cu.yd. slag concrete $19.05, etc., total $27,943; 0.337 mi. Hickman Rd., Contr. CN-18, 1,700 cu. yd. excav. $2.20, (a) 620 cu.yd. stone concrete $16.50 or (b) 620 cu.yd. slag concrete $16, etc., total (a) $17,392 (b) $17,082; 1.925 mi. Summit Bridge-Kirkwood Rd., Contr. CN-19, 8,700 cu.yd. excav. $1.32, (a) 3,350 cu.yd. concrete $15.96 or (b) 3,350 cu.yd. slag concrete $15.22, etc., totals (a) $76,453 (b) $73,974; steel superstructure, Seaford Bridge, Contr. 42-C, from A. S. Fox, 1033 West 3rd St., Dayton, O., $29,690. Noted Mar. 20.

Md., Baltimore — Bd. Awards, paving roads, Contr. 251-OA, 11,400 sq.yd. asphalt, from Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $45,184; Contr. 253-OANA, 12,625 sq.yd. concrete, from Aiello Constr. Co., Gough and 4th Sts., $32,006. Noted Apr. 3.

Kentucky—State Hy. Dept., Frankfort, shaping and paving with bank gravel 19.22 mi. Henderson-Madisonville Rd., 18 ft., Federal Aid Project 34, Sect. F, Webster Co., from A. J. Hoffman, North Adams, Mich., $242,063. Noted Mar. 20.

O., Cleveland—Improving with **(a)** brick **(b)** asphalt **(c)** concrete **(1)** East 169th St. **(2)** Sandusky Ave. **(3)** Camden Ave. (1-3 inclusive involves 5,663 lin.ft. stone curb, 5,940 lin.ft. 4 in. drain tile gutter, 11,950 cu.yd. excav., 8,408 sq.yd. vitr. brick on concrete), **(4)** East 135th St. **(5)** East 143rd St. **(6)** East 126th St. **(7)** Milverton Rd. (4-7 inclusive involves 7,764 lin.ft. stone curb, 7,250 lin.ft. 4 in. drain tile gutter, 9,350 lin.ft. stone or concrete sidewalk, 9,640 sq.yd. vitr. brick, 2,235 sq.yd. concrete, 11,875 sq.yd. concrete base), **(8)** East 130th St. **(9)** East 169th St. **(10)** East 139th St. **(11)** East 137th St. (8-11 inclusive involves 14,806 lin.ft. stone curb, 13,640 cu.yd. earth excav., 23,230 sq.yd. asphalt or brick on concrete, from Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, **(a1)** $31,400 **(b4)** $23,923 **(c5)** $10,497 **(b8)** $28,873 **(b9)** $20,424 **(b11)** $37,032; W. E. Hugh, Pavers Exch., **(a2)** $9,146; Roehl Bros., Lorain Ave., **(a3)** $16,796; Gould & Maybach, 16123 Saranec Rd., **(a5)** $12,679; Rieley Bros., The Arcade, **(6)** $17,594; A. M. Pejsa, 3161 Derbyshire Rd., **(7)** $4,336 **(b10)** $26,368 **(a11)** $42,790; Baldwin Bros., 4500 Euclid Ave., **(a8)** $32,308. Noted Mar. 27.

O., St. Clairsville—Belmont Co. paving Temperanceville-Baileys Mills Rd., tar bound macadam, from B. C. Stringer, Rayland, $77,541.

Ind., Terre Haute—Vigo Co., paving J. E. Milks Rd., from J. L. Weeks, Farmersburg, $38,699. Engrs. est. $50,231

Ind., Wabash—Wabash Co., 8,004 ft. Wischel Rd., 18 ft., from Republic Asphalt Paving Co., 801 Schwind Bldg., Dayton, O., $33,999. Engrs. est. $35,736. Noted Apr. 3.

Michigan — State Hy. Dept., Lansing, grading and surfacing 6.649 mi. State Trunk Line Rd. 19-4, E, St. Clair Co., from C. G. Milne, 717 Holden St., Saginaw, $153,260; 4.663 mi. State Trunk Line Rd. 19-4, B, C and D, St. Clair Co., from C. W. Whitely, Marlette, $112,958; 1.872 mi. State Trunk Line Rd. 27-17, A, St. Clair Co., from J. Porath, 903 Free Press Bldg., Detroit, $40,539, 2.123 mi. State Trunk Line Rd. 27-4, B, St. Clair Co. and 2.731 mi. State Trunk Line Rd. 27-15, A, St. Clair Co., from J. H. Baker & Son, Port Huron, $37,634 and $55,572 respectively. Noted Mar. 27.

Michigan—State Hy. Dept., at office Rd. Comn. Allegan Co., at Allegan, grading and surfacing 6.24 mi. State Trunk Line Rd. 89-5, Allegan Co., 59,503 sq.yd. gravel, from E. W. oVsburg, Comstock, $79,814.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete from Detroit Asphalt Paving Co., 20 McGraw Bldg., 4,900 sq.yd. Atkinson Ave. $15,032, 1,400 sq.yd. Boston Ave. $8,030, 3,800 sq.yd. Domine Ave. $20,834, 11,000 sq.yd. Trenton Ave. Sect. 1, $57,518, 6,300 sq.yd. Trenton Ave., Sect. 2, $33,475, 3,300 sq.yd. Genoa Ave. $16,305, 4,600 sq.yd. Ironwood Ave. $25,352, 1,800 sq.yd. LeMay Ave. $9,313, 3,200 sq.yd. Lonyo Rd. $16,997, 1,400 sq. yd. Leland St. $8,578, 2,700 sq.yd. Lakewood Ave. $14,059, 3,700 sq.yd. Marcus Ave. $20,653, 3,500 sq.yd. Savery Ave. $20,104; from Cleveland Trinidad Paving Co., 402 Hammond Bldg., 1,400 sq.yd. Brighton Ave. $7,346, 4,100 sq.yd. Robinwood Ave. $20,818, 3,000 sq.yd. Eason Ave. $15,191, 1,050 sq.yd. Grove Ave. $5,650, 6,100 sq.yd. Hilldale Ave. $38,096, 5,100 sq.yd. Savannah Ave. $26,314.

Ill., Chicago—South Park Comrs., paving on South Park Ave., from R. F. Conway Co., 133 West Washington St., $459,844; sidewalks, curbs and gutters from Simpson Constr. Co., 133 West Washington St., $82,884.

Ia., Sioux City—Paving (a) 21,400 sq.yd. West 7th St. (b) 6,280 sq.yd. between street car tracks, from Booth & Olson, 120 Virginia St., Sioux City, concrete (a) $2 per sq.yd. (b) $4 per sq.yd.; M. L. Flinn, 218 Grain Exch. Bldg., Sioux City, vibrolithic concrete $2.49 per cu.yd.

Wisconsin—State Hy. Comn., Madison, concrete surfacing, etc., Sect. A Snyderville Rd., Federal Aid Project 342, Outagamie Co., from Koepke Bros., Appleton, 10,827 cu.yd. earth excav. $0.79, 16,732 sq.yd. concrete surfacing $1.39, etc., total $53,263; Chilton-Hilbert Rd., State Project 1049, Calumet Co., from Franz Radlaff Co., Plymouth, 4,125 cu.yd. earth excav. $0.80, 18,316 sq.yd. concrete $1.43, etc., total $33,966. Noted Apr. 3.

Wis., Fond du Lac—Fond du Lac Co., concrete surfacing, etc., Ladoga-Brandon-Ripon Rd., Sects. A and B, from A. Kramp, Berlin, 28,800 cu.yd. earth excav. $0.80, 44,320 sq.yd. concrete $1.32, 47,220 sq.yd. concrete $1.33, etc., total $184,158. Noted Mar. 27.

Wis., Hudson—Paving 8,956 sq.yd. various streets, from C. T. Welch Co., 703 1st Natl.-Soo Line Bldg., Minneapolis, Minn., rein.-con. 6 in. $23,400, 7 in. $25,888, Class A asphalt concrete 5 in. oil $30,187, 6 in. oil $32,227; from General Contg. Co., 1222 Plymouth Bldg., Minneapolis, asphaltic concrete, Class B (bitulithic) 5 in. lake $30,890, 6 in. lake $32,920; from J. Noreen, Hudson, 5 in. brick $35,506; from A. Larson & Co., Eau Claire, vibrolithic, 6 in. $26,183, 7 in. $28,402. Noted Mar. 27.

Wis., La Crosse—Paving, etc. 22,092 sq. yd. 14th, 15th, 20th, Ferry, Rose, and St. Andrews Sts. and alley, from T. E. Wooley, 148 West Ave. S., brick $3.27 per sq.yd., asphalt macadam $2.57, from White Constr. Co., 68 Wisconsin St., Milwaukee, asphaltic concrete $2.70 and $2.90; 1,689 sq.yd. State, Pearl and Main Sts., from T. E. Wooley, 148 West Ave. S., brick $7,427, from General Contg. Co., 1222 Plymouth Bldg., Minneapolis, Minn., asphaltic concrete, $5,608, E. Rasmussen, Ft. Dodge, Ia., warrenite bitulithic $5,827; 2,427 sq. yd. rein.-con. driveways around St. Rose viaduct approaches, from T. J. Malzahn, Majestic Bldg., $7,800. Noted Apr. 3.

Kan., Iola—Grading and surfacing with one course concrete 2.036 mi. Federal Aid Project 168, Sect. A, Allen Co., 18 ft., from Fry Bros., Iola, $70,210. Noted Mar. 20.

Colorado—State Hy. Dept., Denver, concrete paving 0.787 mi. Federal Aid Project 246-B, Pueblo Co., from W. A. Colt & Son, Las Animas, $29,454, engrs. est. $28,411; 2.944 mi. Federal Aid Project 255-B, Morgan Co., from W. F. Pigg & Son, 534 Commonwealth Bldg., Denver, concrete $92,486, A. D. Dobson Co., 1st Nat. Bank, Lincoln, Neb., bituminous on concrete, $117,351. Noted Apr. 10.

Oregon—State Hy. Dept., Salem, Apr. 2, grading and paving 4.5 mi. Jacksonville-Medford Sect. of Blue Ledge Market Rd., 18 ft., bituminous concrete, also 4.5 mi. Ruch-Summit Sect. of above Rd., 18 ft., bitulithic concrete, both Jackson Co., from S. S. Schell, Oakland, Calif., $78,175 and $78,557 respectively; 1.34 and 1.24 mi. Perry-Oro-Dell La Grand Sect. of Old Oregon Trail, Union Co., 60 ft. right of way, from Morrison-Knudson, Railroad and Reclamation Aves., Boise, Idaho, concrete pipe $35,030, galvanized iron corrugated pipe $34,963.

Wash., Seattle—Bd. Pub. Wks., Apr. 4, grading and paving West Spokane St., from J. L. Smith, Pioneer Bldg., 7,275 sq. yd. 8-in. concrete $2.20, 440 ft. asphaltic concrete curb $0.70, 2,495 ft. concrete curbing $.40, 65,000 cu.yd. earth excav. $0.45, etc., total $56,486, engrs. est. $59,752.

Wash., Mt. Vernon—Comrs. Skagit Co., Mar. 25, paving Wickersham Rd., Sect. 2, 70,000 sq.yd. 7-in. concrete, from Riddle & Hawkins, Bellingham, $244,814. Engrs. est. $250,000.

Wash., Seattle—Bd. Pub. Wks., paving 2nd Ave. N. et al., from J. L. Smith, Pioneer Bldg., 173,000 sq.yd. 6-in. concrete $1.80, 1,775 ft. 5 in. asphaltic concrete curbing $0.60, 9,260 ft. 5-in. concrete guttering $0.40, 600 sq.yd. concrete sidewalk $1.70 4,000 cu.yd. earth excav. $0.70, total $52,933. Engrs. est. $54,540.

Calif., Los Angeles—Los Angeles Co. improving portion Western Ave. from G. R. Curtis, 2440 East 26th St., 3,626 cu.yd. excav. $1, shaping 10,305 sq.yd. $0.15, removing 954 cu.yd. old disintegrated granite $1, 10,305 sq.yd. sub-base $0.30, 10,305 sq. yd. asphaltic concrete $1.40, 10,305 sq.yd. Topeka surface $0.74. Noted Apr. 3.

CONTRACTS AWARDED

New Hampshire—State Hy. Dept., Concord, paving Projects 158 and 175, in Derry, 25,480 sq.yd. concrete, to Winslow & Cummings, Nashua, $98.696. Noted Apr. 3.

Vermont—State Hy. Dept., Montpelier, paving 1.2 mi. Gateway Rd., Federal Aid Project 50, in Fairhaven, 2,264 cu.yd. rein.-con., 4,300 cu.yd. earth excav., to Frissel & Snyder Inc., 176 West St., Gardner, Mass., $44,995; 2.25 mi. Milton-St. Albans Rd., Federal Aid Project 52A, in Georgia, 1,872 cu.yd. bituminous macadam, 2,850 cu.yd. broken stone base, etc., to A. Florentine, Plattsburg, N. Y., $56,440.

Connecticut—State Hy. Comn., Hartford, paving 4,550 ft. road in Pomfret, 3-in. bituminous macadam on 5-in. stone base, to Peckham Rd. Corp., 6 Crane Ave., White Plains, N. Y., $20,007; 3,200 ft. Main St. in East Hartford, sheet asphalt, to E. Balf Co., 14 Haynes St., Hartford, $74,653 (for oil asphalt) 900 ft. in Oxford, 7-in. water bound macadam, and 2 concrete bridges, to F. B. Hastings, Bridgeport, $15,020; 1,440 ft. in Seymour, rein.-con., to T. J. Fleming, 27 Chestnut Ave., Waterbury, $18,056; 3,540 ft. Orange Ave. in West Haven, concrete, and 18,283 ft. in Clinton and Westbrook, rein.-con., to C. W. Blakeslee & Son, 58 Waverly St., New Haven, $24,823 and $190,294 respectively; 16,300 ft. Boston Post Rd., concrete, in Darien, to Bridgeport Constr. Co., 355 Ridgefield Ave., Bridgeport, $206,930; 24,568 ft. South Canaan Rd. in Canaan and North Canaan, to J. DeMichiel & Bro., 58 High St., Torrington, $141,572; 3,326 ft. road, waterbound macadam, and concrete bridge on Middletown Ave., New Haven, to D. V. Frione & Co., New Haven, $45,359; 8,800 ft. Whisconeer Hill Rd., in Brookfield and Newtown, 8-in. native stone macadam, to W. J. Montgomery & Co., Inc., 72 Canner St., New Haven, $44,671. Noted Apr. 3.

Conn., New London—Paving 1,438 ft. Howard St., concrete, and 400 ft. State St., hillside brick on 5-in. concrete, to N. Benvenuti & Sons, 74 Goshen St., $20,000 and $15,000 respectively. Noted Mar. 6.

N. Y., Albany—Bd. Contr. & Supply repaving Western and Madison Aves., to M. F. Dollard, 36 State St., $37,253 and $252,802 respectively. Engrs. ests. $45,000 and $275,000 respectively. Noted Apr. 3.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Cranford Co., 52 9th St., asphalt paving Bay Ridge Ave. $12,942, Ave. J $4.745, Mansfield Pl. $12,180, 40th St. $8,691, 48th St. $3,525, curbing, flagging and asphalt paving Lefferts Ave. $22,782, curbing and asphalt paving Mansfield Pl. $13,610; to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., asphalt paving Bay 10th St. $8,748, East 40th St. $7,396, 10th Ave. $10,237, West 12th St. $8,760; to Borough Asphalt Co., 1301 Metropolitan Ave., asphalt paving Belmont

Streets and Roads (Continued)

Ave. ,090, Thatford Ave. $8,876; to L. Mangieri, 190 31st St., grading, curbing and flagging Canal Ave., etc. $7,965; to F. Persicano, 350 Fulton St., grading, curbing and flagging Ave. O, etc. $9,155, Schenectady Ave. $5,005, 19th Ave. $3,610. Noted Apr. 10.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, to Borough Asphalt Co., 1301 Metropolitan Ave., asphalt paving Blake Ave. $3,967, East 34th St. $8,052, Hegeman Ave. $14,336, Union St. $4,638; to W. E. Carberry, 45 South Elliott Pl., grading sidewalk space, curbing and flagging Dahill Rd. $2,384, grading curbing and flagging East 37th St. $6,736; to W. H. Geoghegan Realty Co., grading Flatbush Ave. $376,980; to L. Mangieri, 190 31st St., grading sidewalk space, curbing and flagging 7th Ave. $1,023. Noted Apr. 3.

N. J., Freehold—Monmouth Co., rein.-con. paving 2.53 mi. Sect. 2, Farmingdale-Manasquan Rd., to Freehold Constr. Co., Freehold, $105,270. Noted Mar. 20.

N. J., Oakhurst—Ocean Twp., paving Sunset, Corlies and Edgemont Aves., etc., to Union Paving Co., 31st and Locust Sts., Phila., $58,000. Noted Mar. 20.

Pennsylvania—State Hy. Dept., Harrisburg, concrete highways **(R. means Route and A. means Application)** 65,500 sq.yd. R. 76, Beaver Co., to D. W. Challis & Sons, Sewickley, $368,032; 46,900 sq.yd. R. 47, Sect. 1, Redford Co., to W. C. Guncheon & Co., Masonic Bldg., Harrisburg, $238,907; 34,660 sq.yd. R. 62, Sect. 4, Cambria Co., to McClure & Bigner, 424 Swank Bldg., Johnstown, $194,351; 27,200 sq.yd. A. 2801-2, Berks Co., to General Paving Co., B & B Bldg., Allentown, $101,362; R. 271, Sect. 2, Erie Co., to J. McCarthy Constr. Co., Bessemer, $138,493; 56,720 sq.yd. Routes 223 and 314, Indiana Co., to Booth & Flinn, 1942 Forbes St., Pittsburgh, $332,513; 25,055 sq.yd. A. 1623, Lawrence Co., to E. A. Freshwater & Sons, Chester, W. Va., and Painesville, O., $110,323; 65,774 sq.yd. R. 168, Monroe Co., to Souder Constr. Co., 349 Woolworth Bldg., Lancaster, $256,916; 16,121 sq.yd. R. 208, Venango Co., to Jamieson & Narlee, Fredonia, $81,091; 37,681 sq.yd. R. 95, Sect. 2, Warren Co., to J. C. Devine Co., Alliance, O., $165,349; 17,100 sq.yd. R. 234, A. 2043, Clearfield Co, to G. I. Thompson, Clearfield, $74,760; 31,566 sq.yd. R. 62, Sect. 5, Cambria Co., to Clarks Bros. Constr. Co., Hastings, $164,486; 19,492 sq.yd. R. 181 Allegheny Co., to A. G. Rothey, Elizabeth, $104,770; 20,750 sq.yd. A. 650, Chester Co., to Lincoln Constr. Co., Stratford, $90,872; 63,236 sq.yd. R. 223, Sect. 1, Indiana Co., to Rood Constr. Co., Lyric Theatre Bldg., Butler, $321,476; 66,000 sq.yd. R. 95 Warren Co., to W. B. Constr. Co., 909 Cascade St., Erie, $315,278; 8,586 sq.yd. R. 268, Washington Co., and 29,700 sq.yd. R. 268, Greene Co., to Jones Constr. Co., Salem, O., $55,261 and $231,926 respectively; 10,482 sq.yd. R. 223, Indiana Co., and grading R. 106, Sect. 2, Cameron Co., 160,330 cu.yd. excav., to M. Bennett & Sons, Indiana, $44,248 and $197,388 respectively. Noted Mar. 20.

Pa., Cresson — Paving 20,000 sq.yd. various streets, bitulithic asphalt on 5 in. concrete, to Warren Bros., 202 North 3rd St., Harrisburg, $94,750.

W. Va., Fairmont—Marion Co., grading and bituminous macadam surfacing 2.5 mi. Morgantown-Bridgeport Turnpike, Winfield Div., to W. R. Bainbridge, Fairmont, $58,039. Noted Mar. 20.

North Carolina—State Hy. Comn., Raleigh, grading and topsoiling **(S. P. means State Project)** 17.51 mi. S. P. 156, Martin Co., to N. L. Teer, Durham, $129,179, 13.75 mi. S. P. 721, Caldwell Co., to J. T. Plott, Greensboro, $112,185; grading and asphaltic paving on concrete 11.22 mi. S. P. 330, Columbus Co., to Coastal Constr. Co., Florence, S. C., $331,728, 12 mi. S. P. 686-B, Stanly Co., to Noll Constr. Co., Charlotte, $376,156; grading and concrete paving 10.68 mi. S. P. 537-B, Guilford Co., to Ziegler & Dalton Constr. Co., Junction City, Kan., $358,023, 8.23 mi. S. P. 421-B, Franklin Co., to A. G. Lassiter & Co., Citizens Bank Bldg., Raleigh, $257,418; grading and bridging 8.56 mi. S. P. 102, Beaufort Co., to H. M. Beasley, Lumberton, $45,472; grading 12.61 mi. S. P. 720, Caldwell Co., to W. C. Carter, Mebane, $61,473; grading and topsoiling 12.16 mi. S. P. 162, Nash Co., and grading 11.96 mi. S. P. 568, Moore Co., to J. F. Mulligan Constr. Co., North Wilkesboro, $44,642 and $40,814 respectively. Noted Apr. 10.

Fla., Pensacola—Escambia Co. 6 mi. of 18 ft. concrete road, near here, to Speed-Parker, Inc., Norton Bldg., Louisville, $187,000. Engrs. est. $200,000.

Alabama—State Hy. Dept., Montgomery, 14.293 mi. Helfin-Ashland Rd., Project 136, Clay Co., to Nixon & Phillips, Lineville, $137,213; 20.921 mi. Abbeville-Houston Co. Rd., Project 129, Sect. B, Henry Co., to W. M. Bentley, Bentley, $129,483. Noted Mar. 17.

Ala., Troy—Grading and asphalt paving 20 blocks North, Three Notch and other streets, 30 ft., to Couch Constr. Co., Troy, $300,000.

Miss., Belzoni — Street improvements, Projects A, B, C and D, to Owens & Gaddis, Jackson. Noted Mar. 13.

Tennessee—Tennessee Dept. Hys. & Pub. Wks., Nashville, grading and paving with waterbound macadam 5 mi. Tate Springs-Hamblen Co. Rd., Grainger Co., to W. C. Anderson, Harriman, $35,745, with cement concrete 8.32 mi. Blountsville-Bristol Rd., 18 ft., Federal Aid Project 98, Sullivan Co., to Smith Bros. Constr. Co., Amer. Exch. Bank Bldg., Dallas, Tex., $256,979, with gravel 19.03 mi. Henderson-McNairy Co. Rd., State Aid Project 159, Chester Co., incl. timber bridge and corrugated metal pipe, to G. Bourgois, Cairo, Ill., $147,956, with rock asphalt on crushed stone, 4.1 mi. road from Harriman to Federal Aid Project 85, 18 ft., State Aid Project 161, Roane Co., to J. F. Marcum Co., 103½ South Gray St., Knoxville, $110,517, with bituminous macadam on crushed stone, 8.72 mi. New Market-Knox Co. Rd., 16 ft., State Aid Project 133, Jefferson Co., to Baird-Eller Constr. Co., Nashville, $238,407, with bituminous concrete on concrete 3.68 mi. Nashville-National Cemetery Rd., 24 ft., Federal Aid Project 206, Davidson Co., to Texas Road Co., Dallas County Bank Bldg., Dallas, Tex., $145,467; grading 8.09 mi. Clinton-Knox Co. Rd., 18 ft., Federal Aid Project 82, Anderson Co., to Smith & Creech Constr. Co., Title Guaranty Bldg., St. Louis, Mo., $119,721, 3.07 mi. Morristown-Grainger Co. Rd., 16 ft., State Aid Project 160, Hamblen Co., to R. S. Freeman Co., Knoxville, $35,390, 5.13 mi. Smithville-White Co. Rd., De Kalb Co., to Congers & Elwood, McMinnville, $42,147; surfacing with bituminous macadam 3.5 mi. Overton Co.-Obey River Rd., 16 ft., State Aid Project 162, Pickett Co., to Boyd Williams, Murfreesboro, $43,111. Noted Mar. 20.

Tenn., Tullahoma—City will construct 10 mi. gravel and asphalt streets, by day labor. $40,000. Noted Nov. 15.

O., Canton—Bd. Control, paving 18th St. N. W., vertical fibre brick, to R. D. Salisbury, Akron, $34,704, engrs. est. $35,000; 19th St. N. W., trinidad asphalt, to Burd Constr. Co., 25th St. N. E., $28,889, engrs. est. $30,000; 8th St. N. W., texaco asphalt, to Wise Bros., Canton, $75,743, engrs. est. $80,000; Market Ave. S., asphalt, to Garaux Bros., Co., Massillon Rd., $119,581, engrs. est. $125,000. Noted Apr. 3.

O., Cleveland—Improving Nathaniel Ave., to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $19,373; Cleariare Rd., to H. G. Herring, Pavers Exch., $17,379. Work involves 5,590 lin.ft. stone curb and 4 in. drain tile gutter, 4,400 cu.yd. earth excav., 5,305 sq.yd. vitr. brick on concrete. Noted Apr. 10.

O., Ravenna — Portage Co., improving Sect. "A" Intercounty Highway 16, 20 ft. wide, brick, to J. L. McCormick, Ravenna, $141,937. Engrs. est. $150,000.

Ind., Albion—Noble Co., hard surfacing 6,448 ft. O. F. Miller Rd., 18 ft., to Twitchell & Barrows, Angola, $34,115, engrs. est. $40,225; Joseph McCoy Rd., to G. D. Adair, Albion, $28,600, engrs. est. $33,906.

Michigan — State Hy. Dept., Lansing, grading and surfacing with concrete 3.04 mi. State Trunk Line Rd. 13-44 Sects. A and B, St. Joseph Co., to W. H. Fredericks, Coldwater, $62,294. Noted Apr. 10.

Michigan — State Hy. Dept., Lansing, shaping and surfacing 4.25 mi. Federal Aid Project 63, Sect. B, Bay Co., 44,602 sq.yd. asphalt, concrete or bituminous concrete, to R. Miller, 502 West Jane St., Bay City, $67,210. Noted Mar. 13.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete, to Detroit Asphalt Paving Co., 20 McGraw Bldg., Coplin Ave. $8,668, Devereaux Ave. $5,980, Holmur Ave. $24,140, Homedale Ave. $15,347, Kentucky Ave. $14,530, Marlborough Ave. $15,829, Park Grove $26,754, Roselawn Ave. $35,946, Six Mile Rd. $70,075; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Glendale Ave. $29,147, Lawrence Ave. $20,729; to Cooke Asphalt Paving Co., 1260 Penobscot Bldg., Mitchell Ave. $39,067. Noted Apr. 3.

Mich., Detroit—Grading and paving alleys with one course concrete, to T. E. Currie, 20 McGraw Bldg., Alley 1859 $11,848, Alley 1860 $10,220; to R. J. Powelson & Co., 6415 Iroquois Ave., Alley 1861 $2,634, Alley 1863 $4,672, Alley 1866 $3,430, Alley 1868 $8,411, Alley 1877 $2,994; to Bishop & Weir, 1305 Lafayette Bldg., Alley 1862 $1,873, Alley 1865 $1,159, Alley 1869 $3,557, Alley 1870 $1,314, Alley 1872 $6,612, Alley 1874 $4,165; to Otis Cement Constr. Co., 806 Hammond Bldg., Alley 1864 $2,121, Alley 1871 $3,884, Alley 1873 $2,106, Alley 1875 $1,458, Alley 1876 $3,636, Alley 1878 $2,927.

Ill., Urbana—Champaign Co., 6.25 mi. Sect. 38-15 D, and 16.51 mi. Sects. 41 and 54-15D, to H. C. Finley Constr. Co., Hoopeston, $90,639 and $232,711 respectively, engrs. est. $86,725 and $232,342 respectively; 4.66 mi. Sect. 43-15D, to W. C. Meneely Co., Decatur, $65,096, engrs. est. $63,234; 8 bridges on Sects. 41B, 43B and 54B, to Acme Engineers, Decatur, $29,800, engrs. est. $34,427. Noted Mar. 27.

Wisconsin—State Hy. Comn., at div. office 2, Milwaukee, concrete surfacing, etc. Truesdale-Somers Rd., Federal Aid Project 378-A and Somers-Sylvania Rd., Federal Aid Project 378-B, to J. R. Griffith, 1500 9th St., Racine, $97,764; Lake Shore Rd., Sects. A and B, Sheboygan Co., to Peppard, Burrill & Lynch, 311 16th St., Milwaukee, $218,445. Noted Apr. 3.

Wis., Elkhorn — Walworth Co. concrete surfacing, etc., Whitewater-Elkhorn Rd., to Lampert Constr. Co., 11 Algoma St., Oshkosh, 97,852 sq.yd. concrete $1.06, 49,566 cu.yd. earth excav. $0.67, 5,000 cu.yd. loose rock $1.25, etc. Noted Apr. 3.

Ia., Alden—Paving 7,955 sq.yd. various streets, vibrolithic concrete, to Dearborn Constr. Co., Waterloo, $30,354. Noted Mar. 6.

Ia., Cedar Falls—Paving 35 blocks asphalt concrete, to Bryant Paving Co., 807 Black Hawk Bank Bldg., Waterloo, $2.27 per sq.yd., total $79,105.

Ia., Iowa City—For 34,000 sq.yd. brick and concrete paving, 19,000 lin.ft. concrete curbing, to W. Horriban Contg. Co., Iowa City, $124,000.

Ia., Nevada — Paving various streets, 40,300 sq.yd. concrete paving, 1,500 lin.ft. concrete header, 50 cast iron inlets, 46 catch basins, to O'Rourke Eng. Co., 1215 Mulberry St., Des Moines, $105,539. Noted Apr. 3.

Ia., Mt. Pleasant—Paving 53,680 sq.yd., brick and bitulithic concrete, 38,900 lin.ft. combined curb and gutter, 705 lin.ft. 8- to 15-in. vitr. storm sewers, etc., to McCarthy Constr. Co., Davenport.

Ia., Sioux City—Paving West 7th St., to Booth & Olson, 120 Virginia St., 21,400 sq.yd. at $2 per sq.yd., 6,280 sq.yd. between street car tracks $4. Noted Apr. 17.

Ia., Sioux City—Paving 4th St., 6 in. concrete, to P. C. Hansen & Son, 1422 Court St., Sioux City, 13,900 sq.yd. straight paving $2.06 per sq.yd., 3,965 sq.yd. between car tracks, $2.48.

Minn., Duluth — St. Louis Co., paving Thomson Hill Rd. from Worden St. north, 15,289 sq.yd. concrete, 6,000 lin.ft. concrete curb, to D. H. Clough & Co., 405 Palladio Bldg., $50,165; Eveleth-Gilbert Rd., 20,940 sq.yd. concrete, 8,900 lin.ft. concrete curb, to E. W. Coons Co., Hibbing, $57,688.

Minn., Grand Rapids—Itasca Co., Cutfoot Forestry Project, Div. B, 13.47 mi., 73,716 cu.yd. earth excav., 322 cu.yd. loose rock and 80 cu.yd. solid rock excav., etc., to S. H. Adams & Son, Long Prairie, $27,415; 2,178 lin.ft. portable culverts, to Berger Mfg. Co., 1701 North East Bway., Minneapolis, $2,502.

Minn., Mantorville—Dodge Co., Job 2303, State Rd. 1, 85,452 cu.yd. earth and 100 cu.yd. loose rock excav., to J. Brown Constr. Co., Madison Lake, $32,850; Job 2401, State Rd. 5, 66,500 cu.yd. excav., etc., one 50 ft. low truss bridge, to O'Malley & Irybour, 509 Globe Bldg., Minneapolis, $21,444. Noted Mar. 20.

Minn., St. Paul — H. W. Austin, city purch. agt., paving Mississippi Rrver Blvd. from end of present paving to Cretin and Portland Aves. to point 304 ft. west of West 7th St., 72,827 sq.yd. asphaltic concrete, 972 sq.yd. reset asphaltic concrete, etc., to Fielding & Shepley, 216 University Ave., $272,949; Phalen Parkway-East Lake Shore Dr. between bath-house and Larpenteur Ave., and Phalen Park Roadway from East Lake Shore Dr. at southerly end of lake to Maryland St., 16,598 sq.yd. Class A and 8,668 sq.yd. Class B asphaltic concrete, and 2,980 sq.yd. 7 in. rein.-con., to Hanlon & Okes, 338 Lumber Exchange, Minneapolis, $98,831. Noted Mar. 13.

Streets and Roads (Continued)

Minn., St. Paul—Ramsey Co., improving Upper Afton Rd., 32,014 cu.yd. excav., 64,421 cu.yd. overhaul, to Wewers & Mielke, St. Paul, (Daytons Bluff, Route 4), $14,109; culverts to Berger Mfg. Co., 1701 North East Bway., Minneapolis, $960. Bids rejected for gravel surfacing, will be done by force account together with improving Division St. from north city limits of White Bear village to Park Ave., in Bald Eagle. Noted Mar. 20.

Neb., Lincoln—Paving, curbing and guttering in Dists. 564, 412, 574 and 579, to Cochran Constr. Co., 1st Natl. Bank Bldg., $17,415; Dist. 573 to Roberts Constr. Co., 1st Natl. Bank Bldg., $8,073; Dist. 571 to Abel Constr. Co., Terminal Bldg., $8,979.

Minn., Sandstone—State Hy. Dept., St. Paul, grading and concrete paving State Project 1-44, Sect. 2, Div. A, Federal Aid 1, between here and Friesland, 33,000 cu.yd. excav., 51,000 sq.yd. paving to Nolan Bros., 18 North 2nd St., Minneapolis, $145,000; monolithic culverts to Morris Constr. Co., Morris, $17,400.

Kan., Topeka—Grading and surfacing 43 blocks, 2 in. asphaltic concrete on 7 in. concrete, to Kaw Paving Co., N. E. Bldg., Topeka, $261,625. Noted Apr. 3.

Neb., Omaha—Clerk Douglas Co., paving 2.49 mi. Federal Aid Project 20 C, Lincoln Highway, brick on concrete, to J. J. Parks Constr. Co., 4 Elks Bldg., $101,953.

Neb., Schuyler—Paving Dists. 2, 3 and 4, 18,788 sq.yd. sheet asphalt, 8,900 cu.yd. grading, to A. H. Reed Constr. Co., Omaha, $61,320.

Wyo., Casper—Improving East 2nd St., to Warren Constr. Co., Casper, 14,350 sq.yd. 4 in. bituminous concrete with 2 in. warrenite bitulithic top, $2.62, 2,600 cu.yd. excav., including preparing subgrade $1.45, etc., total $56,224.

Ark., Blytheville—Paving, concrete curbing, etc. 10 mi. various streets, to J. H. Rouse, Cape Girardeau, Mo. $100,000.

Ark., Blytheville—Mississippi Co., grading and concrete work Dist. 1, to H. H. Hall Constr. Co., East St. Louis, Ill., $100,000.

Ark., Little Rock—Paving and grading in Street Dist. 354, to M. D. L. Cook, 315 Southern Trust Bldg., 9,800 sy.yd. 2 in. warrenite $1.54, 4 in. concrete base $1.15, grading $0.75 per cu.yd.

Tex., Brownsville—Cameron Co. concrete paving 3 mi. road between Harlingen and Combes Sts., 18 ft., to Dodds & Wedegartner, San Benito, $78,348. Noted Mar. 20.

Tex., Ft. Worth—Paving 26,250 sq.yd. Vickery Blvd., 2½ in. brick on concrete, 9,920 cu.yd. curb and gutter, 5,540 cu.yd. excav., to Valient & Toomey, F & M Bldg., $2.75 per sq.yd.

Tex., Glen Rose—Somerval Co., grading, gravel surfacing and bridging 12.35 mi. State Highway 68, State Aid Project 474, 81,190 cu.yd. roadway, 46,158 cu.yd. borrow, 8,618 cu.yd. loose and 8,362 cu.yd. rock excav., 1,473 cu.yd. concrete, 134,240 lb. reinforcing and 152,500 lb. structural steel, 22,660 cu.yd. gravel, to Texas Road Co., Mercantile Bank Bldg., Dallas, $110,661. Noted Apr. 10.

Tex., Greenville—Hunt Co., gravel sub-base, waterbound macadam base and inverted penetration top on 5.3 mi. State Highway 39, State Aid Project 379, 10,344 cu.yd. crushed stone, 7,724 cu.yd. gravel sub-base, 2,068 cu.yd. crushed stone cover material, etc., to Cocke & Turner, Marshall, $30,500. Engrs. est. $75,000. Noted Feb. 14.

Okla., McAllister—Grading and paving 9 blocks Madison, Monroe and Harrison Sts., 11,830 sq.yd. concrete, 5,500 lin.ft. curbing, 3,200 cu.yd. excav., to Altman Rogers Co., McAlester, $38,860. Noted Apr. 3.

Wash., Seattle—Bd. Pub. Wks., paving 2nd Ave. N. et al., 173,000 sq.yd. 6-in. concrete, etc., to J. L. Smith, Pioneer Bldg., $52,933. Engrs. est $54,540. Noted Apr. 17.

Wash., Tacoma—Paving Portland Ave. from Bay St. to Fairbanks St., 15,840 sq.yd. concrete, 8,538 lin.ft. concrete curb and gutter, 4,048 cu.yd. earth excav., to J. Warter Sr., 631 North Fife St., $73,446. Engrs. est. $74,415. Noted Mar. 27.

Oregon—State Hy. Comn., Salem, grading 6.04 mi. Mill Gulch Sect. of Baker-Unity Highway, 60 ft., Baker Co., to A. D. Kern, Exch. Bldg., Portland, $151,008; grading and surfacing 2.33 mi. Roosevelt Highway, 60 ft. right-of-way, Curry Co., to Johnson Contg. Co., Exch. Bldg., Portland, cedar culverts $77,770.

California—State Highway Comn., Sacramento, improving 3.7 mi. highway between Milpitas and Coyote Creek, paving with asphaltic concrete and widening with waterbound macadam shoulders, to Federal Paving Co., New Standard Oil Bldg., San Francisco, $86,768 (using state plant). Noted Apr. 3.

Calif., Fullerton—Improving East Santa Ave., 207,836 sq.ft. 1½ in. Warrenite on 2½ in. bituminous, 544,305 sq.ft. 1½ in. pavement on 2½ in., 38,400 sq.ft. resurfacing, 9,442 ft. curbs, etc., to Los Angeles Paving Co., 2900 Santa Fe Ave., Los Angeles, $183,000.

Calif., Oakland—Improving portion 5th St., grading and paving, 2 in. Warrenite-bitulithic on 6 in. concrete, etc., to Bates & Borland, Bank of Savings Bldg., $80,265. Noted Jan. 31.

Calif., San Francisco—Improving 48th Ave. between Lawton and Santiago St., also Ortega St. between 48th Ave. and Great Highway, to A. J. Raisch Impvt. Co., 46 Kearney St., $116,684; 48th Ave. between Santiago and Taraval Sts., to C. B. Eaton, 715 Ocean Ave., $8,967. Former bids reconsidered. Noted Apr. 10.

Ont., Kitchener—S. Cassel, clk. Waterloo Co., 3 mi. concrete pavements, to Lichty Bros., Wellesley, paving from Heidelburg to Martins Corners $1.98 per sq.yd., and from Baden to Phillipsburg $2.04 and $2.36 per sq.yd., to Paul Bergmann, Waterloo, east of Preston, $2 per sq.yd.

Ont., London—Will build 5 mi. cement and asphalt roads by day labor, under direction W. P. Near, city engr. $300,000.

Ont., Ottawa—Asphalt paving Carling Ave., to O'Learys Ltd., Rideau St., $31,262.

Industrial Works

PROPOSED WORK

N. H., Manchester—Manchester Traction, Light & Power Co., 46 Hanover St., plans to improve existing water power plants at Garvins Falls on Merrimack River and Kellys Falls on Piscataquog River. Work incl. removing 4 horizontal units and substituting 2 vertical units, modifying building at Garvins Falls, and installing vertical turbine at Kellys Falls. Stone & Webster, Inc., 147 Milk St., Boston, engrs.

Mass., Brookline (Boston P. O.)—Machine Shop, etc.—G. O'Riordan, 5 Chelsea St., Charlestown (Boston P. O.), having plans prepared by H. F. Bryant, 234 Washington St., 1 story, 185 x 250 ft. machine shop and garage, brick and concrete, 161 Harvard St., here.

Mass., Lawrence—Machine Shop, etc.—City having plans prepared by J. Broadhurst, 45 Broadway, 2 story, 125 x 150 ft., machine shop and garage, brick and concrete, $100,000. W. T. Rochefort, mayor.

Mass., Peabody—Machine Shop—Danvers Bleachery having plans prepared by Smith & Walker, 80 Boylston St., Boston, 2 story, 50 x 150 ft., brick and concrete. $75,000. Noted Mar. 6.

N. Y., Brooklyn—Plant—Brooklyn Boro Gas Co., 2909 South 17th St., having plans prepared by Bloch & Hesse, archts. and engrs., 18 East 41st St., New York, 2 story, 200 x 200 ft., rein.-con. and brick, plain foundation, Coney Island Ave. $250,000.

N. Y., Colliers (Colliersville P. O.)—Station—New York State Gas & Electric Corp., 123 South Cayuga St., Ithaca, plans transformer station, here. $450,000-$500,000.

N. Y., Schenectady—Shop—Amer. Locomotive Co., North Jay St., plans pattern and carpentry shop. $350,000.

Pa., Lewistown—Plant—Overhead Door Co., Hartford, Ind., plans plant here. $40,000.

N. C., Winston-Salem—Freight Station—Southern Ry. Co., Southern Bldg., Wash., D. C., plans new freight station, here. $150,000.

Georgia—Mill—Vestal Lumber & Mfg. Co., Maryville Park, Knoxville, Tenn., purchased site in Southern Georgia and plans saw mill. $100,000.

La., Monroe—Paper Mill—Great Southern Lumber Co., Bogalusa, having preliminary plans prepared paper mill near here. $2,000,000.

Tenn., Chattanooga—Factory—Southern Cotton & Paper Co. plans additions to plant. $150,000. M. Reynolds, pres.

O., Canton—Factory—Canton Bridge Co. plans 1 story addition, Belden Ave. and 10th St. $40,000.

O., Cleveland—Laundry—White City Wet Wash Laundry Co., c/o H. Kaplin, 2616 East 65th St., having plans prepared by M. Altschuld, 5116 Woodland Ave., 1 story, 70 x 110 ft., brick and steel addition. $40,000.

O., Cleveland—Foundry—Bowler Fdry Co., 1688 Columbus Rd., had plans prepared by A. G. Simon, 716 Hippodrome Bldg., 1 story, 90 x 203 ft., 40 x 100 ft., 100 x 146 ft., brick and steel, East 49th St. $250,000.

Ind., Paoli — Plant — Columbus Wood Turning Co., Crothersville, plans plant here. $50,000.

Ind., Rockport—Plant—Rockport Sanitary Pottery Co. plans plant. $100,000.

Mich., Iron Mountain—Laundry—C. R. Jorgenson, having plans prepared by D. E. Anderson, Iron River, 2 story, 37 x 100 ft. brick and tile, plain foundation. $40,000.

Mich., River Rouge — Steel Mill — Ford Motor Co., Highland Park, (Detroit P. O.), having plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, 1 story, 544 x 1,320 ft. rein.-con., brick and steel mill.

Ill., Chicago—Printing Plant—W. F. Hall Printing Co., 466 West Superior St., having plans prepared by Weiss & Neistadt, 53 West Jackson Blvd., 1 story, 500 x 700 ft., fireproof, Diversey and Kilpatrick Sts. **$1,000,000.**

Wis., Manitowoc—Cold Storage—Northern Wisconsin Produce Co., 6th and Quay Sts., plans 2 story, brick and concrete, plain foundation, 6th St. $40,000.

Wis., West Bend—Shop—W. Warnkey, Main St., had plans prepared by Federal Eng. Co., engrs., 444 Milwaukee St., Milwaukee, 2 story, 34 x 72 ft., brick and concrete, plain foundation. $40,000.

Mo., St. Louis—Sub-station—Union Electric Light & Power Co., 12th and Locust Sts., plans rein.-con. and brick, equal to 2 story, 40 x 140 ft., 8th St. $160,000.

Mo., South West City—Light Plant—See "Waterworks."

Okla., Deer Creek—Power Plant—Blackwell High Line Co., Blackwell, plans power plant, here, with transmission lines to neighboring cities. $60,000. R. W. Porter, Blackwell, engr.

Okla., Frederick—Plant—City had preliminary plans made oil engine electric light plant. Election soon to vote on $75,000 bonds. Engineer not selected.

Okla., Oklahoma City—Service Station—Ford Motor Co., Highland Park, Detroit, Mich., had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 1 story, 100 x 200 ft., brick, steel and concrete addition, plain foundation, Main and Francis Sts.

Okla., Texola—Plant—See "Waterworks."

Oregon—Sub-station, etc.—See "Unclassified under Oregon and Washington."

Calif., Princeton—Substation—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, having plans prepared, Rice substation, rein.-con., here. $40,000. Private plans.

Calif., Sacramento—Gas Plant—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, having preliminary plans prepared extensions to gas plant, 2nd and I Sts., here. To exceed $50,000. Private plans.

Calif., San Diego—Crushing Plant—See "Buildings."

Calif., Santa Barbara—Power Plant—City had estimates made hydro-electric power plant, at Gibraltar Lake, one unit station delivering 180 kw. per day, utilizing 3 m.g. with 499 ft. head. $40,000. H. Nunn, city mgr.

Ontario—Provincial Government, Ottawa, voted $22,000,000 to Hydro Electric Power Comn. of Ontario, 190 University Ave., Toronto, for hydro-electric power development and construction this year as follows: Chippawa-Queenston plant, two 55,000 hp. units, generators, turbines, Niagara System, $13,000,000; investigation, survey and design of 2nd Queenston-Chippawa Canal, $100,000; steam power plant construction as standbys, $5,000,000; Morrisburg development in connection with St. Lawrence Canal Scheme, $1,500,000; Georgian Bay System, $750,000; Muskosh River Development, $550,000; Thunder Bay System including 2 new 12,500 hp. units at Cameron Falls, and transmission line to Port Arthur and Ft. William, $2,550,000; Central Ontario System, $1,400,000; Nipissing System, $180,000; Rideau System, $100,000; Ottawa System, $780,000. F. A. Gaby, ch. engr.

Ont., Galt—Factory—Galt Shoe Co., A. M. Stuart, mgr., plans to rebuild factory recently destroyed by fire. $125,000.

Ont., Peterboro—Factory—Canadian General Electric Co., 212 King St. W., Toronto, plans 3 story and basement, rein.-con.,

Industrial Works (Continued)

brick and steel addition, plain foundation. $400,000. Private plans.

Ont., Sandwich—Substation—Ontario Hydro Electric Power Comn., 190 University Ave., Toronto, plans electric substation, here. $150,000. F. A. Gaby, ch. engr.

Ont., St. Thomas—Roundhouse and Machine Shop—Canadian Natl. Ry., New Union Sta., Toronto, having plans prepared and takes bids about Apr. 15, new roundhouse and machine shops, cement. $220,000. S. H. Stone, c/o owner, engr.

Ont., Toronto—Substation—Toronto Transportation Comn., Bd. Trade Bldg., plans 1 story, rein.-con., brick and steel addition, plain foundation, Yonge St. $200,000. Private plans.

BIDS DESIRED

Mass., Boston—Substation—J. R. Worcester Co., archts., 79 Milk St., taking bids substation 72, 5 story, 66 x 80 ft., brick and steel, for Edison Electric Illuminating Co., 70 State St.

Mass., Worcester — Factory — H. L. Meacham, archt., 571 Main St., taking bids 2 story, 60 x 120 ft., brick and steel, Derby St., for Star Auto Radiator Repair Wks., 33 Derby St.

N. Y., Brooklyn—Housing Station, etc.—Apr. 21, by Comrs. of Plant & Structures, Municipal Bldg., New York, housing station, incl. small repair shop, 2nd Ave. and 11th St., here.

N. Y., New York—Housing Station, etc.—Apr. 21, by Comrs. Plant & Structures, Municipal Bldg., housing station and destructor plant, rein.-con., brick and steel, plain foundation, 139th St. and Harlem River.

Pa., Altoona — Power House — Pennsylvania R.R. Broad St. Sta., Phila., taking bids 1 story, 40 ft. high, 52 x 52 ft. brick and steel power house here. W. H. Cookman, c/o owners, engr.

Pa., Bloomsburg — Plant — Apr. 25, by Ballinger Co., archts., 12th and Chestnut Sts., Phila., 2 story and basement, 70 x 180 ft. rein.-con., brick and steel, plain foundation, for Magee Carpet Co., Bloomsburg. $200,000.

Pa., Pittsburgh—Laundry—Pearl Laundry Co., 2015 Wyandotte St., taking bids 3 story and basement, brick and steel, Wyandotte St. $150,000. Private plans.

O., Cleveland—Factory—Cleveland Heater Co., 1900 West 112th St., taking bids 1 story, 100 x 250 ft., brick and steel addition. $100,000. G. S. Rider & Co., Century Bldg., archts. Noted Jan. 31.

Mich., Detroit—Factory—A. R. Morison, archt., 2210 Park Ave., taking bids 3 story, rein.-con. and brick bakery factory, 4th Ave., for New England Pie Co., 2002 4th Ave. $50,000.

Mich., Detroit—Factory—Smith, Hinchman & Grylls, archts., 800 Marquette Bldg., taking bids and open same about Apr. 21, 1 story, 100 x 140 ft., rein.-con., brick and steel, plain foundation, West End Ave., for Kelsey Wheel Co., 3600 Military St. $50,000.

Ill., Chicago — Factory — Lockwood, Greene & Co., engrs., 38 South Dearborn St., will let separate contracts 2 story and half-basement, 126 x 414 ft. finishing building, 6 story, 48 x 128 ft. dope building and 48 x 53 ft. clay storage building, rein.-con., for Western Shade Cloth Co., 22nd and Jefferson Sts. Noted Mar. 6.

Ill., Rock Island—Plant—Cervin & Horn, archts., 310 Safety Bldg., taking bids and open same about Apr. 20, 2 story and basement, 68 x 150 ft., rein.-con., brick and stone, for John Potter Publishing Co., 1624 2nd Ave. $150,000.

Ia., Cedar Rapids—Plant—Apr. 21, by Gazette Co., 2 story and basement, 60 x 140 ft., rein.-con., brick, tile and stone, 3rd Ave. and 5th St. E. $90,000. B. Rugh, 119½ 2nd Ave., archt. Noted Jan. 10.

Minn., Winona—Plant, etc.—Wisconsin Light & Power Co., R. M. Howard, mgr., taking bids addition to boiler plant, brick and steel, plain foundation. Mead & Seastone, Journal Bldg., Madison, Wis., engrs. Noted Mar. 13.

CONTRACTS AWARDED

Mass., Malden — Manufacturing — Potter Drug & Chemical Corp., 129 Medford St., 2 story and basement, 52 x 65 ft., brick, Medford St., to J. H. Whitcomb Constr. Co., 6 Beacon St., Boston, $54,000. Archts. est. $55,000.

Conn., Stamford—Plant—H. E. Verran Co., 19 Union Sq., New York City, plant for dyeing and finishing silks, etc., here, to J. W. Ferguson, 152 Market St., Paterson, N. J. Archts. est. $200,000.

R. I., North Smithfield (Woonsocket, P. O.)—Plant—Branch River Wool Combing Co., 1 story, 238 x 392 ft. wool plant, 3 story and basement, 95 x 170 ft. storage plant, pump houses, boiler house and garage, etc., Branch Village, to Turner Constr. Co., 242 Madison Ave., New York City, $600,000. Archts. est. $1,000,000. Noted Apr. 10.

R. I., Pawtucket—Factory—Collyer Insulated Wire Co., 249 North Main St., 1 story, 60 x 120 ft., to Rowley Constr. Co., 260 Central Ave., $45,000.

N. Y., New York—Plant—M. F. Westergreen, Inc., 213 East 144th St., masonry contract 2 story, 27 x 100 ft., East 144th St., to Hubener & Escher, 748 Melrose Ave., $30,000. All other work being done by owner by separate contracts. Total cost about $200,000.

Pa., Morrisville—Plant—C. Warner Co. I.O.O.F. Bldg., Wilmington, Del., 3 story, 40 x 40 x 40 x 160 ft. sand and gravel plant, brick and steel, plain foundation, to W. Steele & Sons Co., 219 North Broad St., Phila. $500,000.

Pa., Phila.—Garage—J. W. Vandergrift, 1017 Cambria St., 1 story, 63 x 255 ft., brick and steel, plain foundation, Cambria and 12th Sts., to Robbins Contg. Co., 808 North 7th St.

Pa., Phila. — Plant — Pittsburgh Plate Glass Co., 11th and Arch Sts., plant, Indiana St., to W. Steele & Sons Co., 219 North Broad St., $50,000.

Pa., Pittsburgh—Factory—Wolverine Mfg. Co., Page and Fontilla Sts., 3 story and basement, 80 x 160 ft., rein.-con., Western Ave., to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland, O. $100,000.

W. Va., Parkersburg — Plant — Seward Wire Co., 1 story addition, to Plate & Vogel, Parkersburg. Archts. est. $40,000.

Ala., Tallassee — Mill — Mount Vernon Woodberry Mills, 4 story, 144 x 367 ft. rein.-con. mill, 1 story, 80 x 100 ft. opener room and 1 story warehouse, to Potter & Shackelford, Gallivan Bldg., Greenville, S. C.; 150 tenement houses, to Daniel Lumber Co., LaGrange, Ga. Noted Feb. 28.

Ky., Louisville—Assembly Plant—Ford Motor Co., Detroit, Mich., assembly plant, to C. A. Koerner Co., 3183 East Burnett St., Louisville, about $700,000; 1,000 tons structural steel, to McClintic-Marshall Co., Oliver Bldg., Pittsburgh, Pa. Total est. $1,500,000. Incorrectly noted in Mar. 20 issue.

Ind., Macksville—Power Plant—Indiana Electric Corp., Guarantee Bldg., Indianapolis, power plant, here, to Stone & Webster, 147 Milk St., Boston. Archts. est. $200,000.

Ill., Plymouth — Plant — Local Syndicate c/o F. M. Connolly, archt., 432 Peoples Bank Bldg., Galesburg, will build rock crushing plant, incl. power plant, here, by day labor. $150,000. Noted Jan. 31.

Wisconsin — Substation — See "Unclassified."

Wis., Chippewa Falls — Laundry — St. Josephs Hospital, 2 story, 50 x 52 ft., brick and rein.-con., plain foundation, to Ischoff-Durck Camastral Co., Chippewa Falls. Archts. est. $50,000. Noted Mar. 20.

Wis., Milwaukee—Plant—Pittsburg Plate Glass Co., 205 Lake St., 5 story and basement, 90 x 140 ft., brick and concrete, plain foundation, to Dahlman Constr. Co., 456 Bway. Noted Mar. 13.

Wis., Milwaukee—Foundry—Prime Mfg. Co., 653 Clinton St., 1 and 2 story, 82 x 160 ft., brick and steel, plain foundation, Clinton St., to P. Riesens Sons, 1018 Humboldt Ave. Steel previously let. Noted Mar. 6.

Wis., Sheboygan — Factory — D. & D. Hanger & Panel Co., 722 Jefferson Ave., 1 story, 70 x 100 ft., rein.-con., plain foundation, to W. Guenther Sons Co., Sheboygan. $50,000. Noted Mar. 13.

Wis., South Milwaukee—Factory—Line Material Co., 2 story, 60 x 185 ft., brick and timber addition, plain foundation, to Bentley Bros., 808 South Pierce St., Milwaukee. $55,000.

Minn., Duluth—Plant—Dominion Tar and Chemical Co., 59th Ave. W., 40 x 50 ft. still house, 2 story, 45 x 60 ft. tar products plant, 1 story, 25 x 40 ft. office, and 16 pitch containers from 16 to 40 ft. circumference, brick and steel, to E. J. Zaufft, 5613 Grand Ave., $50,000.

Mont., Livingston—Boiler Shops—Northern Pacific Ry. Co., 5th and Jackson Sts., St. Paul, Minn., 1 story, 144 x 186 ft., brick, concrete, etc., here, to C. Skooglun, 502 Ryan Bldg., St. Paul, Minn., $100,000.

Mo., St. Louis — Factory — Hellmuth & Hellmuth, archts., DeMenil Bldg., general contract 3 story and basement, 60 x 100 ft., rein.-con. and brick, Theresa and Gratiot Sts., to J. H. Bright Contg. Co., Arcade Bldg., for Steelcote Mfg. Co., 700 North Main St. Archts. est. $50,000. Noted Jan. 31.

Calif., Fresno—Rock Crushing Plant—Service Rock Co., Patterson Bldg., rock crushing plant, (railroad $40,000), bunkers, etc., to R. F. Felchlin Co., Patterson Bldg., total cost $200,000. Noted Dec. 6.

Tex., Taylor—Creamery—R. Thompson will build 1 story brick and concrete creamery, by day labor. $45,000. H. F. Kuehone, Littlefield Bldg., Austin, archt.

Calif., Los Angeles — Factory — Weber Show Case & Fixture Co., 316 South Los Angeles St., will build brick and timber, South Park Ave., by day labor under supervision of Hamm & Grant, Inc., engrs., Ferguson Bldg. $250,000. Noted Dec. 13.

Calif., Oakland—Factory—Magnavox Co., 2725 East 14th St., 1 and 2 story, rein.-con. and brick, to F. E. Nelson, 3090 King St., Berkeley, $50,000.

Calif., Pasadena—Factory—Wickercraft Furniture Co., c/o Hamm & Grant, Inc., engrs., Ferguson Bldg., Los Angeles, will build 4 story, rein.-con. and heavy mill construction, South Raymond Ave., here, by day labor, under supervision of engineers. $50,000. Noted Mar. 27.

N. S., Sheet Harbor—Mill—Albany Perforated Wrapping Paper Co., 1273 Bway., Albany, N. Y., 72 x 185 ft. rein.-con. and brick, here, to Parsons Co. Ltd., Moncton, N. B.

Buildings

PROPOSED WORK

N. Y., New York — Apartment — L. H. Murray, c/o J. E. R. Carpenter, archt. and engr., 598 Madison Ave., soon takes bids 14 story, brick, steel and stone plain foundation, 1170 5th Ave. $750,000.

O., East Liverpool—Memorial Home—M. Patterson soon takes bids 3 story and basement, brick, concrete and steel, East 4th St. $160,000.

O., Zanesville—Hotel—P. J. Flood soon takes bids 5 story, 27 x 67 ft., brick and steel, 430 Market St. $150,000 or more. W. S. Jameson, Zanesville, archt.

Ill., Clinton—School—School Dist. 60, c/o W. F. Gray, soon takes bids 2 story and basement, brick and stone. $150,000. Lewis & Dougherty, 35 North Dearborn St., Chicago, archts.

Ill., Rockford—Bank and Office—Security Natl. Bank soon takes bids 5 story and basement, 42 x 78 ft., rein.-con., brick, stone and steel, 14th St. Peterson & Johnson, Swedish-American Bldg., archts.

Kan., Kansas City—Court House—Wyandotte Co. soon takes bids for competative plans court house. $1,000,000. W. L. Steel, 502 Union Bank Bldg., Sioux City, Ia., consult. engr. Noted Mar. 31.

Kan., Lawrence—Hotel—W. C. Houston takes bids Apr. 25, 5 story and basement, 110 x 117 ft., rein.-con., brick and stone. $180,000. W. E. Hulse Co., Stamey Bldg., Hutchinson, archt. Noted Mar. 13.

BIDS DESIRED

N. Y., Astoria (Long Island City, P. O.)—Theatre and Office—S. Ageloff, 26 Court St., Brooklyn, will build brick, steel and stone, plain foundation, 2nd Ave. near Ditmars Ave., here. Owner will do general work and award sub-contracts. $750,000. M. Klein, 39 Graham Ave., Brooklyn, archt. and engr.

N. Y., Jamaica—Office—H. O. Falk, c/o Shampan & Shampan, archts. and engrs., 189 Montague St., Brooklyn, will build 6 story, 61 x 110 ft., brick, steel and stone, plain foundation, Fulton St. $250,000. Work will be done by separate contracts under supervision of architects.

N. Y., Mt. Pleasant—Hospital—May 5, at office of F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, White Plains, Grasslands Hospital, here. Walker & Gillette, 128 East 37th St., New York City, archts.; adv. E. N.-R. Apr. 17. Noted Mar. 6.

N. Y., New York—Market, etc.—May 14, by E. J. O'Malley, comr. Pub. Markets, Municipal Bldg., wholesale market and storage building, Exterior and East 151st Sts., for Bronx Terminal Market.

N. Y., New York—School—May 13, by Bd. Educ., 500 Park Ave., brick, stone and steel addition to High School of Commerce, plain foundation, West 65th St. and Amsterdam Ave. $1,000,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, engr. and archt.

N. Y., Ripley—High School—Apr. 25, by Bd. Educ., new high school. To exceed $150,000. O. R. Johnson, 610 Fenton Bldg., archt.

Buildings (Continued)

N. J., Asyla (Grenloch, P. O.)—Hospital—May 6, by city of Camden, c/o A. Moses, archt., Temple Bldg., Camden, group of buildings for tuberculosis hospital, here.

Pa., Homestead—Theatre—J. E. Stahl, 207 8th Ave., taking bids 3 story and basement, 75 x 110 ft., brick, steel and tile, 8th Ave., $150,000. V. A. Rigamount, State Theatre Bldg., Pittsburgh, archt.

Pa., Woodland—School—Apr. 24, by V. G. Henderson, pres. Bradford Twp. School Dist., 3 story and basement, 100 x 110 ft., brick and steel. $150,000. Howard & Hatcher, Du Bois, archts.

Md., Baltimore—Apartment—Apr. 19, by Parker, Thomas & Rice, archts., Union Trust Bldg., 4 story, 69 x 112 ft., brick, plain foundation, Charles St. and Wyndhurst Rd., for S. Olivier, Standard Oil Bldg. $150,000. Noted Mar. 6.

W. Va., Clarksburg—Church—Church of Immaculate Conception taking bids and opens same about Apr. 21, new church. $250,000. E. J. Weber, Knights of Columbus Bldg., Pittsburgh, Pa., engr. Noted Apr. 10.

Fla., Tampa — Office — V. M. Antuono, 1316 Spring St., and F. O. Adams, Jr., resident archt., Grand Theatre, taking bids 16 story, brick and steel, Lafayette St. Hentz, Reid & Adler, 92½ North Forsyth St., Atlanta, Ga., archts.

Tenn., Memphis—High School—Apr. 28, by Bd. Educ., Lyceum Theater Bldg., North Side High School, 3 story, 1,000 seating capacity, Manassas St. and Saffarans Ave. $250,000. C. P. Pfeil, and G. Awsumb, 1403 Union & Planters Bank Bldg., Memphis, archts. Noted Jan. 10.

O., Akron—City Hall—Apr. 21 by Bd. Control, 8 story, brick and steel, South High St. $900,000.

O., Cleveland—Apartment Hotel—Braverman & Havermaet, archts., taking bids 6 story and basement, brick and rein.-con., East 102nd St. near Euclid Ave., for Shelton Apartment Co., c/o J. J. Klein, Engineers Bldg. $350,000.

O., Cleveland Heights (Warrensville P. O.)—School—St. Anns Roman Catholic Church, 2115 Coventry Rd., taking bids 3 story and basement, 65 x 192 ft., brick, steel and concrete, Coventry Rd. $250,000. George Hunt Ingraham, 2138 B. F. Keith Bldg., Cleveland, archt.

Ind., Indianapolis — Memorial — May 15, by Walker & Weeks, archts., 1900 Euclid Ave., Cleveland, O., Building B of first unit, 4 story, 60 x 150 ft., stone and steel, for Indiana World War Memorial, M. S. Sonntag, pres. Noted May 10.

Mich., Ecorse—School—A. Des Rosiers, engr. and archt., 620 McKerchey Bldg., Detroit, taking bids and opens same about Apr. 21, 2 story and basement, 110 x 115 ft., rein.-con., brick and stone, plain foundation, Bonzane St., here, for St. Francis Xavier Church, Ecorse. $150,000.

Mich., Grand Rapids — Office — Smith, Hinchman & Grylls, archts., 800 Marquette Bdg., Detroit, taking bids and opens same about Apr. 21, 4 story and basement, rein.-con., brick, stone and steel, plain foundation, Division and Fountain Sts., for Michigan State Telephone Co., Grand Rapids. $200,000.

Mich., Highland Park (Detroit, P. O.)—Office—Bonnah & Chaffee, archts., 528 Farwell Bldg., Detroit, taking bids and opens same about Apr. 25, 10 story and basement, 60 x 75 ft. rein.-con. and brick, plain foundation, Woodward Ave., for C. R. Murphy, 812 Free Press Bldg., Detroit.

Ill., Chicago—Apartment—R. F. France, owner and archt., 155 North Clark St., taking bids 3 story and basement, 100 x 110 ft., fireproof, Winchester and Cullom Sts. $150,000.

Ill., Chicago—Apartment—J. H. Klafter, archt., 127 North Dearborn St., taking bids 3 story, 100 x 125 ft., fireproof, 3115-21 Warren St., for Brown & Levin, c/o archt. $200,000.

Ill., Chicago—Apartment—Owner c/o M. Golstein, 801 West Madison St., taking bids 3 story, 100 x 125 ft., fireproof, Gladys and Kilburn Sts. $175,000. E. Steinborn, 111 North Dearborn St., archt.

Wis., Green Bay—Community—Apr. 28, by H. A. Foeller and H. W Carr, archts., Nicollet Bldg., 3 story and basement, 117 x 180 ft., concrete, brick and stone, plain foundation, for Green Bay Columbus Club, c/o C. K. Bong, 114 South Jefferson St. Noted Feb. 8.

Wis., Lancaster—High School—May 1, by School Bd., 2 story and basement, 90 x 130 ft., brick, tile and concrete, plain foundation. $175,000. Parkinson & Dockendorff, Linker Bldg., La Crosse, archts. Noted Mar. 27.

Wis., Milwaukee — Apartment — E. G. Schroeder Co., archts., 405 Bway., taking bids 3 story, brick, semi-fireproof, plain foundation, Cramer St., for Oakridge Realty Co., c/o A. Straus, 97 Wisconsin St. $150,000.

Wis., Milwaukee—Garage—Tharinger & Bruecker, archts., 496 Cramer St., taking bids 2 story, 60 x 198 ft., brick and concrete, plain foundation, Windlake Ave., for Tobin-Sutton Co., 636 Lincoln Ave. $150,000.

Wis., Racine—Church—St. Patricks Congregation, W. F. McCarth, pastor, 1109 Douglas Ave., and Barry, Byrne & Ryan, archts., 104 South Michigan Ave., Chicago, taking bids 2 story, 98 x 100 ft., brick, tile and terra cotta, plain foundation. $150,000. Noted Feb. 21.

Wis., Sheboygan—Store and Office—W. C. Weeks, archt., 720 Ontario Ave., taking bids 2 story, 85 x 100 ft., brick, rein.-con. and steel, for H. C. Prange, 731 North 8th St. Noted Mar. 20.

Wis., Wauwatosa—Convent—Backes & Pfaller, archts., 216 West Water St., Milwaukee, taking bids 2 story and basement, 102 x 130 ft., brick and tile, plain foundation, 59th St., for Dominican Sisters, R. D. Hales Corners. $150,000.

Minn., Northfield—Science Hall—May 1, by St. Olafs College, P. O. Holland, bus. mgr., 3 story and basement, 84 x 164 ft., rein.-con., brick and tile, $250,000. Coolidge & Hodgdon, 134 South LaSalle St., Chicago, archts. Noted Nov. 9, 1922.

Minn., St. Paul—Hospital—Apr. 25, by State Bd. Control, Capitol, 3 story and basement, rein.-con., brick and tile addition, to State Hospital for Crippled Children, 1003 Ivy St. $150,000. D. F. Mullen, secy. C. H. Johnston, 715 Capital Bank Bldg., archt. Noted Feb. 22, 1923.

Neb., Beaver City—High School—Apr. 28, by Bd. Educ., 2 story and basement, 67 x 100 ft., brick and stone. $150,000. Fiske & Meginnis, 533 Bankers Life Bldg., Lincoln, archts.

Colo., Denver—Grade School—Apr. 23, by Bd. Educ., School Administration Bldg., 2 story, 80 x 254 ft., rein.-con. and brick, plain foundation. $275,000. R. K. Fuller, Foster Bldg., archt.

BIDS RECEIVED

N. Y., New York—Schools—W. H. Gompert, archt., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 126, Van Alst Ave., in Astoria, from O'Day Constr. Co., 1639 Bway., New York City, $1,001,464; P. S. 82, West 176th St., in New York, from M. F. Kelly Co., Inc., $777,000; P. S. 83, Rhinelander Ave., in New York, from Watt & Sinclair, Inc., 348 West 27th St., New York, $745,494; P. S. 217, Newkirk Ave., in Brooklyn, from G. F. Driscoll Co., 115 Schermerhorn St., Brooklyn, $743,900; P. S. 220, 9th Ave., in Brooklyn, from Waters & Coxwell, $973,000; P. S. 216, Ave. X, in Brooklyn, from Dooley Stapleton Corp., $772,700; bids for above 6 buildings awarded as 1 contract, from T. A. Clarke Co., 122 Livingston St., Brooklyn, $5,187,000. Noted Mar. 13 and 20.

Ky., Louisville — Theatre, Office and Apartment—Mammouth Realty Co., 6 story and basement, 70 x 150 ft., from Platoff & Bush, 122 West Liberty St., about $225,000. Noted Feb. 28.

O., Parma (Berea, P. O.)—Schools—Bd. Educ. 2 grade schools and 1 high school, 1 story each, brick, steel and concrete, from W. A. Franklin Sons Co., 375 Cuyahoga St., Akron, $145,000. Noted Mar. 27.

Minn., Minneapolis — Administration — State Bd. Control, St. Paul, Apr. 8, 4 story and basement, rein.-con., brick and tile, at State University, here, from J. and W. A. Elliott Co., 906 Lumber Exch., $419,949. Noted Mar. 27.

Minn., St. Paul — School — Dept. Educ., Apr. 8, 3 story and basement, rein.-con., brick and tile addition to school, York St. and Walsh Ave., general contract from Federal Constr. Co., 38 East 4th St., $151,000.

Tex., Houston — Library — General contract 3 story and basement, 65 x 200 ft., brick, stone and concrete, Smith and McKinney Sts., from Southwestern Constr. Co., West Bldg., $243,000.

Calif., Los Angeles—Hall—Los Angeles Co., fireproof, concrete and brick, general contract, Hall of Justice, from Clinton Constr. Co., Stock Exch. Bldg., $856,000. Noted Mar. 20.

CONTRACTS AWARDED

Mass., Springfield—Business—A. Joseph & Bro., 115 Lyman St., 4 story and basement, 65 x 93 ft., brick, concrete and steel, Taylor and Chestnut Sts., to E. F. Carlson, 244 Main St., Springfield, $15[illegible].

Mass., Springfield—Office—H. J. Perkins, Dwight St., will convert 4 story warehouse into office, Lyman and Chestnut Sts., by day labor under supervision of Smith & Annable, archts., 145 State St. $1[illegible].

Conn., Hartford — Office — D'Esopo Real Estate Corp., 647 Main St., alterations to office, Sheldon and Main Sts., to J. D'Esopo, 132 Temple St., $230,000. Noted Sept. 20.

N. Y., Brooklyn—Apartment—J. Klein, c/o E. M. Adelsohn, archt. and engr. 1778 Pitkin Ave., will build brick, steel and stone, plain foundation, Montgomery St., by day labor. $250,000.

N. Y., Brooklyn—Apartments—B. Levy Corp., c/o Reilly & Hall, archts. and engrs., 405 Lexington Ave., two 5 story, brick, steel and stone, plain foundations, Ridge Blvd., by day labor. $250,000 each.

N. Y., Dolgeville — School — Bd. Educ., general contract grade and high school, South Main St., to O. L. Weidman, Dolgeville, $112,880; heating, to Mohawk Valley Heating Co., 35 Genesee St., Utica, $26,967. Noted Mar. 27.

N. Y., Hamburg—High School—Bd. Educ. 2 story and basement, 150 x 250 ft., rein.-con. and brick, Pleasant Ave., to Felton Constr. Corp., 1450 Michigan Ave., Buffalo, to exceed $400,000. Noted Jan. 31.

N. Y., New York—High School—Roman Catholic Archdiocese of New York, 452 Madison Ave., brick, steel and stone, plain foundation Lexington Ave., to Niewenhouse & Co., Inc., 316 East 161st St. Archts. est. $500,000.

N. Y., New York — Office and Bank — Seven Hundred Five 5th Ave. Corp., c/o W. Cruikshank Sons, 85 Liberty St., brick, steel and stone, plain foundatio, 705 5th Ave., to W. Crawford Co., 7 East 42nd St. Archts. est. $1,250,000.

N. Y., Oriskany—Infirmary—Order of Eastern Star, structure for infirmary to Waldo Griffiths, Mayro Bldg., Utica. Archts. est. $975,000.

N. Y., Rome—Lodge—Bd. Trustees Order of Eastern Star, general contract for lodge, to W. Griffiths, 261 Genesee St., Utica, plumbing, to C. H. Jackson Co., Inc., 118 North Washington St., $140,000.

N. Y., Rome — Nurses and Employees Home—Bd. Mgrs. Rome State School, general contract 3 story and basement, 60 x 160 ft. with 80 ft. wing, concrete, brick and steel, to Dean, Duffy & Liechti, Olean, $181,918; plumbing, to C. H. Jackson, Inc., 118 North Washington St., $25,126. Noted Jan. 31.

N. Y., Solvay (Syracuse P. O.)—High School—Bd. Educ. Junior High School, Gertrude and Hazard Sts., to Shane Constr. Co., Herald Bldg., Syracuse, $500,000. Noted Mar. 20.

N. Y., Utica—Church—Building Com. Westminster Presbyterian Church concrete, brick, steel and stone, to E. Bedford, 48 John St., Ilion. $250,000.

N. J., Newark—School—Bd. Educ., City Hall, Broad St., school for crippled children, brick, steel and stone, plain foundation, Bloomfield Ave. and Ridge St., to Essex Constr. Co., Hackett St., $158,975. Noted Mar. 13.

N. J., Paulsboro — Office, Research Laboratory and Annex—Vacuum Oil Co., Brown Bros. Bldg., Phila., 3 story, 70 x 140 ft., 3 story, 50 x 70 ft., and 1 story, 80 x 155 ft., here, to White Constr. Co., 95 Madison Ave., New York City.

Pa., Chester—Business—McCrory Stores Corp., 1107 Bway., New York City, 2 story and basement, 60 x 100 ft., 611 Edgemont Ave., to W. R. Provost, Crozier Bldg. Archts. est. $150,000.

Pa., Easton—High School—School Bd., 30 North 2nd St., brick, steel and stone, Northampton, 21st and Spring Garden Sts., general contract to T. M. Gibbs Constr. Co., 215 South Broad St., Phila., $587,850; heating and ventilating also plumbing to E. P. Saeger, 1401 Turner St., Allentown, $73,888 and $36,888 respectively. Noted Apr. 3.

Pa., Jenkintown—Bank—H. Trumbauer, archt., Land Title Bldg., Phila., 2 story and basement, 57 x 151 ft. brick and steel, plain foundation, to F. L. Hoover & Sons, 1023 Cherry St., Phila., for Jenkintown Bank & Trust Co. Noted Mar. 20.

Pa., Phila.—Hospital—Samaritan Hospital, Broad and Ontario Sts., 3 and 4 story and basement, 44 x 225 ft. and 3 story, 35 x 50 ft., brick and steel, plain foundation, Broad and Ontario Sts., to Wark Co., 16th and Walnut Sts.

Pa., Pittsburgh—Clubhouse—Y. M. C. A., Pittsburgh, 2 and 3 story and basement,

Buildings (Continued)

Dithridge St., to W. T. Grange Constr. Co., Keenan Bldg. Archts. est. $150,000.

Pa., Pittsburgh — Exchange — Bell Telephone Co., 17th St. and Parkway, Phila., 3 story and basement, Schenley Pk., to W. F. Trimble & Sons, 1719 Penna. Ave. Archts. est. $150,000.

D. C., Wash.—Library—Natl. Episcopal St. Albans, library to G. Fuller Co., Munsey Bldg., $350,000.

D. C., Wash.—Store—Lansburgh & Bros. Dept. Store, 420 7th St. N. W., addition to store to Parsons & Hyman, Inc., Equitable Bldg. $1.000,000.

W. Va., Huntington—Lodge—Huntington Lodge 64, I. O. O. F., 4 story and basement, 52 x 150 ft., 3rd Ave. and 10th St., to C. W. McNulty, 208 4th St., Huntington. Archts. est. $150,000. Noted Apr. 24.

O., Cincinnati — Store and Loft — L. Baker, 1605 Union Trust Bldg., 12 story, 90 x 168 ft., rein.-con., 9th and Sycamore Sts., to Ohio Constr. & Building Co., Burnet Ave. Archts. est. $800,000.

O., Cleveland — Commercial, Apartment and Garage—F. W. Staatny, 12704 Woodland Ave., 1 and 2 story and basement, 100 x 120 ft., 12631 Woodland Ave., to O'Connell & Baurle, 2041 East 115th St. Archts. est. $150,000.

O., Cleveland—Garage—Eagle Improvement Co., c/o H. D. Hughes, archt., Citizens Bldg., 2 story and basement, 100 x 115 ft., rein.-con., brick and steel, Eagle Ave., to S. W. Emerson Co., Union Bldg. Archts. est. $150,000.

O., Cleveland — Hotel — W. J. Cutler, Turkish Baths, 41 Public Sq., 6 story, 47 x 176 ft., rein.-con., brick and steel, 1112 Prospect Ave., to Crowell & Little Constr. Co., 3751 Prospect Ave., $400,000.

Mich., Detroit—Hotel—A. B. Hartz, 17 Brady St., 9 story and basement, 75 x 100 ft. rein.-con., brick and steel, plain foundation, John R St., to A. W. Kutsche & Co., 333 State St. Archt.'s est. $800,000.

Mich., Detroit—Morgue—W. H. Green, secy. Wayne Co., County Bldg., 2 story and basement, 85 x 136 ft. rein.-con., brick and steel, plain foundation, Lafayette Ave., to Culbertson & Kelly, 827 West Milwaukee Ave., $332,607. Noted Mar. 20.

Mich., Detroit—Temple—Amaranth Lodge, 3106 Gratiot Ave., 4 story and basement, 70 x 112 ft. rein.-con., brick and steel, plain foundation, Gratiot Ave., to Corrick Bros., 507 Owen Bldg. Archts. est. $150,000. Noted Mar. 6.

Mich., Flint — School — A. J. Wildanger, secy. Bd. Educ., 2 story and basement, 67 x 210 ft. and 92 x 114 ft. rein.-con., brick and steel, plain foundation, Corunna Rd., to Burke & Smith, Flint, $236,800. Noted Feb. 21.

Mich., Highland Park (Detroit, P. O.)—School—Bd. Educ., 2 story and basement, 64 x 200 ft. addition to Ferris School, rein.-con., brick and steel, plain foundation, to Martin & Krausman, 606 Woodward Ave., Detroit, $160,000. Noted Dec. 27.

Mich., Port Huron—School—Bd. Educ., 2 story ad basement, rein.-con., brick and steel, plain foundation, Garfield and 10th Sts., to O. F. Miller Co., Kalamazoo, $169,675.

Ill., Chicago—Apartment—O. T. Nelson, 7014 Crandon St., 3 story, 108 x 125 ft., fireproof, 6700-12 Chappel Ave., to Turnquist Bros. Constr. Co., 217 East 69th Pl. Archts. est. $150,000.

Ill., Chicago — Apartment — V. Nelson, 7345 Phillips Ave., 3 story, 100 x 118 ft., fireproof, 7114-20 Ridgeland Ave., to Turnquist Bros. Constr. Co., 217 East 69th Pl. Archts. est. $150,000.

Ill., Chicago — Apartment — Plothe & Grosby, 2532 North Clark St., 3 story, 110 x 170 ft., fireproof, 4639-49 Lake Park Ave., to Thogerson & Erickson, 4804 North Kedgie St. Archts. est. $350,000.

Ill., Chicago—Apartment—W. L. Wallen, Jr., 6712 North Clark St., 3 story, 116 x 163 ft., fireproof, 660-10 North Ashland St., to E. Edlund, 1749 Highland Ave. Archts. est. $150,000.

Ill., Chicago—Warehouse—Great Atlantic & Pacific Tea Co., 445 West Pershing Rd., 4 story, 105 x 515 ft., fireproof, 2622-26 North Crawford St., to Turner Constr. Co., 315 Loomis St. Archt.'s est. $600,000.

Ill., Kankakee—Office, etc.—Knights of Columbus Lodge, 3 story and basement, 80 x 124 ft., rein.-con., brick and stone, Indiana and Merchant Sts., to Houde Constr. Co., LeGris Pl. Archts. est. $150,000.

Wis., Madison—Club—University Club, W. J. Mead, pres., 5 story, 50 x 99 ft., rein.-con., brick and steel, plain foundation, State St., to C. B. Fritz Co., 138 North Frances St. Archts. est. $150,000. Noted Dec. 20.

Wis., Milwaukee—Apartment—Allied Investment Co., 97 Wisconsin St., 3 story, 52 x 118 ft., brick and tile, plain foundation, Cass St., to W. W. Oeflein, 86 Michigan St. $150,000. Noted Feb. 28.

Ia., Des Moines — Warehouse — Brown-Camp Hardware Co., 330 Southwest 5th St., general contract 5 story and basement, 102 x 282 ft., rein.-con., brick and tile, to J. and W. A. Elliott Co., 906 Lumber Exch. Bldg., Minneapolis, Minn., $277,000. Noted Mar. 27.

Ia., Hopkins—School—Bd. Educ., general contract 2 story and basement, rein.-con., brick, tile and stone, to Lundberg & Peterson Constr. Co., 831 2nd Ave., S., Minneapolis, Minn., $143,486.

Minn., Minneapolis — Church — Simpson Methodist Episcopal Church, c/o R. L. Smith, 215 Rustic Lodge Ave. W., general contract 42 x 124 ft., rein.-con. and brick, 2740 1st Ave. S., to Splady & Haagenson, 1022 Plymouth Bldg., $150,000.

Minn., Minneapolis—Sanatorium—Loring Holding Co., c/o Bertrand & Chamberlin, archts., 616 Northwestern Bank Bldg., general contract, 4 story, 99 x 128 ft., rein.-con., brick and tile addition, 15th St. and Yale Pl., to O. P. Bailey Co., 610 Builders Exchange Bldg., $200,000.

Kan., Emporia—High School—Bd. Educ., 3 story, rein.-con., brick and stone, junior high school, general contract to Peterson Constr. Co., Salina, $265,095. Noted Mar. 20.

Neb., Scottsbluff—Hospital—Northwestern Nebraska Methodist Hospital Bd., c/o F. S. McCaffree, pres., will build 6 story and basement, 18th and Bway., by day labor. $200,000. E. L. Goldsmith, 1623 6th Ave., archt.

Mo., Joplin—Office—I. T. Cook & Co., Inc., Arcade Bldg., St. Louis, 8 story and basement, 75 x 110 ft., hollow tile, brick and stone, 4th and Main Sts., here, to C. A. Dieter Constr. Co., Independent Bldg. Archts. est. $500,000.

Mo., St. Louis—Garage and Auto Show —Lambert Graves Motor Co., 4576 Manchester Ave., 2 story and basement, 75 x 125 ft., rein.-con., brick, stone and terra cotta, Lindell Blvd., to B. J. Charleville, 114 North 7th Sts. Archts. est. $160,000.

Mo., St. Louis—Hospital—Jewish Hospital, 5414 Delmar Blvd., 6 story and basement, rein.-con., brick, stone and steel, Kingshighway and Forest Park Blvd., to Murch Bros. Constr. Co., Ry. Exch. Bldg. Archts. est. $800.000. Noted May 24.

Mo., St. Louis—Seminary—T. Graebner, secy. building com. Concordia Seminary, 3618 Texas Ave., general contract dormitories, academic, dining hall, library, assembly hall, lecture hall, infirmary, professor's house and power plant, etc., rein.-con., limestone and local stone, plain foundations, to Kellerman Constr. Co., 421-22 Victoria Bldg., $1,306,860. Noted Mar. 6.

Ark., Little Rock—Apartment—Rackensack Apartment Co., c/o Wittemborg, Deloney & Watts, archts., Southern Trust Bldg., will build 7 story and basement, 140 x 150 ft., rein.-con., brick, stone and terra cotta, by day labor. $400,000.

Tex., Dallas—Bank—Republic Natl. Bank, Main St. and Exch. Pl., 2,000 tons structural steel for bank, to Mosher Steel & Machine Co., 900 South Austin St., $250,000. Noted Mar. 27.

Tex., Marshall—High Schools—Bd. Educ. general contract 3 story and basement, 94 x 190 ft., brick, steel and concrete, to Quisle & Andrews, Cotton Exch., Ft. Worth, $147,978; negro school, to Joplin Marshall Constr. Co., Slaughter Bldg., Dallas, $49,734. Noted Mar. 20.

Wash., Seattle — School — St. Benedicts Order, 2 story, 126 x 140 ft., 48th and Wallingford Sts., to M. Hoard & Co., Pantages Bldg. Archts. est. $155,000.

Ore., Salem—High School—Bd. Educ., general contract 2 story, 100 x 100 ft., rein.-con. and brick, plain foundation, to Hansen, Hammond & Clist, Pittock Blk., Portland, $125,623. Noted Dec. 27.

Calif., Huntington Park (Branch of Los Angeles)—High School—Huntington Park Union High School Dist., general contract high school, to Edwards, Wildey & Dixon, Black Bldg., Los Angeles, $168,500. Noted Apr. 10.

Calif., Long Beach—Club—Long Beach Ebell Club, 140 x 150 ft., brick, 3rd St., to C. T. McGrew & Sons, 1345 West Ocean Ave., $155,000.

Calif., Long Beach—Store—Boys Shop, Inc., 128 West Bway., 6 story and basement, rein.-con., brick and steel, Locust St. and Bway., to C. T. McGrew & Sons, 1345 West Ocean Ave., $200,000.

Calif., Pasadena — Church — Second Church of Christ Scientist, North Lake Ave. and Washington St., hollow tile, Claremont St. and Hudson Ave., to Johnson & Christensen, 360 West 43rd St., Los Angeles, $152,000. Noted Mar. 20.

Calif., Paso Robles—High School—Paso Robles Union High School Dist., 2 story, rein.-con. and brick, general contract to A. Johnson, 1007 South Grand Ave., Los Angeles, $137,490. Noted Mar. 20.

Calif., San Diego — Art Gallery — A. Bridges, Loma Portal, 2 story and basement, 115 x 200 ft., Class A, rein.-con., in Balboa Park, to Lange & Bergstrom, 6376 Yucca St., Los Angeles, $300,000.

Que., Beauharnois — College — Catholic School Comrs. of St. Clement de Beauharnois, 4 story, rein.-con., brick and stone, to J. A. A. Leclaire, 454 Lasalle Rd., Verdun. $150.000.

Ont., Kingston—Hospital—Kingston General Hospital, clinic building at hospital, to P. H. Secord & Sons Constr. Co., Ltd., Brantford. Archts. est. $360,000. Noted Feb. 8.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn — Roads and Walks — Spec. 4953—Bureau Yards & Docks, Navy Dept., Wash., D. C., soon takes bids concrete roads at Naval Hospital here. Noted Mar. 6.

Ala., Florence—Bridge—U. S. Engineer Office, Florence, plans bascule bridge across lock at Wilson Dam.

Ky., Uniontown—Ties and Piles—U. S. Engineer, P. O. Box 72, Louisville, takes bids about Apr. 25, 5,280 oak ties, 6 x 8 in. x 8 ft. and 600 round hardwood piles, for Dam 49, Ohio River.

BIDS DESIRED

Mass., Thatcher Island—Radio Compass Station—Apr. 30, by Bureau Yards & Docks, Navy Dept., Wash., D. C., radio compass station, tramway and repairs to building, here.

N. Y., Governors Island (branch New York) — Roof Repairs — May 2, at Constructing Quartermaster's Office, Room 510, 39 Whitehall St., New York, roofing repairs to warehouse 138; adv. E. N.-R. Apr. 17.

N. C., Wilmington—Dredging Pump—May 15, by U. S. Engineer, Wilmington, furnishing one 20 in. dredging pump, etc. for dredge Henry Bacon; adv. E. N.-R. Apr. 17.

Ga., Savannah — Hospital — May 5, by Treas. Dept., office of Superv. Archt., Wash., D. C., remodeling at U. S. Marine Hospital here; adv. E. N.-R. Apr. 17.

Fla., Key West—Pumphouse—Apr. 21, by Treas. Dept., at office Supervising Architect, Office, Wash., D. C., complete new pumphouse, well, pumps, etc.

Ky., Louisville—Steel Gates—Apr. 22, by U. S. Engineer, P. O. Box 72, two steel gates for Lock 5, Green River, delivered f.o.b. Addison.

O., Chilo—Dwellings—Apr. 28, by U. S. Engineer Office, 405 Customhouse, Cincinnati, two 1½ story, 5 room, brick locktenders' dwellings, at Dam 34, Ohio River, near here, at Dam 36 near Coney, Ky., and Dam 38 near Mcs'Ville, Ky.; adv. E. N.-R. Apr. 17.

Mich., Detroit—Steel Derrick Boat—Apr. 30, by U. S. Engineer, Detroit, constructing steel derrick boat; adv. E. N.-R. Apr. 17. Noted Feb. 28.

Nevada—Road—May 14, by C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., San Francisco, Calif., grading 11.32 mi. Meadow Creek Sect. Gold Creek-Jarbridge Natl. Forest Highway, 62,503 cu.yd. excav.

Ariz., Tucson — Hospital — May 15, by U. S. Veterans Bureau, Wash., D. C., 1 therapy building and 2 bath houses, also altering and building addition to mess hall at Veterans Hospital 51, here.

Wash., New Dungeness—Radio Compass Station—May 7, by Bureau Yards & Docks, Navy Dept., Wash., D. C., radio compass station, power house and fuel oil storage building, here.

Calif., San Francisco—Barracks—May 1, by Treas. Dept., at office Supervising Architect Office, Wash., D. C., 1 story, 42 x 66 ft. barracks building, at U. S. Quarantine Sta., here.

Federal Government Work (Continued)

BIDS RECEIVED

Va., Fort Meyer—Receiving Basin—Constructing Quartermaster, War Dept., Wash., D. C., constructing rein.-con. receiving basin with pipe connections, from L. B. Davidson, 410 Bond Bldg., Wash., D. C., (1) $2,685 (2a) $1.50 (b) $4.50 (c) $20 (d) $90 (e) $0.65 (40 days).

Ky., Louisville—Cement—U. S. Engineer, P. O. Box 72, furnishing cement, (a) 15,000 bbl. f.o.b. Kosmosdale for Dam 44 (b) 25,000 bbl. f.o.b. Addison for Dam 45 (c) 35,000 bbl. f.o.b. Owensboro, for Lock 46, all on Ohio River, from Kosmos Portland Cement Co., M. E. T. Bldg., Louisville, (a) $2.55 (b) $2.84 (c) $2.74; from Atlas Portland Cement Co., Louisville, Hermitage Portland Cement Co., 174 3rd Ave., Nashville, Tenn., and Lehigh Portland Cement Co., Nashville, Tenn., (c) all $2.74. Noted Mar. 13.

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, Providence, maintenance dredging in Connecticut River below Hartford, Conn., to Hartford & New York Transportation Co., 285 State St., Hartford, Conn., $17,150. Noted Feb. 28.

Pa., Phila.—Paving—U. S. Shipping Bd., Wash., D. C., paving at Army Base here, to Acchione & Canuso Paving Co., 804 South 12th St., $46,828.

Ala., Florence—Generators—U. S. Dist. Engineer, Florence, 4 generators with exciters, etc., to General Electric Co., River Rd., Schenectady, N. Y., $757,120. Noted Apr. 3.

Ala., Florence—Switchboard—U. S. Engineer, War Dept., Wash., D. C., switchboard for power house, Wilson Dam, to General Electric Co., River Rd., Schenectady, N. Y., $378,950. Noted Feb. 7.

O., Cincinnati—Cement—U. S. Engineer, furnishing 6,200 bbl. cement for Dams 34, 36 and 38, Ohio River, to Wellson Iron Furnace Co., Jackson, O., 2,000 bbl. at $2.78 and 4,200 bbl. at $2.67. Noted Apr. 3.

Ind., Leavenworth—Stone—U. S. Engineer, P. O. Box 72, Louisville, Ky., 5,000 tons derrick stone for Dam 44, Ohio River, to Webster Stone Co., Irvington, Ky., $1.98 per ton f.o.b. Pilcher, Ky.

Wis., Mineral Pointe—Post Office—Treas. Dept., Supervising Architect, Wash., D. C., post office here, to F. R. Comb Co., 2123 Chicago Ave., Minneapolis, Minn., $49,187.

Washington—Roads—C. H. Purcell, dist. engr. Bureau Pub. Rds., U. S. Dept. Agriculture, 316 New Postoffice Bldg., Portland, Ore., constructing and improving 5.9 mi. Glacier; Excelsior Natl. Forest Rd., in Whatcom Co., to Sloan Constr. Co., Columbia Bldg., Spokane, $35,797, also 9.5 mi. Shuksan-Austin Pass Natl. Forest Rd., Whatcom Co., to Strong & Carlson, Tacoma, $198,875.

Calif., San Diego — Surface — Bureau Yards & Docks, Navy Dept., Wash., D. C., surface for parade ground at Training Sta., here, to Gilmore Oil Co., Hancock and Court Sts.

Unclassified

PROPOSED WORK

Gas Mains—New York—Elmira Water, Light & Railroad Co., Elmira, plans extending gas mains to Elmira Heights. $40,000-$45,000.

Transmission Line—New York—Adirondack Light & Power Corp., State St., Schenectady, plans twin wood pole, 3 phase double circuit, 114,000 volt line from Beardsley Falls to Colliers, approximately 46 mi.

Transmission Line — New York — Binghamton Light, Heat & Power Co., 172 Washington St., Binghamton, plans 3 phase high tension transmission line to Cortland. To exceed $50,000.

Transmission Lines, etc.—New York—New York State Gas & Electric Corp., 123 South Cayuga St., Ithaca, plans transmission and distribution lines in Laurens, Milford, Hancock, Margaretville, Richfield Springs, Fleischmans and 26 other villages. $100,000.

Hydro-electric Development, etc.—Ballston Spa, N. Y.—Bd. Supervs. Saratoga Co. takes bids about May 15, hydro-electric development and water supply system together with transmission lines, pipe lines and elevated supply tank, for Homestead Sanatorium. Utilities Eng. Co., Inc., 467 Bway., Albany, engrs. Noted Aug. 23.

Distribution Lines—Granville, N. Y.—Granville Gas & Electric Co. had plans prepared 6 mi. distribution lines in slate quarries adjacent to Granville. $40,000. P. Fasoli, mgr.

Gas Mains—Troy, N. Y.—Troy Coke & Iron Corp. of South Troy, plans gas mains from company's plant under Hudson River to Breaker Island. To exceed $100,000.

Retaining Wall—Meyersdale, Pa.—See "Streets and Roads."

Coaling and Storage Station—Millen, Ga.—Central of Georgia R.R. Co., 233 West Broad St., Savannah, plans 500 ton rein.-con. coaling and storage station. $40,000. W. K. Lawrence, ch. engr.

Grade Separation — Shreveport, La. — Kansas City Southern Ry., 11th and Wyandotte Sts., Kansas City, Mo., having preliminary plans prepared grade separation work, raising tracks, bridges, etc. in various parts of city, especially in West End, $900,000, also concrete and steel viaduct at Texas Ave. crossing, $100,000. A. N. Reece, ch. engr.

Athletic Field, etc.—Cedarburg, Wis.—Barth & Straub plan athletic field at Hilgen Spring Park, incl. pool, track, play ground apparatus, tennis courts, etc. Engineer not selected.

Lighting System — Platteville, Wis. — Making plans ornamental street lighting system. $25,000. W. E. Skinner, 3241 Aldrich Ave., Minneapolis, Minn., engr.

Retaining Wall—El Paso, Tex.—Election Apr. 30, $49,000 bonds, retaining wall for Rio Grande St., earth and rein.-con., also dredging; $105,000 bonds, river retaining walls and some dredging. Address Mayor Dudley.

Grain Elevator—Longview, Tex.—Heid Bros. Grain Co., plans 100 x 125 ft. grain elevator.

Transmission Line—Deer Creek, Okla.—See "Industrial Works."

Turbo Generators, etc. — Oregon and Washington — Pacific Power & Light Co., Gasco Bldg., Portland, Ore., plans to expend $1,500,000 for betterments and extensions to properties in Oregon and Washington, incl. new steam driven turbo generator and power house in Astoria, Ore., sub-station and transformer at Pendleton, Ore., additional transformer at The Dalles, Ore., reconstructing power lines in Hood River, Ore., extending lines in Yakima and Walla Walla districts, Wash., etc. G. W. Talbot, pres.

Electric Improvements—Portland, Ore.—Northwestern Electric Co., Pittock Blk., plans to expend over $1,000,000 for improvements and extensions, incl. two 1,000 hp. steam heating boilers at Lincoln St. station, 6 new distributing heating stations and extensions to pipe lines, electrical pole and conduit lines.

Power Distributing Line — California — Pacific Gas & Electric Co., 445 Sutter St., San Francisco, appropriated $58,500, reconstructing high tension distributing lines from Colusa to Hamilton. Private plans.

Wharf—San Diego, Calif.—See "Buildings."

Stadium—San Francisco, Calif.—City and San Francisco Co. plan stadium, seating capacity from 20,000 to $50,000, will be provided with tennis and handball courts, track and football fields, basket ball pavilion, etc., in Golden Gate Park. $300,000. M. M. O'Shaughnessy, city engr.

Subway — Cooksville, Ont. — Dept. Pub. Highways, 110 University Ave., Toronto, having plans prepared rein.-con. and steel subway under Grand Trunk Ry. tracks at Center Rd., here. $75,000. G. Hogarth, 110 University Ave., Toronto, engr.

Arena—Kingston, Ont.—Apr. 18, by J. S. McDonnell, competitive drawings and estimates, 1 story, 80 x 200 ft. rein.-con., brick and steel, plain foundation, Albert and Union Sts., for Queens University. $150,000.

Electric and Power System—Ottawa, Ont.—Ottawa Hydro Electric Comn., 75 Laurier Ave., plans to extend electric light and power system. $50,000.

Electric Light and Power System—Weston, Ont.—Town plans extending electric light and power system. $25,000.

BIDS DESIRED

Ramps—New York, N. Y.—Apr. 24, by Transit Comn., 49 Lafayette St., permanent ramps at Times Sq. station, Routes 4 and 36, Sect. 3, Agreement "CT." G. McAneny, chn.

Subway—Brooklyn, N. Y.—Apr. 25 ,by Transit Comn., 49 Lafayette St., New York, Route 70, extending along and under Bedford Ave. from DeKalb Ave. to Keap St., here. G. McAneny, chn.

Column Foundations—New York, N. Y.—Apr. 25, by Transit Comn., 49 Lafayette St., column foundations, retaining walls and embankment for Westchester Ave. Yard, Routes 19 and 20. G. McAneny, chn.

Fill — Miami, Fla. — Apr. 29, by City Comn., hydraulic filling of Bay Front Park. E. Cotton, dir. pub. utilities; adv. E. N.-R. Apr. 17.

Steel Pontoon—Algiers, La.—May 1, by Algiers Pub. Serv. Co., Inc., Canal St., New Orleans, 1 steel pontoon for Morgan St. ferry landing, here.

BIDS RECEIVED

Stadium—Erie, Pa.—Bd. Educ., concrete and steel stadium, from E. E. Austin & Son, Commerce Bldg., $157,000. Noted Feb. 14.

Street Lighting, etc. — Chicago, Ill. — South Park Comrs., street lighting, etc., on South Park Ave., from R. I. Purcell, 210 South Wood St., $98,123.

CONTRACTS AWARDED

Jetty — Belmar, N. J. — Boro Council, Mar. 25, 300 ft. stone jetty, to T. Proctor, 212 North 5th Ave., Long Branch, $50,000. Noted Mar. 20.

Park—Trenton, N. J.—Embellishment of North Trenton Park, to J. R. Grant, 56 McKinley Ave., and J. Jingola, 416 Princeton St., $21,864. Noted Apr. 10.

Foundations—Phila., Pa.—Phila. Rapid Transit Co., 8th and Dauphin Sts., foundations for carbarns, inspection shop, office building, sand panel, water storage reservoir, etc., 19th, 20th and Johnston Sts., to H. E. Baton, 1713 Sansom St.

Stadium — Parkersburg, W. Va. — Bd. Educ., high school stadium, to Plate & Fogel, Parkersburg, $53,335.

Retaining Wall—Miami, Fla.—City, retaining wall, timber sheet pile bulkhead, for Bay Front Park, incl. 43,500 lin.ft. wood piling, 440,000 ft. sheet wood piling, to Comer & Ebsany Foundation Co., South West 2nd Ave., $70,000.

Levee—New Orleans, La.—Atchafalaya Levee Dist., 1,000,000 cu.yd. levee work at Aabama Island, to McWilliams Co., Exch. Bldg., Memphis, Tenn., $0.2193 per cu.yd.

Levees—Shreveport, La.—Caddo Parish Levee Bd., repairs, etc. to 18 mi. Loole and Horseshoe Levees, to Douglas, Buchanan & Crow, Shreveport, $115,000.

Transmission Line, etc. — Wisconsin — Wisconsin Valley Electric Co., R. Drew, purch. agt., Wausau, will build power transmission line to Merrill and construct and equip 3 electric sub-stations, by day labor. $80,000. Private plans. Noted Mar. 27.

Gas Mains—Houston, Tex.—Houston Gas & Fuel Co., 607 San Jacinto St., will lay gas mains from central plant to storage tanks at Link and West Clay Sts. and at 12th and Studewood Sts., by day labor. $750,000.

Grain Elevator—Midland, Ont.—Midland Grain Elevator Co., rein.-con. grain elevator, wood pile foundation, to McFarlane-Pratt-Hanley Ltd., Midland. Est. $500,000.

Tower—Ottawa, Ont.—Dominion Government, Parliament Bldg., constructing 300 ft. Peace Tower, to P. Lyall & Son, Parliament Bldg., $600,000 plus 7%.

Material and Equipment

BIDS DESIRED

Broken Stone—Brooklyn, N. Y.—Apr. 23, by E. Riegelmann, boro pres., Boro Hall, 4,000 cu.yd. 1½ in. and 1,200 cu.yd. ¾ in. broken stone, 1,000 cu.yd. broken stone screenings, and 4,000 cu.yd. sand grit.

Portland Cement, etc.—Millville, N. J.—Apr. 25, by Bd. City Comrs., 29,600 bags standard Portland cement, 2,600 tons concrete sand, 5,200 tons concrete gravel, 21,000 sq.yd. steel reinforcing fabric not galvanized, shipped in sheets cut to length as directed, 844 ft. 12 and 15 in. vitr. terra cotta sewer pipe, etc. W. S. Kates, dir. Streets and Pub. Impvts.

Chutes, etc.—New Orleans, La.—Apr. 24, by Bd. Port Comrs., New Court Bldg., furnishing chutes, dock spouts, booms, winches, etc., for belt conveyor extensions and public coal commodity handling plant.

Road Oil—Circleville, O.—Apr. 21, by L. Schneider, dir. Pub. Wks., 40,000 to 50,000 gal. road oil, f.o.b. Circleville.

Asphalt Repair Outfit—East Cleveland (Cleveland, P. O.), O.—Apr. 23, by C. A. Carran, city mgr., 1 asphalt repair outfit.

Patrol Graders—Alma, Wis.—J. Reinhardt, highway comr. Buffalo Co., taking bids 2 patrol graders.

Pile Driving Machine—Cambridge, Wis.—H. O. Jarlsberg taking bids pile driving machine.

Sand, Gravel, etc.—Minneapolis, Minn.—Apr. 23, by F. S. Gram, city purch. agt., 3,700 cu.yd. sand and 4,600 cu.yd. broken stone or gravel. N. W. Elsberg, city engr.

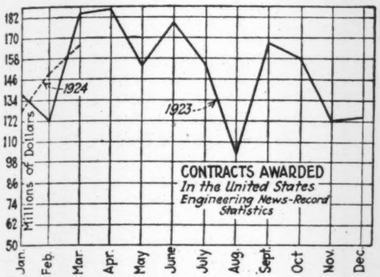
CONSTRUCTION NEWS

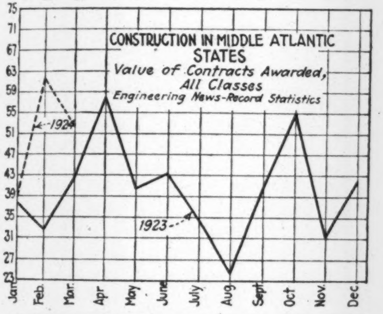
Engineering News-Record, April 24, 1924

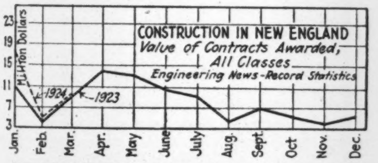
The Construction Barometer

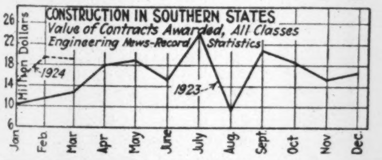
Demand Active—Materials Plentiful—Mill Deliveries Prompt—No Labor Troubles of Importance—Prices Fairly Steady—Money Readily Available

THE eastern half of the United States shows a heavier total value of contracts let for the first quarter of this year than for the corresponding period in 1923. The West fell below last year as shown by the accompanying charts. Reports to *Engineering News-Record* for the third week in April reveal decided gains in lettings for municipal and public utility construction as well as in private work. Awards for large commercial buildings, though not so heavy during the last week as at the beginning of the month, are increasing in number and total value. The present construction market is one of active demand, plenty of materials, prompt mill deliveries, satisfactory labor conditions (so far as strikes and disputes are concerned), fairly steady prices and readily available money.









Engineering News-Record Statistics

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Apr. 3	$23,838,000	$20,548,000	$44,386,000
Apr. 10	16,276,000	17,337,000	33,613,000
Apr. 17	28,549,000	22,293,000	50,842,000
3 weeks	**$68,663,000**	**$60,178,000**	**$128,841,000**

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

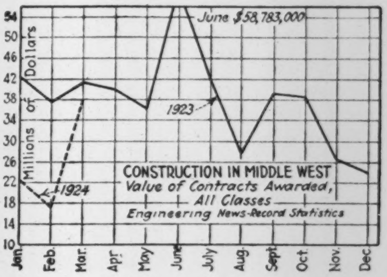
Week Ended	No.	Public Work	No.	Private Work
Apr. 3	16	$6,553,000	58	$17,247,000
Apr. 10	13	2,548,000	31	11,075,000
Apr. 17	16	4,210,000	49	16,139,000
3 weeks	**45**	**$13,311,000**	**138**	**$44,461,000**

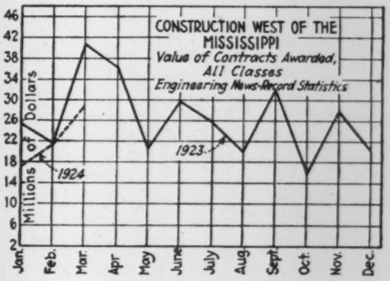
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

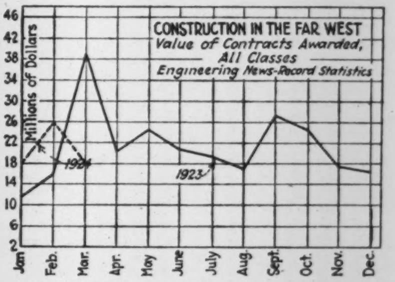
		Public			
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
Apr. 3	37	53	127	50	301
Apr. 10	48	54	120	41	289
Apr. 17	42	52	109	41	254

PRICES OF BASIC MATERIALS FAIRLY STEADY

	Quoted on Apr. 24 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.25 @2.40	$2.30 @2.50	Apr. 10
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	63.00	64.00	Apr. 10
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.55	.54	Feb. 28







Note: Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

Waterworks

PROPOSED WORK

N. Y., **Attica**—Election Apr. 29, $55,000 bonds improving water supply.

N. Y., **Clyde**—Clyde Water Wks. Co. plans to purchase approximately five hundred ¾ and 1 in. service water meters.

N. Y., **Cortland**—Plans improving and extending water supply. $50,000.

N. Y., **Herkimer**—Plans extending 8 in. mains, etc., in German and South Washington Sts. $18,000-$20,000. F. Gray, pres. Municipal Comn.

N. Y., **Liverpool**—Plans water supply system, utilizing springs on Duerr Farm. $150,000. I. R. Fairchild, village pres.

N. Y., **Sherrill**—Voted $15,000 bonds increasing reservoir capacity.

W. Va., **Grafton**—Plans election $125,000 bonds, filtration plant.

Ga., **Dawson**—Plans municipal waterworks. $35,000.

Ala., Auburn—Alabama Polytechnic Institute plans water works system, 360,000 gal. per day. $50,000.

Ala., Florence—Election May 5, $100,000 bonds, extension and improvements to waterworks, incl. new settling basin, 12- to 15-in. mains, etc. Noted Mar. 31.

Fla., Sarasota—Plans election to vote on $90,000 bonds, extending water system.

Tenn., Cookeville — Making plans new water purification plant, pipe lines and motor driven centrifugal pumps. $100,000 bonds voted. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs. Noted Oct. 25.

O., Alliance — Making plans additions, alterations and betterments to pumping station and filtration plant. $200,000. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.

O., Cleveland—Plans 20-in. c.i. mains in Pearl Rd., $108,500; 36-in. c.i. mains in Madison Ave. and West 89th St. to West Blvd., $225,700. A. V. Ruggles, City Hall, engr.

O., Columbus—See "Streets and Roads."

Ill., Hartford—Voted $50,000 bonds, waterworks and distribution system.

Ill., Rock Island — Rock Island Water Co. having preliminary plans prepared laying 12-in. mains in various parts of city. $30,000. J. A. Murrin, supt.

Ill., Springfield—Making plans waterworks improvements, incl. filtration plant. $450,000 bonds voted. Burns & McDonnell Eng. Co., Interstate Bldg., Kansas City, Mo., engrs. Noted Mar. 6.

Wis., Green Bay—Allouez Twp. election Apr. 29, $75,000 bonds, new waterworks. H. R. Abert, Court House, engr.

Wis., Watertown—Had plans prepared 6 in. c.i. mains in various streets. $15,000. A. Kraeft, City Hall, engr.

Waterworks (Continued)

Wis., Kimberly — Making plans new waterworks, incl. artesian wells, two 500 g.p.m. pumps, air lift, 100,000 gal. elevated steel tank, distribution system. $100,000. A. E. McMahon, City Hall, Menasha, engr.

Minn., Fergus Falls—Voted $15,000 bonds, waterworks improvements. Noted Mar. 20 under "Industrial Work."

Minn., Isanti—Had preliminary surveys made waterworks system. $35,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs.

Mont., Livingston — Defeated $45,000 bonds, water plant.

Mont., Missoula — Defeated $900,000 bonds, water plant. Noted Dec. 20.

Mo., Gallatin—Plans 75,000 gal. tank on 135 ft. tower, new fire hydrants and 6 in. mains. $15,000. Engineer not announced.

Okla., Newkirk—City defeated $150,000 bonds for reservoir, new wells and extensions. Musson & Gayle, Grain Exch. Bldg., Oklahoma City, engrs. Noted Apr. 17.

Calif., Claremont—Claremont Domestic Water Co. plans to extend system. $25,000 or more.

Calif., El Centro—Plans to vote on $200,000 bonds, additional filtration machinery, settling basins and new mains. $200,000.

Calif., Placerville — See "Streets and Roads."

Calif., Tujunga—Haines Canyon Water Co. plans extensions and improvements to system. $25,000 or more.

Calif., Whittier—Election Apr. 29, $100,000 bonds, extending mains. Noted Apr. 10.

Calif., Williams—See "Sewers."

Ont., Chipawa—Village Bd. plan extension to water supply system, sanitary and storm sewers. $150,000-$175,000.

BIDS DESIRED

Mass., Waltham (Boston P. O.)—May 15, at office of Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, furnishing and laying 60-in. pipe, here. W. E. Foss, dir. Water Div.; adv. E. N.-R. Apr. 24.

Conn., New Britain—May 12, by Bd. Water Comrs., Room 201, City Hall, laying c.i. mains. J. D. Williams, city engr.; adv. E. N.-R. Apr. 24.

N. Y., Brooklyn—Apr. 28, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Mansfield Pl., K, M, Kingston, Lott, Newport and Lott Aves., Carroll, Malta, 57th, 80th, 81st, East 8th, East 12th, East 28th, East 29th, East 58th, East 59th and East 91st Sts., here.

N. Y., Fredonia—May 6, by Bd. Village Trustees, 19,000 ft. 12 in. c.i. mains, etc. H. P. Bishop, village clk.; adv. E. N.-R. Apr. 24.

N. Y., Long Island City—Apr. 28, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Fresh Pond Rd., Caldwell, Clermont, Firth, Flushing, Homans, Mount Olivet, Phelps, Prospect and Wilton Aves., Delia, Harrow, Henry, Hosack, Madison, Mazeau, Proctor, Ramsey, Seabury, Stockholm, Van Horn, Van Tassel and Weirfield Sts., here.

N. Y., Long Island City—Apr. 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Culver and Hunt Places, Alstyne, Burnside, Colonial, Maurice, Nicolls, Peartree and Way Aves., Ivy, Pilgrim, Van Cleff, 20th, 24th, 44th, 51st and 113th Sts., here.

N. Y., Long Island City—Apr. 30, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Maurice Ave. and 167th St.; removing existing connections, valves and appurtenances at Queens Blvd. and Fisk Ave., here.

N. Y., New York—Apr. 28, by N. J. Hayes, comr. Water Supply, Gas & Electricity Municipal Bldg., mains in Grand Concourse, Goodwin Terrace, Claflin, Johnson, Netherland, University, Jerome and Walton Aves., Whalen, West 195th, East 169th, East 171st, East 175th and East 180th Sts., Elliott, Osborne and Wythe Places, Bronx Boro.

N. Y., New York—Apr. 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Westchester, Esplanade, Knapp and East 161st Sts., Allerton, Astor, Fenton, Mickle, Seymour, Waring, Bogart, Hering, Jerome, Lurting, Pierce, Radcliffe, Rhinelander, Sherman, Van Nest and Yates Aves., Bronx Boro.

N. Y., New York—Apr. 30, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in White Plains and Boston Rds., Barry and Craven Sts., Chatterton, Gildersleeve, Gleason, Newman, Underhill, Allerton, Astor, Gruger, Fairmount, Hollywood, Matthews and Wallace Aves., Bronx Boro.

N. Y., Whitehall—May 13, by Bd. Village Trustees, furnishing c.i. pipe, Div. A; hauling and laying pipe, building small concrete dam, earth dam, dike and distributing reservoir, Div. B. J. P. Wells, Cutler Bldg., Rochester, hydraulic engr.; adv. E. N.-R. Apr. 24. Noted Apr. 17.

Md., Baltimore—Apr. 30, by Bd. Awards, special 30-in. Poppet valves for additions to Montebello Filters, Water Contr. 73. V. B. Siems, City Hall, water engr.

Md., St. Michaels — May 15, by city comrs., water tanks and towers. Kastenhuber & Anderson, Easton, engrs.; adv. E. N.-R. Apr. 24.

O., Cleveland—Apr. 30, by Cuyahoga Co., 11,500 ft. 6- to 16-in. c.i. mains, Impvt. 551, Sewer Dist. 5. R. F. MacDowell, Court House, engr.

O., Cleveland—May 7, at office of Commissioner Purchases and Supplies, City Hall, Ingersoll Rd. c.i. main, Contr. 33, alternate steel main Contr. 33-A, of Baldwin-Fairmount Project. C. P. Jaeger, comr. Water & Heat; adv. E. N.-R. Apr. 24.

O., Garfield Heights (Cleveland P. O.)—May 9, 6 and 8 in. c.i. mains in 32 streets. $100,000. R. F. Munz, Town Hall, engr.

Mich., Iron Mountain—May 5, by Village of Kingsford, Iron Mountain, $75,000 worth of pipes, valves, hydrants, etc. for extending mains; adv. E. N.-R. Apr. 24.

Minn., Herman—May 5, by village, waterworks improvements, incl. concrete reservoir and pumping equipment. Cory & LeCocq, Aberdeen, S. D., engrs.

Minn., West Concord—May 6, by city, 12,204 lin.ft. c.i. mains, hydrants, specials, etc. $16,000. Toltz, King & Day, 1410 Pioneer Bldg., St. Paul, engrs. Noted Sept. 20.

S. D., Virgil—May 2, 3,700 lin.ft. c.i. mains, 3,500 gal. rein.-con. reservoir, 30,000 gal. elevated steel tank on tower, pump station, one 250 gal. centrifugal pump. $17,000. Smith & Reeves, Mitchell, engr.

Tex., Brenham—Apr. 30, by A. A. Hocker, mayor, water purification addition to waterworks plant, 900,000 gal. water basins, settling and mixing tanks with necessary connections. Noted Feb. 7.

Okla., Tulsa — May 5, by R. Gaebett, city aud., paving with concrete or gunite, slopes of Mohawk Reservoir, 20,000 sq.yd. concrete, etc. $160,000. Holway Eng. Co., 505 Wright Bldg., engrs.

Idaho, Emmet—See "Streets and Roads."

Calif., Long Beach—City Council taking bids 2 pumping plant units, each to consist of horizontal centrifugal pumping equipment, capacity not less than 2,600 g.p.m. nor more than 2,750 g.p.m. against 175 ft. head, direct connected to 2,200 volt, 50 cycle, 3 phase, 40 deg. induction motor, etc. R. D. Van Alstine, city engr.

Calif., Stockton — May 6, by Supervs. San Joaquin Co., one turbine deep well pump, to lift from 700 to 1,000 gal. against 100 to 130 ft. head, operated by 440 volt, 3 phase, 60 cycle motor. E. Graham, clk.

BIDS RECEIVED

O., Cleveland—For 1,875 ft. 60 and 66 in. c.i. mains in Woodland Ave. Sect. 30W, from J. Connelly Constr. Co., 7016 Euclid Ave., $184,267. Noted Apr. 3.

Wis., West Allis — For 10,641 lin.ft. mains, from Mierswa Constr. Co., 1619 Oregon St., Oshkosh, 6 in. $2.85, 8 in. $3.40, 10 in. $5.84.

Wis., Milwaukee — Mains (c.i.) in 16 streets, from L. J. Stevenson, 1720 Cedar St., 5,148 ft. 6 in. $0.68, 5,218 ft. 8 in. $0.795, 10,038 ft. 12 in. $1.34.

CONTRACTS AWARDED

N. Y., Binghamton—Bd. Contr. & Supply, mains in Court, Robinson and Ely Sts., to La Roche & Brown, Binghamton, $25,010; in Vestal Ave., to C. W. Rose, 616 Chenango St., $12,417. Noted Apr. 17.

Md., Baltimore — Bd. Awards, motor-operated pumps and c.i. piping in Pumping Sta. 1, to H. W. Kries & Sons Co., 6 West Lombard St., $9,956. Noted Apr. 17.

O., Columbus—Franklin Co., to Grant Boulton Co., 202 Central Bank Bldg., 10,260 ft. 6- to 12-in. c.i. mains in Sewer Dist. Clinton 2 (North High St. Area), Contr. 35, $33,543; to H. E. Miller, 938 South High St., 7,266 ft. 6 in. c.i. mains in Sewer Dist. Clinton 2 (Chaseland Area), Contr. 36, $12,218, 7,425 ft. 6 in. and about 1,140 ft. 12 in. c.i. mains in Sewer Dist. Clinton 2 (Sharon Heights Area) Contr. 37, $16,795, 3,075 ft. 6 in. c.i. mains in Sewer Dist. Prairie 1 (Area 2), Contr. 38, $5,468. Noted Apr. 3.

Mich., Detroit—Water Bd. will lay 6 in. water mains in Carbondale Ave. from Livernois Ave. eastward and in Westlawn Ave. north of Fenkell Ave., also 8 in. mains in Wilshire Dr. and Promenade Ave. between Dickerson and Chalmers Sts., Cheyenne Ave. between Grand River and Davison Aves., and Washburn Ave. between Davison and Schoolcraft Aves., by day labor. $25,000. Will purchase pipe. G. H. Fenkell, Jefferson Ave., genl. mgr.

Mich., Detroit—Bd. Water Comrs., 100 tons c.i. special castings for mains, to Michigan Valve & Fdry. Co., 3631 Parkinson St., $10,950.

Wyo., Casper — Constructing 10 m.g. rein.-con. reservoir to Scott & Curlee, Casper, 57,600 cu.yd. earth excav. $0.50, 1,800 cu.yd. rein.-con. in walls $18, 1,985 cu.yd. rein.-con. paving $14, 212,000 lb reinforcing in walls $0.055, 134,000 lb. reinforcing in paving $0.055, etc., total $116,549. Noted Apr. 3.

Tex., Sinton—**Waterworks**: 21,000 ft. 4- to 8-in. c.i. pipe, 11,300 ft. 2 in. galvanized steel pipe, 75,000 gal. elevated steel or metal tanks, to Kirkwood & Wharton, 213 West Commerce St., San Antonio, $43,633.

Sewers

PROPOSED WORK

Mass., Brighton (Boston P. O.)—City of Boston making plans 3,000 ft. 12-in. pipe sanitary sewer in Hichborn St., here. $45,000. E. P. Murphy, City Hall, Boston, div. engr.

Mass., Dorchester (Boston P. O.)—City of Boston making plans 2,000 feet 6 ft. 8 in. x 6 ft. 1 in. concrete sewer in Humphreys St. between Holden and Dudley Sts., here. $65,000. E. P. Murphy, City Hall, Boston, div. engr.

N. Y., Binghamton — Broome Co. had plans prepared new sewer facilities for Broome Co. Tuberculosis Hospital. $25,000.

N. Y., Endicott—Bd. Village Trustees plans storm and sanitary sewers in various streets. **To exceed $25,000. Address** C. E. Bennett, village pres.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., received no bids Apr. 15, sewer in Hammels Blvd. and Amstel Ave. Noted Apr. 10.

Tenn., Cookeville—Surveys being made 6 mi. sanitary sewerage system. Voted $50,000 bonds. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Ky., Mayfield—Plans sanitary sewers and disposal plant. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs. Noted Feb. 14.

O., Alliance — Making plans improving disposal facilities. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.

O., Columbus—See "Streets and Roads."

O., Crestline — Making plans sewerage system and disposal facilities. $150,000. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.

O., Lodi — Making plans disposal improvements. $50,000. G. B. Gascoigne, 648 Leader-News Bldg., Cleveland, engr.

O., New Philadelphia — Plans sanitary sewerage system. $50,081. G. E. Arnold, New Philadelphia, engr.

Ind., Evansville — Received no bids Howard Roosa Trunk Sewer. Will probably readvertise. $800,000. J. D Saunders, City Hall, engr. Noted Jan. 10.

Wis., Manitowoc — Making plans 7,700 lin.ft. 8- to 20-in. storm sewers in 13 streets. $25,000. F. L. Alter, City Hall, engr.

Ia., Sioux Center—Plans sewers in various streets. $25,000. P. B. Mouw, clk.

Neb., Omaha — Soon takes new bids sewers in Dists. 756, 843, 846, 847, 848, 849, 850, 851 and 852. $25,000. H. Beal, city engr.

S. D., Sioux Falls—Making plans disposal plant. $30,000. W. C. Leyse, aud.

Tex., Merkel—Election May 14, $50,000 bonds, sewerage system. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Calif., Placentia — Plans sewerage system, to connect with outfall sewer direct to ocean. To exceed $25,000.

Calif., Venice—See "Streets and Roads."

Calif., Whittier—Apr. 29, to vote on $50,000 bonds, sewage disposal plant. Noted Nov. 29.

Sewers (Continued)

Calif., Williams—Plans to vote on $55,000 bonds: $40,000 for sewerage system, incl. small disposal plant, and $15,000 for purchasing existing waterworks, for which improvements are planned.

Ont., Guelph—Plans duplicate trunk sewer from sewage disposal plant to Gordon and Wellington Sts., 12,000 ft. pipe, 12 in. up. $58,400. H. S. Nicklin, city engr.

Ont., Long Branch—Making plans rein.-con. disposal plant, septic tank or activated sludge. $40,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Riverside—Making plans disposal plant and 3 mi. sewers. $100,000. A. Smith, City Hall, engr.

BIDS DESIRED

N. Y., Gloversville—May 6, by Common Council, sanitary sewer in Bleecker St. To exceed $25,000. W. H. Marple, clk. Noted Apr. 17.

N. Y., Long Island City—Apr. 29, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Ridgewood Pl., 91st Ave., Park Lane South (Ashland St.), 195th (Danube) and 114th Sts.

N. Y., North Tonawanda—May 19, by City at office of City Clerk, sanitary sewers. C. L. Oelkars, city engr.; adv. E. N.-R. Apr. 24.

N. J., Irvington (branch of Newark)—Apr. 25, by Bd. Town Comrs., sixty-four 4 in. and fifty-seven 6 in .sewer connections in Stuyvesant Ave., twenty-three 6 in. Sandford Ave., 1,155 lin.ft. 15- to 18-in. sewer in Augusta St. and Stratford Pl. I. J. Casey, Jr., town engr.

D. C., Wash.—May 5, at office Washington Suburban Sanitary Comn., Evans Bldg., New York Ave., steel standpipe, Contr. 42 W. R. B. Morse, Hyattsville, Md., ch. engr. of Dist.; adv. E. N.-R. Apr. 24.

Md., Baltimore—Apr. 30, by Bd. Awards, storm water drains in Sewer Dist. 48 and 34-A, Storm Water Contr. 68, 4,000 ft. 15- to 36-in. storm drain and inlet connections. B. L. Crozier, City Hall, highways engr.

Ga., Bainbridge—May 7, by City Council, 4 mi. 8- to 12-in. and 2 mi. 15- to 36-in. sewers. $150,000. A. Pew, 34 Cove St., Atlanta, engr. Noted Dec. 13.

O., Cleveland—Apr. 30, by Cuyahoga Co, 21,000 ft. 8- to 66-in. vitr. sewers, Impvt. 500, also 9,150 ft. 8- to 18-in. vitr. sewer, Impvt. 51 of Co. Sewer Dist. 1. R. F. MacDowell, Court House, engr.

O., Massillon—May 1, by Director Pub. Serv., constructing Tuscarawas, Sippo, Wetmore, North End and Wooster trunk sewers. C. E. Rice, city engr.; adv. E. N.-R. Apr. 24.

Michigan—Apr. 24, by C. J. Crawford, drainage comr., Royal Oak, improving Red Run Drain and constructing Campbell Rd. Drain, Oakland Co., 13,600 ft. widening and deepening, 10,371 ft. 9 ft. 6 in. and 10 ft. drains, 17,865 ft. 24 in. to 9 ft. drains, 70 tons steel I beams.

Mich., Royal Oak — Apr. 28, by R. B. Fleming, city clk., 5,920 ft. Sanitary Lateral 29, 8 in. vitr. pipe, 5,189 ft. Lateral 28, 8 and 10 in. vitr. pipe, 6,034 ft. Lateral 24, 8 in. vitr. pipe. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Calif., La Habra—May 6, by Trustees La Habra Sanitary Dist., 1,625 lin.ft. 15 in., 3,093 lin.ft. 12 in., 5,857 lin.ft. 10 in. and 2,238 lin.ft. 8 in. sewer pipe, 42 manholes, sewage treatment plant, etc. Elrod Eng. Co., Mills-Fraser Bldg., Santa Monica, engrs. Noted Feb. 14.

Calif., Los Angeles—Bd. Pub. Wks. taking bids Sect. 7 North Outfall Sewer, 1,770 lin.ft. inverted rein.-con. syphon in 3 lines on concrete cradles, laid about 16 ft. underground and top line of sewer 6 ft. underground, 1,714 lin.ft. double concrete pipe, etc. J. A. Griffin, city engr.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Hunt St., from Peace Bros. Inc., 57 North Laurence St., Flushing, $5,029; California Ave., from Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, $5,493; 95th Ave., from P. J. Greenough Eng. Co., $705; 97th Ave., from D. A. Gross, $3,641; Ulster Ave., from E. Muccinni, $1,201. Noted Apr. 10.

N. Y., New York—H. Bruckner, pres. Bronx Boro., Apr. 15, sewers and appurtenances in Waring Ave., from Spedero & Turiana, 3185 East Tremont Ave., $21,265; in Pelham Parkway and Strang Ave., from Carlo Petrillo Co., $47,113 and $15,890 respectively; in West 255th St., from Alpheo Mussumeea, $9,498; in Taylor Ave., from McDonald & Wilson, $22,301. Noted Apr. 10.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, sewers in Arthur Ave., etc., from J. Johnson Sons, 455 Bway., West New Brighton, $18,008. Noted Apr. 10.

Pa., Phila.—Dir. Pub. Wks., Northeast sewerage treatment works superstructure for 1 story, 27 x 42 ft. brick and steel locker building and 1 story, 65 x 114 ft. brick and steel heating plant, from Kober Constr. Co., 34 South 17th St., $22,950 and $86,000 respectively; mechanical equipment, etc., for heating plant from Roberts Filter Mfg. Co., Darby, $87,490. Noted Apr. 3.

Md., Baltimore — Bd. Awards, Apr. 16, storm water drains in Dist. 48, Storm Water Contr. 66, 17,000 cu.yd. excav., 2,500 cu.yd. concrete masonry, 4,000 lin.ft. 24- to 54-in. rein.-con. pipe drains, from Ryan Constr. Co., Real Estate Trust Bldg., Phila., $108,479. Noted Apr. 10.

O., Cleveland—For 565 ft. 5 x 8 ft. concrete sewer in Ontario St., from W. McDowell & Son Co., 10319 Miles Ave., $57,838; 1,230 ft. 2-C sewer and 500 ft. 12 in. vitr. tile sewer in East 185th St. and Melville Rd., from George & Ameen Constr. Co., 2192 East 119th St., $15,618; 345 ft. 12 in. vitr. tile sewer in Cedar Ave., from G. Assad, Orange Ave., $1,545; 1,560 ft. 12 in. vitr. tile sewer in East Blvd., from Yahya Bros., 3196 West 25th St., $9,362; 840 ft. 12 in. vitr. tile sewer in Harvey Ave., from M. Stein, $4,818; 490 ft. 7 ft. concrete sewer in Kingsbury Run, from Stevens & McKeon, 4208 East 96th St., $23,518. Noted Apr. 3.

O., Euclid—Sewer in Lake Shore Blvd., from C. W. Jackson, 1318 East 84th St., Cleveland, $138,738.

Wis., Milwaukee — Monolithic, concrete and pipe sewers in Roosevelt Dr., from Clayton Constr. Co., 397 Farwell Ave., $203,009; Sherman Blvd. from Concordia Ave. to Roosevelt Dr., from G. E. Zimmermann Co., 3402 Grand Ave. $114,899; Sherman Blvd. from Burleigh St. to Concordia Ave., from Hammen & Co., 342 East North Ave., $86,329; Oklahoma Ave., etc., from Milwaukee Sewer & Drainage Co., 928 Humboldt Ave., $15,004.

Wis., West Allis—For 11,000 lin.ft. 8- and 10-in. vitrified clay sanitary sewers, from H. Schaefer & Son, 1149 East Mason St., Green Bay, $1.90 and $2.60 per ft.

Colo., Denver—For 8, 10 and 12 in. vitr. pipe, brick manholes, in South Side Special Sanitary Sewer 9, from Pendergast-Connor Constr. Co., 1st Natl. Bank Bldg., $60,153. Noted Apr. 10.

Wash., Seattle—Bd. Pub. Wks., Apr. 11, sewers in 34th Ave. W., from Scalzo & Co., Seattle, 7,815 ft. 8-in. clay $1.75, 2,270 ft. 10-in. $2, 2,315 ft. 12-in. $2.10, 870 ft. 24-in. $6, 2,750 ft. 27-in. $8.50, 2,180 ft. 30-in. $12, and 512 ft., 30-in. on trestles $6, total $100,373. Engrs. est. $89,936.

CONTRACTS AWARDED

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Edison and Hobart Aves., to McDonald & Wilson Co., $31,160 and $3,225 respectively; Sedgwick Ave., to Sunrise Constr. Co., Inc., $7,679; East 194th St., to C. E. Farrell Contg. Co., 1981 Pilgrim Ave., $8,110. Noted Apr. 17.

O., Columbus—Franklin Co. 9,000 ft. 8 and 10 in. vitr. sewers in Sewer Dist. Clinton 2 (Sharon Heights Area), Contr. 39, to H. E. Miller, 938 South High St., $20,261. Noted Apr. 3.

O., Toledo—West Side Branch Intercepting sewer, Contr. 7 A, to Harris & Tansey. Nasby Bldg., $167,820. Noted Mar. 6.

Ill., Harvey—Sewers in Dists. 168 and 169 to Kraay & Livers, Harvey, $21,530 and $16,797 respectively; Dist. 170 to Christensen Bros., Urbana, $36,157. Noted Apr. 17.

Ia., Oelwein—See "Streets and Roads."

Waste Disposal

BIDS DESIRED

N. Y., Eastchester (Greycourt, P. O.)—May 7, by E. A. Mathews, clk. Town Bd., Village Hall, Tuckahoe, incinerator plant, chimney and building on White Plains Rd., here. Former bids rejected. J. F. Musselman, 101 Park Ave., New York City, consult. engr. Contract for equipment, to Decarie Incinerator Co., New York. Noted Apr. 17.

N. Y., Rockaway Beach (Ind. Sta. Far Rockaway)—Apr. 29, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Long Island City, constructing and completing building and runway, furnaces, appurtenances and chimney of Rockaway Beach Destructor, here.

Bridges

PROPOSED WORK

Vermont — T. W. Dix, ch. engr. State Hy. Dept., Montpelier, takes bids about May 15, facing with 1-2-4 concrete old stone abutments of bridge over Hoosic River, at Pownal, Federal Aid Project 53; bridge over river and railway tracks, known as Gassets Overpass, in Chester, Federal Aid Project 54A, seven 25 ft. I beam spans and two 75 ft. girder spans; one 163 ft. and one 72.5 ft. spans using existing abutments and piers and capping with concrete, in Waterbury, Federal Aid Project 61A; one 80-ft. low truss span, concrete foundation, in Middlebury, (moved 100 ft. upstream from old structure), Federal Aid Project 62A.

New Jersey—State Hy. Dept., Trenton, plans 150 ft. draw double leaf bascule span over Hackensack River between Kearny and Jersey City. $700,000. J. L. Vogel, Broad St. Bank, Trenton, engr.

North Carolina — See "Streets and Roads."

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, takes bids about June 1, steel and concrete bridge and approaches over Caney Fork River, near Rock Island, White and Warren Counties. To exceed $25,000. J. G. Creveling, state highway comr.

Tenn., Smithville—DeKalb Co. soon takes bids concrete and steel bridge over Caney Fork River at Sligo Landing. $25,000. Work will be done under supervision State Hy. Dept., Nashville.

Ohio—See "Streets and Roads."

O., Cleveland—See "Unclassified."

Michigan — State Hy. Dept., Lansing, plans following bridges for 1924: Bridge 310402, 75 ft., across Ontonagon River, Houghton Co., Bridge 100501, 60 ft., across Betzie River, Benzie Co., Bridge 032001, 212.5 ft., across Kalamazoo River, Allegan Co., Bridge 040801, 75 ft., across Thunder Bay, Alpena Co., Bridge 060201, 120 ft., across Rifle River, Arenac Co., Bridge 091,301, 90 ft., across Cheboygan River, Bay Co., Bridge 131202, 75 ft., across Kalamazoo River, Calhoun Co., Bridge 230101, 90 ft., across Battle Creek River, Eaton Co., Bridge 291601, two 75 ft. spans, across Maple River, Gratiot Co., Bridge 320602, 90 ft., across Pinnebog River, Huron Co., Bridge 3306001, two 14 x 22 ft. spans, under Grand Trunk Rd., Ingham Co., Bridge 340404, two 60 ft. and one 90 ft. spans, across Grand River, Ionia Co., Bridge 3811001 over Michigan Central R.R., Jackson Co., Bridge 4113001 over Pere Marquette R.R., Kent Co., Bridge 580711, two 40 ft. spans, on Federal Aid Project 73, across Raisin River, Monroe Co., Bridge 580303, 150 ft., on Trunk Line Rd. 56, across Huron River, Monroe Co., Bridge 560804, one 20 x 90 ft., across Salt River, on Trunk Line 20, Midland Co., Bridge 531002, 75 ft., across Pere Marquette R.R. on Trunk Line Rd. 11-23, Mason Co., Bridge 531001, one 22 x 75 ft., across Pere Marquette River, Mason Co., Bridge 500401, two 22 x 90 ft. spans, across Clinton River on Trunk Line Rd. 59, Macomb Co. G. C. Dillman, ch. engr.

Minn., St. Paul—Had plans prepared temporary bridge over Mississippi River on Jackson St., for use while Robert St. Bridge is being built, 900 ft. long, 24-ft. roadway, 6-ft. sidewalk, timber and steel. $125,000. G. M. Shepard, city engr.

Montana—See "Streets and Roads."

Montana—State Highway Comn., Helena, having plans prepared Project 212A, Big Horn Co., two bridges, each 120 ft. steel truss span on concrete abutments, $30,000 each; Project 213, Glendive Co. bridge over Yellowstone River, six 216 ft. steel spans on concrete abutments, concrete deck, incl. 600 lin.ft. concrete paving on approach, $310,000; Project 152, Blaine and Phillips Counties, two bridges across Milk River, each 175 ft. steel spans on concrete abutments, $35,000 each; Park Co., bridge across Bitter Root River, two 150 ft. steel spans on concrete piers, $50,000.

Arkansas—Comrs. St. Francis Levee Dist. comprising 8 counties, authorized Elliott & Harmon, engrs., Bank of Commerce Bldg., Memphis, Tenn., to prepare plans for Harahan Bridge over Mississippi River. Expense to be borne by State of Tennessee, city of Memphis, St. Francis Levee Dist. and State of Arkansas.

Ore., Portland—Comrs. Multnomah Co. rescinded contracts Sellwood, Ross Island and Burnside Bridges. Noted Apr. 17.

Bridges (Continued)

Calif., Placerville — See "Streets and Roads."

Calif., Sacramento—Sacramento Co. rejected bids for bridge over Paintersville Slough, incl. 1,267 cu.yd. of ½ to 5 in. concrete in piers and abutments, 396 cu.yd. 1-to 4 in. concrete in arches, erecting 500,000 lbs. structural steel (furnished by county), etc. Noted Mar. 13.

Calif., Sacramento — State Highway Comn., Sacramento, having estimates made ground-level bridge over American River, 12th St., here. To exceed $25,000. R. M. Morton, state highway engr.

Calif., San Francisco—City and San Francisco Co. having plans prepared San Jose Ave. viaduct. $175,000. M. M. O'Shaughnessy, city engr.

BIDS DESIRED

Mass., Chicopee—May 5, by E. Bourbeau, supt. streets, repairing city's portion of Chicopee West-Springfield Bridge over Connecticut River; adv. E. N.-R. Apr. 24.

New Jersey—May 5, by State Hy. Dept., Trenton, Beaver Brook Bridges, Route 5, Sect. 11, Warren Co. and municipality of White Twp. A. L. Grover, secy.; adv. E. N.-R. Apr. 24.

N. J., Asbury Park—May 7, by Bd. Freeholders Monmouth Co. (Freehold) Bridge No. 0-10 over Deal Lake, on Sunset Ave., here. G. K. Allen, Jr., 60 Broad St., Red Bank, engr.; adv. E. N.-R. Apr. 24.

Pa., Claysburg — Apr. 28, by Comrs. Blair Co. (Hollidaysburg), 100 ft. rein.-con. girder bridge, 32 ft. wide, with two 5 ft. sidewalks, over Frankstown branch of Juniata River. F. A. McCloskey, Hollidaysburg, engr.

N. C., Newton—May 5, by Catawba Co. Hy. Comn., bridge over Catawba River between here and Taylorsville. W. B. Kiker, Newton, consult. engr.; adv. E. N.-R. Apr. 24.

Fla., Miami Beach—Apr. 30, by City Council, concrete bridge on Meridian Ave., over Collins Canal, adv. E. N.-R. Apr. 24. Noted Feb. 7.

Louisiana—May 6, by State Hy. Dept., Baton Rouge, 144 ft. bridge near Cancienne Canal, Assumpton Parish, six 17 ft. creosoted timber trestles and one 42 ft. swing span, involving 15,000 ft. untreated lumber, 11,000 ft. creosoted lumber, 1,350 ft. creosoted piling, 18,000 lb. structural steel.

Ohio—See "Streets and Roads."

Ohio—May 2, by Dept. Highways and Pub. Wks., Columbus, 2 bridges on Sect. "D" Lima-Spencerville Rd., Allen Co., $7,515; concrete bridge on Sect. "C" Athens-Marietta Rd., Athens Co., $16,081; concrete bridge on Sect. "G" Springfield-Washington C. H. Rd., Clark Co., $3,282; concrete bridge on Sect. "F" Springfield-Washington C. H. Rd., Clark Co., $6,781; 2 concrete bridges on Sect. "FJ" Jackson-Pomeroy Rd., Jackson Co., $9,181. A. V. Donaheys, dir. highways.

Wis., Tomahawk—Apr. 29, by State Hy. Comn. at City Hall, Tomahawk, Tomahawk Ave. Bridge, overall length 563 ft. plate girder type, 7 spans each 80 ft., 24 ft. roadway, one 6 ft. cantilevered sidewalk, substructure consists of 2 concrete abutments, over Wisconsin River, here. W. C. Buetow, bridge engr.

Wyoming—May 2, by State Highway Comn., Cheyenne, 8 span steel bridge. $60,000. Z. E. Sevison, state highway engr.

Tex., Houston—May 5, by H. L. Washburn, aud. Harris Co., concrete and steel bridges on La Porte Rd. and Sims Bayou. $25,000. Howe & Wise, co. engrs.

Utah, Salt Lake City—See "Excavation, Drainage, Irrigation."

Calif., Sherman Island — Delta Bridge Corp., 525 Market St., San Francisco, taking bids for steel for bridge over San Joaquin River between here and Antioch. Plans provide for 869 lin.ft. concrete trestle approach, 912 lin.ft. concrete or steel viaduct on 16 piers, 270 lin.ft. steel lift span, 270 lin.ft. steel fixed span, 850 lin.ft. approach. Total cost $1,500,000. Little & Dodge, 251 Kearny St., San Francisco, engrs. Noted Jan. 10.

BIDS RECEIVED

Ga., Athens—Clarke Co., concrete arch bridge over Oconee River at Oconee St., from Steel & Lebby, Knoxville, Tenn. Noted Mar. 27.

Ala., Eufaula—State Hy. Dept., Montgomery, bridge over Chattahoochee River, Project 373, Barbour Co., from Nashville Bridge Co., foot of Shelby Ave., Nashville, Tenn., $61,199. Noted Mar. 20.

Ohio—See "Streets and Roads."

O., Milford—Hamilton Co., Court House, Cincinnati, Apr. 18, substructure for 260 ft. steel truss bridge, incl. 1,100 sq.yd. 1:2:3 concrete paving, 6,000 lin.ft. 1:2:3 sidewalk, 800 cu.yd. 1:2:4 concrete 13 tons reinforcing, etc., here, from R. C. Rude, Madisonville, $24,820, engr. est. $28,300; superstructure for above, from Pennsylvania Bridge Co., Beaver Falls, $70,124, $51,700. Noted Mar. 27.

CONTRACTS AWARDED

N. Y., Le Roy — For 262 ft. rein.-con. bridge, 30 ft., over Oatka Creek, Clay St., to G. W. Thompson, Gurney Bldg., Syracuse, $74,500. Noted Mar. 27.

Me., Sullivan—State Hy. Comn., Augusta, superstructure for bridge over Taunton River between here and Hancock, four 190 ft. 6 in. spans, and one 209 ft. 8½ in. span, to Amer. Bridge Co., 30 Church St., New York City, $127,622. Noted Mar. 27.

West Virginia — State Road Comn., Charleston, superstructure Hanging Rock Branch Bridge 670, Project 134, Hampshire Co., Leading Creek Bridge 053, Project 3211-A, Randolph Co., Abrams Creek Bridge 883, Project 122-B, Grant Co., Hackers Creek Branch Bridge 910, Project 3225, Harrison Co., Stonecoal Bridge 898, Project 3188, Wayne Co., to Vincennes Bridge Co., Vincennes, Ind., $8,063, $5,795, $6,365, $7,195 and $6,349 respectively; superstructure, Denver Bridge 885, Project 3167-B, Marshall Co., Johns Branch Bridge 905 and 906, Project 3226, McDowell Co., to E. R. Mills, Newport, Ky., $13,487 and $24,222 respectively; Klines Gap Branch Bridge 884, Project 3146, Grant Co., Annabelle Branch Bridge 899, Project 2135, Marion Co., to Shaid Constr. Co., Elkins, $6,147 and $4,922 respectively; substructure for Hackers Creek Bridge 910, Project 3225, Harrison Co., to Kingwood Constr. Co., Kingwood, $6,324, substructure Cedar Creek Bridge 843, Project 3111, Gilmer Co., to L. W. Cole, 1200 Jefferson Ave., Huntington, $19,620, substructure Johns Branch Bridge 905 and 906, Project 3226, McDowell Co., S. Yon Co., Huntington, $18,818, Hanging Rock Branch Bridge 670, Project 134, Hampshire Co., to N. H. Clark, Luray, $11,190, Hughes Creek Bridge 909, Project 3225, Harrison Co., to O. A. McQueen, Buckhannon, $11,306, Leading Creek Bridge 953, Project 3211-A, Randolph Co., to Keeley Constr. Co., Clarksburg, $4,187; superstructure, Cedar Creek Bridge 842, Project 3111, Gilmer Co., to Oregonia Bridge Co., Lebanon, O., $12,369; substructure and superstructure for Bridge 984, Project 3082-B, Wetzel Co., to Pipes & Johnson, Middleboure, $27,631; State Bridge 744, Project 3084-B, Wood Co., to Hardman & Minns, Spencer, $12,368; Bridges across 3 mile and 5 mile creeks, 857 and 858, Project 3139, Mason Co., to Hatfield Constr. Co., 418½ 10th St., Huntington, $22,886; Grassy Creek Bridge 690, Project 3279, Webster Co., to Farris Constr. Co., Sutton, $22,513; Dallison Bridge, Project 3116-A, Wood Co., to C. P. Cokeley, Harrisville, $5,994. Noted Mar. 13.

Ala., Eufaula — State Hy. Dept., Montgomery, ¼ mi. bridge over Chattahoochee River, here, to Nashville Bridge Co., foot of Shelby Ave., Nashville, Tenn., $61,199. Noted Apr. 24.

Louisiana—State Hy. Comn., Reymond Bldg., Baton Rouge, 11 bridges ranging from 15 to 131 ft. long, on Federal Aid Project 113 B, Lafourche Parish, to Austin Bridge Co., 1813 Clarence St., Dallas, Tex. Noted Mar. 20.

Ohio—See "Streets and Roads."

Ohio—Dept. Highways and Pub. Wks., Columbus, steel bridge on Sect. "D" Youngstown-Conneaut Rd., Ashtabula Co., to Brookville Bridge Co., Brookville, $6,281; steel bridge on Sect. "C" Windsor-Geneva Rd., Ashtabula Co., to Perkins Structural Steel Co., Worcester, $7,547; concrete bridge on Sect. "D" Athens-Nelsonville Rd., Athens Co., to Elsass-Myer Co., Anna, $16,878; bridge on Sect. "D" Piqua-Sidney Rd., Miami Co., to Kobarger & Etherington, Sidney, $7,205. Noted Apr. 3.

Ind., Indianapolis—Marion Co., bridge over Fall Creek, to M. E. White Co., 350 West Kinzie St., Chicago, $172,336. Engrs. est. $196,000.

Mich., Ludington — State Hy. Dept., Lansing, two 75 ft. trough span, concrete girder bridges 531001 and 531002, Mason Co., to W. Marshall, Grand Rapids, $46.-230. Noted Apr. 17.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, bridges, **(3-28B, Warren means Route 3, Sect. 28B, Warren Co.)**, to A. Olsen Constr. Co., Waterloo, Ia., on 3-28B, $46,236, on 3-35B, Warren, $22,917, on 5-28B, 5-29B, 5-30B, 5-28C, and 5-31B, Jo Daviess, $96,985; to A. P. Munsen, Marion, Ia., on 9-25B, Hancock, $52,913, on 9-24B, Hancock, $35,870 to G. C. Fairclo, Industry, on 8-20B, Iroquois, $20,144, on 9-37B, McDonough, $12,179; to Clinton Bridge Wks., Clinton, Ia., on 3-28C, Warren, $25,771, on 9-24C, Hancock, $7,525; to St. Louis Structural Steel Co., Bank of Commerce Bldg., St. Louis, Mo., on 9-25C, Hancock, $21,134; to C. P. O'Reilly & Co., Wainwright Bldg., St. Louis, Mo., on 9-41B, Fulton, $6,778; to Whitewater Bridge Co., Whitewater, Wis., on 41-12B, Fulton, $16,288; to M. R. Deyo & Co., 1126 West Washington St., East Peoria, on 9-44, Fulton and Peoria, $5,897; to Ferguson Constr. Co., 1033 North 2nd St., Rockford, on 8-21D, Iroquois, $31,679. Noted Mar. 13 and Apr. 10.

Kan., Kansas City — Wyandotte Co., bridge on 12th St., substructures, to J. W. McMurry Constr. Co., 511 Railway Exch. Bldg., Kansas City, Mo., $198,500, superstructure and timber work, to Wisconsin Bridge Co., North Milwaukee, Wis., $220,-700 and $53,000 respectively. Noted Mar. 20.

S. D., Yankton—See "Streets and Roads."

Missouri—State Hy. Dept., Jefferson City, three 60 ft. steel truss and two 18 ft. rein.-con. slab spans, 4 rein.-con. piers, over Perchee Creek, Boone Co., to Short, Bramer & Cox, Monnett, $22,444. Noted Mar. 6.

Missouri—State Hy. Dept., Jefferson City, one 90 ft. steel truss and four 25 ft. I-beam spans, 2 rein.-con. piers, etc., over Salt Fork, Salem Co., to Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, $18,622; 483 ft. overhead bridge, one 60 ft. steel plate girder, two 20 ft. rein.-con. slab, one 35 ft. and two 28 ft. rein.-con. deck girder spans, etc., over Salt Creek and tracks of Missouri, Kansas & Texas R.R., Howard Co., to Acme Engineers, Decatur, Ill., $48,574. Noted Apr. 3.

Nevada—Dept. Highways, Carson City, Contr. 103, Federal Aid Project 53-B, timber trestle over Virgin River, near Bunkerville, Clark Co., 882 lin.ft. long, 18 ft., to Dodge Bros. & Dudley, Inc., Reno, 7,740 lin.ft. treated timber piles $1.98, 190,600 ft. timber, complete in place, $130, etc., total $43,219; engrs. est. $57,413. Noted Mar. 27.

Calif., Alton — State Highway Comn., Sacramento, bridge across Van Duzen River, near here, (I-Hum-1-F), three 163 ft. rein.-con. arch spans and eight 30 ft. rein.-con. girder spans, incl. 2,975 cu.yd. concrete, 2,200 cu.yd. excav., 3,500 cwt. reinforcing, 650 lin.ft. rein.-con. piles, to Bordwell & Zimmerman, Napa, $88,050; engrs. est. $93,680. Noted Mar. 27.

Calif., Sacramento — Sacramento Co., bridge at Steamboat Slough, double leaf Strauss bascule structure with 2 piers and abutments, incl. 398 cu.yd. of ½ to 5 in. concrete in piers and abutments, erecting 500,000 lb. structural steel (furnished by county), etc., to Isham & Nystedt, 111 Kensington St., Stockton, $73,516. Noted Mar. 13.

Dams

BIDS DESIRED

Mich., Detroit—May 15, by Detroit Edison Co., dam and power house at French Landing on Huron River, 20 mi. from here. G. S. Williams, Cornwell Bldg., Ann Arbor, consult. engr.; adv. E. N.-R. Apr. 24.

CONTRACTS AWARDED

Ore., Jacksonville — Talent Irrigation Dist., 400 ft. concrete dam, 126 ft. high, to W. A. Cramer, San Francisco, Calif., $185,713; Ashland lateral ditch, 60,000 cu. yd. excav., to Woelke & Rhodes, Grants Pass, $41,900.

Railways

PROPOSED WORK

New York—Binghamton Ry. Co., 375 State St., Binghamton, plans new trackage extensions in Binghamton to Johnson City. To exceed $100,000. F. L. Fuller, pres.

Tennessee—Knoxville Ry. & Power Co., Knoxville, plans to expend $550,000 new road bed, passenger cars and equipment, additions, to shops, etc.

Tennessee — See "Unclassified," under Nashville.

BIDS DESIRED

Missouri—May 13, by Bd. Pub. Serv., 208 City Hall, St. Louis, standard gauge railroad with 75 lb. rails, incl. sidings, appurtenances, switches, etc., for new waterworks at Howards Bend. $32,000. E. E. Wall, City Hall, member of Comn.

CONTRACTS AWARDED

New York—R. K. Fuller, comr. Canals & Waterways, Albany, railroad track along Barge Canal Terminal at Rochester, Contr.

Railways (Continued)

95, to Lathrop, Shea & Henwood, 428 Ellicott Sq., Buffalo, $8,748. Noted Mar. 20.

Missouri—United Railways Co., 39th and Park Aves., will reconstruct roadbed with rein.-con., concrete ties and lay tee rails on about 3 mi. Prairie, Victor, 39th, 14th, Garrison, Franklin, 6th and Devonshire Sts., by day labor.

Oregon—Southern Pacific R.R. Co., 65 Market St., San Francisco, Calif., 6 mi. Natron-cutoff, to Henry & McFee, Northern Life Bldg., Seattle, Wash.; 9 mi. Natron-cutoff, to Erickson-Peterson-Grier, Monadnock Bldg., San Francisco, Calif.

Excavation, Drainage, Irrigation

PROPOSED WORK

N. Y., Rochester—R. K. Fuller, comr. Canals & Waterways, Albany, rejected bids Apr. 15, completing excavation of canal channel in Genesee River and placing rock protection along river banks, here, Contr. 214. Noted Mar. 20.

La., Shrewsbury—Bd. Comrs. 4th Jefferson Dist. of Jefferson Parish, will have revised plans prepared (to meet approval of those of the Board who objected to manners of letting under original specifications) for 30 mi. canal. $1,500,000. Noted Feb. 28.

Kan., Newton—Sand Creek D. D. preparing plans cleaning and wiping channel of Sand Creek. $30,000. Ruckel Eng. Co., Interurban Bldg., Hutchinson, engrs.

Canada—See "Unclassified."

Ontario—See "Unclassified."

BIDS DESIRED

New York—May 1, at office of T. Holahan, general contractor, 164 Lewis St., Rochester, excavating and hauling approximately 100,000 yd. earth from village of Fine to Star Lake, St. Lawrence Co., Contr. 8175; adv. E. N.-R. Apr. 24.

New York—May 20, by R. K. Fuller, comr. Canals & Waterways, 55 Lancaster St., Albany, excavating canal channel at various locations between Oriskany and Oneida Lake, constructing settling basin at Nine Mile Creek, Contr. M-2; excavating material within canal prism lines at Medina, Lockport and Tonawanda, Contr. M-3; excavating tail race for Crescent power house and incidental work thereto at Crescent, Contr. A-4; adv. E. N.-R. Apr. 24.

La., Lake Charles—May 15, by Police Jury Calcasieu Parish, Court House, constructing Sects. 4 and 6 of Navigation Channel. F. Shutts, parish engr.; adv. E. N.-R. Apr. 24.

Wis., Appleton—May 8, by Farm Drainage Bd., H. Wieckert, secy., 816 Summer St., 100,000 cu.yd. excav. in D. D. 3, Bear Creek Twp. $18,000. L. M. Schindler, 717 Clark St., engr.

Calif., Blythe—May 3, by Palo Verde Irrigation Dist., 36 mi. open drains, 1,450,000 cu.yd. excav., with structures for road and canal crossings. $350,000. F. F. Friend, ch. engr.

BIDS RECEIVED

Wis., Milwaukee — Dredging various rivers and channels, 116,000 cu.yd., from Great Lakes Dredge & Dock Co., 216 West Water St., $0.4375 per cu.yd. Noted Apr. 10.

CONTRACTS AWARDED

New York—R. K. Fuller, comr. Canals & Waterways, Albany, excavating various locations from Vischer Ferry to west end of Sect. 2, Contr. 217, to Amer. Pipe & Constr. Co., 20 Market St., Amsterdam, $136,225; various locations, Waterford to Whitehall, Contr. 220, to J. W. Holler, Inc., Ft. Edward, $76,077; various locations the canal channel in Mohawk River from Fonda to Lock 16, Contr. 218, to Empire State Dredging Co., 233 Bway., New York City, $141,991. Noted Mar. 20.

Miss., Newton—Scott Co. D. D., c/o J. R. Rowsee, secy., levee and drainage work consisting 1,200,000 cu.yd. excav., to J. E. Brown, Lake, excav. $0.0933 per cu.yd., clearing $20 per acre.

Ark., Newport—Brown Creek D. D. Jackson Co., cutting 6½ mi. ditch to drain 6,000 acres, to empty into Cache River, to Miller & Harris Bros. Constr. Co., Shelby, Miss. Noted Mar. 20.

Ore., Jacksonville—See "Dams."

Calif., Los Angeles — Drainage Impvt. Dist. 8 of Los Angeles Co., constructing drainage system, incl. 63,305 cu.yd. canal excav., 127,038 cu.yd. excav. in conduit trenches, 19,200 cu.yd. concrete, 1,146,000 lb. steel, 6,622 lin.ft. 8 in., 889 lin.ft. 12 in., 1,030 lin.ft. 24 in., 3,970 lin.ft. 30 in., 5,588 lin.ft. 36 in. and 2,898 lin.ft. 48 in. concrete pipe, ditches to be concrete lined, to Francisco & Ellington, 1250 West 5th St., $647,588. Noted Apr. 10.

Streets and Roads

PROPOSED WORK

Vermont—T. W. Dix, ch. engr. State Hy. Dept., Montpelier, takes bids about May 15, paving 2.67 mi. Williston-Turnpike Rd., Federal Aid Project 60A, in South Burlington, 4,500 cu.yd. plain and 525 cu.yd. rein.-con., 5,340 cu.yd. earth excav.

Massachusetts—State Hy. Dept., Boston, plans macadam paving 3 mi. Belchertown Rd., Hampshire Co. Amherst, Hampshire Co. and State will appropriate $30,000, $30,000 and $60,000 respectively. State Hy. Dept., Boston, engrs.

New York—A. W. Brandt, comr. Highways, Albany, received no bids Apr. 18, 6.75 mi. Highway 5523-A, 16 ft., Hamilton Co. $276,009. Noted Apr. 3.

N. Y., Elmira—Bd. Pub. Wks., plans bitulithic resurfacing State St., also concrete curbing and guttering West 1st and West Gray Sts. To exceed $25,000. T. A. Brown, city engr.

N. Y., North Tonawanda—Plans paving 2nd, 7th and Linwood Aves. To exceed $25,000. C. L. Oelkers, city engr.

N. Y., Schenectady — Schenectady Co. voted $81,000 bonds graveling, etc., 8 mi. roads, 16 ft., in Niskayuna, Glenville, Rotterdam, Princeton and Duanesburg.

N. Y., Seneca Falls—Village Bd. Trustees plans paving 15 streets. $130,000. W. M. Follette, village pres.

N. J., Atlantic Highlands—Monmouth Co. (Freehold) takes bids about May 15, 20 ft. rein.-con. paving, etc., Hendrickson Corners to Hoppings Crossing, here. $125,000. G. K. Allen, Jr., 60 Broad St., Red Bank, engr.

N. J., Flemington—Hunterdon Co. plans to repair White House-Flemington Rd. with State aid. $40,000. G. Davis, White House Station, engr.

N. J., Trenton—Pub. Serv. Ry. Co., 80 Park Pl., Newark, plans to pave ¾ mi. Liberty St., asphalt, here. J. E. English, city engr. of Trenton, will supervise construction. $80,000.

N. J., Trenton—Mercer Co. making plans concrete and brick paving 1 mi. Whitehead Rd. $40,000. H. F. Harris, Court House, engr.

Pa., Williamsport—Plans election, $40,000 bonds, paving and curbing.

W. Va., Wheeling—Plans paving with vitr. brick McConoch, Wood, 39th and other streets. $230,000. H. Conrad, Wheeling, engr.

North Carolina—State Hy. Comn., Raleigh, making plans improving roads (**S. P. means State Project**) grading and bridging 6.744 mi. S. P. 580, Randolph Co., $45,000, 4.291 mi. S. P. 422, Franklin Co., $28,000, 8.012 mi. S. P. 415, Durham Co., $50,000, 10.806 mi. S. P. 212, Craven Co., $75,000; grading and concrete or asphaltic paving 12 mi. S. P. 107-B, Bertie Co., $350,000, 2.048 mi. S. P. 890 Yancey Co., $50,000, 4.891 mi. S. P. 812-B, Burke Co., $125,000, 13.392 mi. S. P. 791-B, Yadkin Co., $390,000, 9.038 mi. S. P. 617, Catarrus Co., $380,000, 8.134 mi. S. P. 318, Brunswick Co., $120,000, 7.197 mi. S. P. 266, Pamlico Co., $45,000; grading, paving with waterbound macadam and bridging 10 mi. S. P. 888, Yancey Co., $100,000; grading and sand-clay or top-soiling 16.656 mi. S. P. 134, Gates Co., $116,000. C. M. Upham, Raleigh, highway engr.

Georgia—State Hy. Dept., Atlanta, plans 35 mi. highway through National Forest Reserve, in Union, Fannin and Lumpkin Counties. $65,000. W. R. Neel, state highway engr.

Ga., Clayton—Rabun Co. voted $175,000 bonds, hardsurfacing road from Habersham Co. line to North Carolina line.

Ga., Waynesboro—**Sold $45,000 bonds, paving roads.**

Fla., Arcadia—De Soto Co. election May 6, $868,431 bonds, constructing roads in Dists. 1, 2, 3, 4 and 5. C. L. Cravens, Arcadia, engr.

Fla., Port Tampa City—Election Apr. 27, $25,000 bonds, paving 1½ mi. streets, (property owners will pay $50,000).

Alabama—State Hy. Dept., Montgomery, plans constructing 41 roads, totaling 744.76 mi. W. S. Keller, state highway engr.

Ala., Hartselle—Plans paving various streets. $25,000.

Miss., Vicksburg—Plans paving municipal landing. $75,000.

Miss., Woodville—Wilkinson Co. will sell $75,000 bonds May 5, for 3 roads out of Centerville, each approximately 6 mi.

La., Homer—**Claiborne Co. election Apr. 29, $800,000 bonds, for road work.**

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, having surveys made improving 20 mi. Trenton-Kenton Rd., 16 ft., Gibson Co. J. G. Creveling, state highway engr.

Tennessee—State Dept. Hy. & Pub. Wks., Nashville, having surveys made grading and surfacing 12 mi. (Jackson Highway), from Columbia to Mt. Pleasant, 18 ft., Maury Co. J. G. Creveling, highway comr.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, plans grading and surfacing 12 mi. Murfreesboro-Cannon Co. Rd., 18 ft., Rutherford Co. J. G. Creveling, highway comr.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading and surfacing with bituminous macadam on limestone 8 mi. Cookeville-Overton Co. line Rd., 16 ft., Putnam Co.; 5 mi. Manchester-Beech Grove Rd., 9 ft., (probably concrete), Coffee Co. J. G. Creveling, state highway comr.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, soon takes bids grading and surfacing with bituminous macadam on limestone 11 mi. McMinnville-Rock Island Rd., 18 ft., Warren Co., probably with gravel 9.53 mi. road from Davidson Co. line to Dickson Co. line Rd. (part of Memphis-Bristol Rd.), 18 ft., Cheatham Co.; oil surface treating 20 mi. Hohenwald-Lawrence Co. Rd., 18 ft., Lewis Co.; grading 4.5 mi. Algood-Overton Co. Rd., Putnam Co., 9 mi. Covington-Shelby Co. Rd., 18 ft., Tipton Co., 6 mi. Gibson Co.-Jackson Rd., 18 ft., Madison Co., 2.5 mi. Humbolt-Madison Co. Rd., 18 ft., Gibson Co. J. G. Creveling, comr.

Tenn., Columbia—**Maury Co. plans repairing and limestone surfacing various roads. $71,000. J. H. Wilkes, supt. roads.**

Tenn., Elizabethtown—Carter Co. plans 5 mi. asphalt surfacing Elizabethtown-Bluffton City Rd. $100,000.

Tenn., Greenville—Green Co. voted $30,000 bonds, improving 6 mi. road from Greenville east toward North Carolina State line, probably limestone.

Tenn., Nashville—Plans widening to 50 ft., paving, etc., 7 blocks Church St. $200,000. W. W. Southgate, city engr.

Tenn., Ripley—Lauderdale Co. election May 6, $400,000 bonds, road from Ripley to Dyer Co. line.

Tenn., Savannah—City Comn. plans concrete paving, curbing, guttering and sidewalks for school and residential district. $25,000.

Kentucky—State Hy. Dept., Frankfort, rejected bids shaping and paving 19.22 mi. Henderson-Madisonville Rd., 18 ft., Federal Aid Project 34, Sect. F, Webster Co. Will readvertise. Noted Apr. 17.

Ohio—Dept. Highways & Pub. Wks., Columbus, cancelled bids which were to be opened Apr. 11, grading, bridging and paving 12.265 mi. roads in Columbiana, Portage, and Trumbull Counties. Noted Apr. 3.

O., Canton—**Plans widening and asphalt resurfacing ½ mi. Market Ave. N. $40,000-$50,000. W. A. Sarver, City Hall, engr.**

O., Canton—**Stark Co. plans resurfacing 2 mi. Alliance-Fairmont Rd., 20 ft. $50,000-$55,000. A. M. Wise, Court House, engr.**

O., Columbus — **Making plans grading, laying necessary water services and sewer connections and paving 4,089 ft. Melrose and Milford Aves., Bassett and 9th Sts., 24 ft., brick $69,979, asphalt $57,715; 5,495 ft. Brehl Ave., Cole and Bruck Sts., 26 ft., brick $95,802, asphalt $76,189; 288 ft. alley north of 16th Ave., 15 ft., brick $1,854, concrete $1,643; 1,127 ft. 5th St., 40 ft., asphalt $16,511; 642 ft. alley north of Frambes Ave., 23.5 ft., brick $6,389, concrete $5,704; 6,594 ft. 17th Ave., 30 ft., brick $88,120, asphalt $71,420; 374 ft. alley west of Carpenter St., 20 ft., brick $3,138, concrete $2,780. R. H. Simpson, city engr.**

O., Columbus — **Making plans grading, laying necessary water services and sewer connections and paving 1,464 ft. alleys north of Oakland and 14th Aves., 20 ft., brick $12,855, concrete $11,381; 1,437 ft. Olmstead Ave., 26 ft., brick $26,590, asphalt $22,799; 656 ft. alley north of Patterson Ave., 18 ft., brick $4,633, concrete $4,104; 358 ft. alley north of Reinhard Ave., 15 ft., brick $2,322, concrete $2,049. R. H. Simpson, city engr.**

O., Dayton—**Plans paving Orchard Ave., rein.-con., $16,609; 5th St., granite block, $52,435; South Bway., brick or asphalt, $9,736; Cambridge and Pritz Aves., Kentucky rock asphalt or concrete, $51,500; Western Ave., brick, $20,459. J. F. Hale, city engr.**

Ind., New Albany—**Plans paving Market St. from Silver to Beharrel Ave., $22,129; 4th St. from Spring to Elm Sts., $4,053; Market St. from Thomas to Silver Sts., $12,751, all foregoing 30 ft. concrete road-**

Streets and Roads (Continued)

way. J. D. Mitchell, New Albany, assistant city engr.

Michigan — State Hy. Dept., Lansing, plans to grade **(S. T. L. Rd. means State Trunk Line Rd.)** 3.25 mi. S. T. L. Rd. 14-12, Hillsdale Co., 4.5 mi. S. T. L. Rd. 14-55, Lenawee Co., 7 mi. S. T. L. Rd. 14-18, Lenawee Co.; grading and gravel surfacing 2.5 mi. S. T. L. Rd. 22-10, Leelanau Co., 5 mi. S. T. L. Rd. 20-17, Lake Co., 5 mi. S. T. L. Rd. 20-3, Sect. B, Lake Co.; grading and surfacing with concrete, bituminous concrete or sheet asphalt 3 mi. S. T. L. Rd. 14-40, Jackson Co., 0.642 mi. S. T. L. Rd. 29-2, Eaton Co., 10.175 mi. Federal Aid Project 67, Sect. E, Washtenaw Co., 13.981 mi. Federal Aid Project 95, Sect. D, Lenawee Co.; grading and surfacing with penetration macadam 2 mi. S. T. L. Rd. 12-42, Iron Co. G. C. Dilman, ch. engr.

Michigan — State Hy. Dept., Lansing, plans to grade and surface 4.994 mi. State Trunk Line Rd. 25-12 B, Chippewa Co., 46,879 sq.yd. gravel, waterbound or bituminous macadam; State Trunk Line Rd. 35-2, Delta Co., 42,640 sq.yd. penetration macadam; 0.467 mi. State Trunk Line Rd. 10-37 B, Presque Isle Co., 5,477 sq.yd. asphalt, concrete or bituminous concrete.

Mich., Detroit—Having plans prepared paving with 3½ in. sheet asphalt on 8 in. concrete 9,280 sq.yd. Linwood Ave. $46,400, 2,770 sq.yd. Gunston Ave. $13,880, 3,900 sq.yd. Petoskey Ave. $19,580, 2,140 sq.yd. Prairie Ave. $10,710, 4,320 sq.yd. Parkside Ave. $21,620, 7,830 sq.yd. Rosemary St. $39,150, 7,590 sq.yd. Wilshire Ave. $37,960, 3,350 sq.yd. Prairie Ave. $16,740. G. Jerome, city engr.

Mich., Holland—Having plans prepared grading and paving various streets, 32,500 sq.yd. sheet asphalt on 6 in. waterbound macadam or concrete. $100,000. R. Overweg, clk.

Ill., Champaign—Soon takes bids grading and surfacing with rein.-con., asphaltic concrete or brick on concrete, 7,900 ft. University Ave., South 2nd and Charles Sts., 30 ft. wide. $83,000. F. C. Lohman, City Hall, engr.

Ill., Salem—Having preliminary plans prepared grading, and concrete surfacing 11,000 ft. road. $100,000. Caldwell Eng. Co., 502 Ayres Bldg., Jacksonville, engrs.

Wisconsin—See "Contracts Awarded."

Wis., Cudahy—Making plans rein.-con. paving 1 mi. Van Norman and Pulaski Aves., 30 ft. $30,000. R. Steinhagen, City Hall, engr.

Wis., Ladysmith—Plans to pave 7 blocks. $33,000 bonds voted. C. C. Kile, city clk.

Wis., Wausau—Making plans paving 10,000 sq.yd. Chicago Ave., Bridge, Adams, Plumer and Lemke Sts. B. C. Gowen, City Hall, engr.

Minn., Alexandria—Douglas Co. plans to sell $175,000 bonds this summer for road improvements. A. Waster, Alexandria, engr.

Kan., Oskaloosa—Jefferson Co. soon takes bids grading and surfacing with vitr. brick or concrete 0.97 mi. Federal Aid Project 227, Sect. B, 18 ft., Dodd & Finney, 216 West 6th St., Topeka, engr.; with bituminous macadam 7.7 mi. Federal Aid Project 220, Sect. A, 18 ft., and 5.5 mi. Sect. B, 18 ft., Eidmann & Marshall, Smith Bldg., Topeka, engrs.; grading Federal Aid Project 222, 6.249 mi., Sect. A, 28 ft., 7.387 mi. Sect. B, 28 ft., 5.275 mi. Sect. C, 28 ft., surfacing with bituminous macadam, vitr. brick or concrete 0.528 mi. Sect. D, 18 to 59 ft. Address R. C. Ham, co. engr., and for Sects. A, B and C. Eidmann & Marshall, Smith Bldg., Topeka, engrs. for Sect. D. Noted Apr. 3.

N. D., Bismarck—Burleigh Co. plans grading 8 mi. Sterling-Moffitt Rd. $26,000.

Montana—State Highway Comn., Helena, plans gravel surfacing 8 mi. Project 205A, Granite Co., $48,000; 3.5 mi. Project 191A, Pable-Polson Rd., Lake Co., $60,000; 4 mi. Project 202, Sanders Co., $26,000; 18 mi. Project 212 A, road from Crow Agency to Lodge Grass, Big Horn Co., $125,000; 3 mi. Project 208 B, $28,000 and 3 mi. Project 209 B, Gallatin Co., $28,000; 6 mi. Project 210, road up Divide Creek Hill in Glacier Park, $50,000; 27 mi. Project 152, road across Ft. Belknap Reservation and several bridges, Blaine and Phillips Counties, $270,000; 16 mi. road in Fort Peck Indian Reservation, Valley Co., $150,000.

Mo., Lees Summit—Making preliminary plans grading, concrete curbing, guttering and surfacing 9 blocks 3rd and Douglas Sts., 26 ft., concrete or asphaltic concrete. $32,500.

Mo., St. Louis — Bd. Pub. Serv. soon takes bids improving 4,210 sq.yd. Cora Ave., asphalt, $21,500; 17,220 sq.yd. Virginia St., bitulithic, $90,000. W. W. Horner, city engr.

Ark., Little Rock—Soon takes bids grading and surfacing with asphalt on concrete, asphaltic concrete or rein.-con. 9,500 ft. Street Impvt. Dist. 363. $100,000. H. R. Carter, Exch. Bank Bldg., engr.

Ark., Pine Bluff—Soon takes bids grading, surfacing with asphalt or asphaltic concrete on concrete, concrete curbs and gutters in Street Dist. 72. $100,000. Guest Eng. Co., City Hall, engrs. Noted Feb. 28.

Ark., Springdale — Making preliminary plans grading and paving 4,200 ft. in Dist. 1, rein.-con., asphalt on concrete, asphaltic concrete or brick on concrete. $39,000-$48,000.

Ark., Texarkana—Plans paving in Dist. 20. $100,000. G. T. Conway, mayor.

Ark., Texarkana — Making preliminary plans grading, surfacing with brick on concrete, rein.-con. or asphalt 8 blocks Pecan St., 30 ft. $28,000.

Tex., Anson—Jones Co. election May 3, $500,000 bonds, constructing roads. J. F. Lindsey, co. judge.

Tex., Bay City — Matagorda Co. had plans prepared grading and shell surfacing 4.89 mi. State Highway 60, 15 ft. $44,800. J. C. Carrington, Bay City, engr.

Tex., Coleman—Coleman Co. election soon $100,000 bonds, gravel surfacing 12 mi. highway from here to Brown Co. line, Precinct 1, 18 ft. A. E. Dickerson, co. engr.

Tex., Colorado—Mitchell Co. plans new election soon $325,000 bonds, concrete paving State Highway 1. Former election defeated. F. F. Du Bose, co. engr. Noted Feb. 28.

Tex., El Paso—Election Apr. 30, $100,000 bonds for permanent street paving, and $50,000 bonds street and alley grading. Address Mayor Dudley.

Tex., Ft. Worth—Making plans Camp Bowie Blvd. from West 7th St. to city limits, 80 ft. paving or two 27 ft. drives with esplanade, alternate bids on miscellaneous types of standard paving. $100,000. D. S. Lewis, city engr.

Tex., Gonzales — Gonzales Co. making plans improving 20 mi. highway, 18 ft. State and Federal aid granted, total $375,000. J. G. Irby, co. engr.

Tex., Groveton—Trinity Co. voted $60,000 bonds, roads in Dist. 3. W. J. Kelly, Trinity, co. engr.

Tex., Henderson—Voted $75,000 bonds paving various streets. H. N. Roberts, Court House, Lubbock, engr. Noted Apr. 3.

Tex., Houston — Making plans paving Woodleyer Addition, inverted penetration. $25,000. Howe & Wise, Commercial Natl. Bank Bldg., engrs.

Tex., Lufkin — Angeline Co. making plans grading and gravel surfacing 15.64 mi. State Highway 63, 16 ft. $150,000. G. R. Abney, co. engr.

Tex., McKinney — Making plans paving South Benge St., et al., standard types pavement, to exceed $25,000.

Tex., New Boston—Bowie Co. election May 24, $490,000 bonds, hard surfaced roads in Precinct 1. F. E. Hess, Medical Arts Bldg., Dallas, co. engr.

Tex., New Braunfels—Comal Co. election Apr. 26, $92,000 bonds, roads in Dist. 1. C. Roeper, co. judge.

Tex., Raymondville—Willacy Co. election soon, $250,000 bonds improving 18.24 mi. highway from Cameron Co. line to Kenedy Co. line, 20 ft., gravel or concrete base, tarvia top. Address County Judge.

Tex., Sequin — Guadalupe Co. defeated $1,100,000 bonds highway improvements. L. Taylor, co. engr. Noted Mar. 13.

Tex., Vernon—Wilbarger Co. voted $150,000 bonds improving roads Precinct 1 Rd. Dist. J. B. Nabors, co. engr. Noted Mar. 6.

Tex., Wichita Falls—Wichita Co. election Apr. 26, $500,000 bonds, roads in Dist. 1. J. M. Isbell, co. engr.

Tex., Winnsboro—Plans paving streets business district, alternate bids, standard types pavement. $25,000. Engineer not announced.

Okla., Bristow—Plans grading and paving 6 blocks 11th St., 6,000 sq.yd. vertical fibre brick, 3,600 lin.ft. curbing, 1,800 cu.yd. excav. $30,000. Berwin & Wilson, Henryetta, engrs.

Okla., Clinton—Plans grading and paving 12 blocks Frisco, Arapho, and Cheyenne Sts., 8,600 sq.yd. asphalt, 7,000 lin.ft. curbing, 2,800 cu.yd. excav. $55,000. B. M. Hart, City Hall, Oklahoma City, engr.

Okla., Grandfield—Completed plans 20,000 sq.yd. paving. $50,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Colo., Denver—Making plans concrete paving 12 blocks Alley Paving Dist. 117, $25,000; asphalt paving 12 blocks South Capitol Hill Paving Dist. 5. $35,000. A. K. Vickery, City Hall, engr.

Nevada—State Highway Comn., Carson City, rejected bids concrete paving 1.27 mi. 1st and Ultman Sts. to east city limits of Ely, White Pine Co. Noted Apr. 10.

Wash., Everett—City Council takes bids about Mar. 11, paving Oakes Ave. from Hewitt to 35th Sts. $34,170. S. E. Paine, Everett, engr.

Wash., Mt. Vernon—Comrs. Skagit Co. rejected bids paving Wickersham-Sedro Woolley Rd., 70,000 sq.yd. 7 in. concrete. Will readvertise. Noted Apr. 17.

California—Redding-Millville Hy. Assn., Redding, had plans prepared grading 4.24 mi., road between Millville and Shingleton, Shasta Co., 16 ft. C. R. Wiegel, Redding, engr.

California—State Highway Comn., Sacramento, having plans prepared improving 13 mi. highway between Woodland and Solano Co. line, Yolo Co., widening highway by placing 2 ft. concrete shoulders on each side of existing pavement; between Santa Rosa and Healdsburg, Sonoma Co., widening highway from 15 to 20 ft. and resurfacing with concrete, to exceed $25,000; Tahoe-Ukiah Hy. west of Williams, Colusa Co., grading and graveling, $80,000 (Colusa Co. to pay $40,000). R. M. Morton, state highway engr.

Calif., Huntington Beach — Had plans prepared improving Coast Blvd. unit of Ocean Ave., 95,675 sq.ft. subgrade, 95,675 sq.ft. 4 in. asphaltic concrete base, 95,675 sq.ft. 2 in. Willite plastic composition wearing surface. W. R. Wright, city clk.

Calif., Los Angeles—Had plans prepared improving Normandie Ave. between Jefferson and Santa Barbara Aves., 5,859 cu.yd. cut, 1,494 sq.ft. 5 in. concrete, 207,752 sq.ft. 1½ in Warrenite-bitulithic with paint binder on 5 in. concrete base, 11,487 sq.ft. 2 in. bituminous base, 2,092 sq.ft. walks, 11,221 sq.ft. gutters, etc. J. A. Griffin, city engr.

Calif., Monterey — Salinas Co. having plans prepared constructing 5 mi. Carmel-Pacific Grove Rd. To exceed $55,000. H. Cozzens, co. surv.

Calif., Piedmont (Branch of Oakland)—Had plans prepared improving streets in Harmon Bell Tract, (private project) incl. macadam pavements, walks, curbs and gutters. From $60,000 to $70,000. E. C. Prather, Syndicate Bldg., Oakland, consult. engr.

Calif., Placerville—Plans to vote on $35,000 bonds, to improve streets, construct bridges and lay water mains.

Calif., Quincy—Plumas Co. having surveys made highway between here and Butte-Plumas Co. line. $115,000 or more. A. L. Watson, co. surv.

Calif., Redwood City — San Mateo Co. having estimates made improving portion Half Moon Bay-San Mateo, Rd. Dists. 2 and 4. $25,000 or more. G. A. Kneese, co. surv.

Calif., San Francisco—Having plans prepared paving streets fronting city property, $25,000 or more; constructing South Outlet for Great Highway project, grading, paving, etc., $41,500; grading Evans Ave. and paving Douglas St., to exceed $30,000. M. M. O'Shaughnessy, city engr.

Calif., San Mateo—Had plans prepared improving Hayward Ave. and Crystal Springs Rd., 29,000 sq. ft. 7 in. concrete, 9,700 sq.ft. 4½ in. concrete with 1½ in. asphaltic concrete surface, 1,200 cu.yd. excav., removing 1,050 lin.ft. parkway curb, etc. C. F. Price, city engr.

Calif., Sausalito — Had plans prepared improving various streets, 26,000 cu.yd. grading, 2,185 cu.yd. concrete, 13,200 lin.ft. concrete curb and gutter, 7,400 lin.ft. grouted rock curb and gutter, 165,000 sq.ft. bituminous macadam, 60,000 sq.ft. local macadam shoulders, 1,100 lin.ft. 12 in. and 64 lin.ft. 36 in. corrugated iron pipe, etc. Howe & Peters, 24 California St., San Francisco, engrs.

Calif., Venice—Had plans prepared paving portion 36th, 37th, 38th and 39th Aves., 5 in. concrete, concrete retaining walls, also 2 centrifugal pumps with two 5 hp. motors and sanitary sewer system. To exceed $25,000. J. B. Griffin, city engr.

Ont., Chatham—Kent Co. having plans prepared 3½ mi. macadam road from Dresden to Wabash. $100,000. W. G. McGeorge, Chatham, engr.

Ont., Listowel—Plans concrete paving Argyle, Dodd and road to Fairview cemetery. $25,000. Prices wanted on materials. E. D. Bolton, Listowel, engr.

Ont., Oshawa — Plans to pave 2 mi. streets with 26,000 sq.yd. asphalt on concrete. $100,000. W. C. Smith, city engr.

Ont., Ottawa—Having plans prepared asphalt pavements on ½ mi. Branson, Powell and Findlay Aves., 40 ft., $23,623. A. F. Macallum, city engr.

Streets and Roads (Continued)

Ont., Ottawa—Carleton Co. plans 6 mi. new macadam roads. $185,000.

Ont., Ottawa—Carleton Co. voted $100,000 bonds improving county highways, $129,500 for Provincial Highways, and $52,000 for county suburban roads. Patterson & Byron, 57½ Sparks St., and A. K. Hay, 279 Carling Ave., engrs.

Ont., Owen Sound — Grey Co. Council having plans prepared rebuilding and improving highways and laying new cement roads. $150,000. J. Johnstone, County Bldg., co. rd. supt.

Ont., St. Catharines—Lincoln Co., plans to expend $103,393 repairing highway system.

Ont., Toronto—Plans concrete pavements on lane south of Wellesley St. $9,466, Chaplin Crescent $7,717. Duplex Ave. $3,749; concrete sidewalks on Snowdon Ave. $2,346; asphalt surface on Blackmore Rd. $1,461; asphalt or bitulithic on concrete, Main St. $10,398, Swanich Ave. $6,847; Kendal Ave. $1,534, Strath Allan Blvd. $28,038, Pine Hill Rd. $2,609, Weller St. $7,493, St. Clair Ave. $20,670, Hogarth Ave. $7,803, Oriole Parkway $15,776; cement concrete walks on Oriole Parkway $1,718, Beaufort Rd. $10,188, Manor Rd. $4,395, Ridout St. $1,043, Cavendish St. $4,823, Golfdale Rd. $3,322. Springmount Ave. $3,303, and Winthorpe Rd. $7,469. R. C. Harris, city engr.

BIDS DESIRED

Mass., Chicopee—See "Bridges."

Rhode Island—Apr. 30, by State Bd. Pub. Rds., Providence, furnishing and applying 250,000 gal. asphaltic oil or refined tar; adv. E. N.-R. Apr. 24.

New York—May 9, by A. W. Brandt, comr. highways, Albany, constructing and reconstructing highways in Allegany, Chenango, Fulton, Genesee, Greene, Hamilton, Herkimer, Livingston, Montgomery, Rensselaer, Saratoga, Tioga, Warren and Washington Counties; adv. E. N.-R. Apr. 24.

N. Y., Brooklyn—May 1, by Park Bd., Municipal Bldg, New York, repairing roadway pavement on parkways and park roads, sheet asphalt and concrete, during 1924; grading, curbing and paving Fort Hamilton Parkway, sheet asphalt on concrete, here. F. D. Gallatin, pres.

N. Y., Buffalo—May 1, by Commissioner Pub. Wks., paving and repaving Trenton Ave., West Utica, Melrose and Theodore Sts., vitr. brick or asphalt on 6 in. concrete. To exceed $50,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., Long Island City—Apr. 29, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., regrading and laying sidewalk in westerly sidewalk space, etc., in Himrod St.; curbing and laying sidewalks where necessary in Hinman St., 159th (Prospect) St. from South Rd. to 107th Ave. (Atlantic St.), 159th (Prospect) St. from 107th to 108th Aves. (Cumberland St.); grading, curbing and laying sidewalks, etc., on 2nd Ave.; repairing sheet asphalt pavement, etc., in 1st and 2nd Wards.

N. Y., New York—May 1, by Park Bd., Municipal Bldg., paving roadway and walks of new roadway entrance to Central Park, 6th Ave. and 59th St., asphalt on concrete; paving and repaving where directed walks of Harlem River driveway, asphalt mastic. F. D. Gallatin, pres.

N. Y., Poughkeepsie — May 1, by Bd. Pub. Wks., paving Delafield, Mill, Conklin, Grant, Harrison, Thompson, Cannon and Franklin Sts., also storm sewer in Delafield St. T. F. Lawlor, supt.; adv. E. N.-R. Apr. 24.

New Jersey—May 5, by State Hy. Dept., Trenton, concrete paving 3 mi. Route 9, Sect. 11, Lincoln Ave. in Plainfield, Union Co., also 5,222 sq.yd. Route 16, Sect. 8, Harlingen cut-off, Somerset Co. W. G. Sloan, 1st Natl. Bank, Trenton, engr.

N. J., Irvington (branch of Newark)—Apr. 25, by Bd. Town Comrs., curbing and paving, etc. Vermont Ave., 2,270 sq.yd. asphaltic concrete on 6 in. concrete, 2,256 sq.ft. cement sidewalks; 13,560 sq.yd. Berkshire Pl., Ruth St., Campfield Pl., Madison and Fern Aves., rein.-con. I. J. Casey, Jr., town engr.

N. J., Neshanic (Neshanic Sta. P. O.)—May 6, at Township Rooms, constructing Neshanic-Clover Hill Rd., est. "A" 24,038 lin.ft. excav., 23,902 sq.yd. rock bottom, 18,832 sq.yd. 6 in. and 23,902 sq.yd. 3 in. cinder pavement, 32,051 gal. bituminous material, etc., est. "B" 24,038 lin.ft. excav., 13,445 sq.yd. rock bottom, 10,593 sq.yd. 6 in. and 13,445 sq.yd. 3 in. cinder pavement, 18,029 gal. bituminous material, etc. H. C. Van Emburgh, 149 North Ave., Plainfield, engr.

N. J., Newark—Apr. 28, at office of T. L. Raymond, dir. Pub. Wks., grading, curbing and flagging North 10th and 11th Sts; grading, curbing, flagging and asphalt paving Pine Grove Terrace and Sunset Ave.; paving 18th Ave., napped reclipped granite block, Court and High Sts., napped reclipped granite block and asphalt; resurfacing Conklin Ave., asphalt. $165,468.

Pa., Johnstown—Apr. 28, by City Council, grading and paving, and storm and sanitary sewers in following: Village St., Russel, Cypress and Linden Aves., Contr. 2401; Weimer and Wesley Alleys, Watson, Good, Franklin, Saylor and Hershberger Sts. Contr. 2402; Blenny Alley, Virginia, Beatrice, Edith, I and Rheam Aves., Daniel and Stone Sts., Contr. 2403; Joseph Ave., Murdock, Hickory and Grant Sts., Sandy, Robb, Ebbert, Seigh, Wise, Ream, Shank, Solomon and Hill Alleys, Contr. 2404. $200,000. H. L. Wilson, city engr.

Maryland—Apr. 29, by State Rds. Comn., Baltimore, concrete paving roads in Garrett, Frederick, Harford and Talbot Counties, Contrs. G-27A, F-70, H-32, H-39 and T-18, macadam resurfacing road in Washington Co., Contr. W-31. J. N. Mackall, chn.; adv. E. N.-R. Apr. 24.

Maryland—May 6, by State Rds. Comn., Baltimore, macadam resurfacing, paving with sheet asphalt and concrete 6 sections of highway in Baltimore, Frederick, Calvert, Kent and Talbot Counties, Contrs. B-50, B-61, F-78, C-18, K-24 and T-17. J. N. Mackall, chn.; adv. E. N.-R. Apr. 24.

Md., Baltimore—Apr. 30, by Bd. Awards, redressing granite block and granite block liners during 1924. B. L. Crozier, City Hall, highways engr.

W. Va., Charleston—May 6, by Kanawha Co., paving 1.3 mi. Campbells Creek Rd., Project 104, plain concrete or penetration macadam. R. N. Moulton, clk. Noted Apr. 3.

W. Va., Wheeling—May 3, by City Clerk, paving with brick or sheet asphalt on rein.-con. 25,900 sq.yd. McColloch, Wood, 43rd, 42nd and 39th Sts., incl. 1,680 cu.yd. concrete walls, also for 1,086,120 repressed paving blocks, etc. H. A. Conrad, city engr. Noted Apr. 24.

W. Va., Kingwood—May 5, by Preston Co., grading and draining five 1 mi. projects in Valley Dist., (1) from Reedsville to Ward Browns Mills (2) from Reedsville toward Morgantown (3) from Masontown toward Rohe (4) from Masontown toward Bull Run (4) from Masontown toward Herring. Separate bids will be received for each project, also grading and draining, constructing base, surfacing with bituminous macadam, Projects 1 and 2, for 9 ft. and 16 ft., Projects 3, 4 and 5, 9 ft. P. F. King, co. clk.

S. C., Moncks Corner—Apr. 30, at office Berkeley Co. Hy. Comn., constructing 10 mi. sand clay road on State Route 31, State Project S-517, W. C. Cathey, Scoville Bldg., Orangeburg, engr.

Ga., Augusta — May 8, by Permanent Paving & Civic Improvements Com., paving Walton Way, Broad, 13th and Weed Sts. W. H. Wise, city engr. and comr. Pub. Wks.

Miss., Greenville—Apr. 28, by Washington Co. Hy. Comn. grading 60,000 cu.yd. Leland-Helm Rd. E. C. Wild, Leland, engr.

Louisiana—Apr. 29, by State Hy. Dept., Reymond Bldg., Baton Rouge, 8 mi. Projest 337, C, Leesville-Alexandria Highway, Vernon Parish, J. M. Fourmy, ch. engr.

Ky., Whitesburg — Comrs. Letcher Co. taking bids and opens same about May 20, section Kentucky-Virginia Highway. $100,000. Noted Mar. 27.

Ohio—May 2, by Dept. Highways & Pub. Wks., Columbus, grading, bridging and paving 84.6964 mi. roads in Allen, Ashland, Ashtabula, Butler, Columbiana, Crawford, Franklin, Gallia, Geauga, Hancock, Licking, Mahoning, Marion, Pike, Portage, Putnam, Sandusky, Seneca, Trumbull, Union and Wood Counties. A. V. Donaheys, dir. highways.

O., Cleveland—Apr. 30, grading, curbing and paving Angelus Ave. S. E., Folk Ave. N. E., Heah Ave. S. E., Hough Ave. S. E., Huron Rd. S. E., Mapleside Rd. S. E., Raymond Ave. S. E., East 33rd, East 112th, East 137th and East 153rd Sts., East 55th St. from Woodland Ave. S. E. to Grand Ave. S. E., East 55th St. from Scovill Ave. S. E., to Carnegie Ave. S. E., East 55th St. from Scovill Ave. S. E. to Woodland Ave. S. E. R. Hoffman, city engr.

O., Garfield Heights (Cleveland P. O.)—May 9, grading and laying concrete or stone sidewalks on 32 streets. $150,000. R. F. Munz, Town Hall, engr..

Ind., Evansville—Apr. 30, by Bd. Pub. Wks., paving 3 mi. streets, asphalt, brick, concrete and asphaltic concrete. J. D. Saunders, engr.

Ind., Warsaw — May 1, by Comrs. Kosciusko Co., concrete paving 53,880 sq. yd. James M. Turner Rd., $151,679; grading and gravel surfacing 15,840 ft. E. Dubbs Rd., 18 ft., $27,421, 15,821 ft. James H. Dill Rd., 18 ft., $26,336.

Michigan—May 7, by State Hy. Dept. at office Comrs. Kent Co., Grand Rapids, grading and surfacing 5.87 mi. State Trunk Line Rd. 13-50, A, Kent Co., 69,358 sq.yd. concrete, bituminous concrete or sheet asphalt.

Michigan—May 8, by State Hy. Dept. at office Comrs. Ontonagon Co., Ontonagon, grading and surfacing 2.057 mi. State Trunk Line Rd. 28-11, 19,306 sq.yd. gravel, 5,618 tons stamp sand.

Michigan—May 8, by State Hy. Dept. at office Comrs. Presque Isle Co. (Rogers), grading and surfacing 1.296 mi. State Trunk Line Rd. 10-37, Sect. A, 15,354 sq. yd. asphalt, concrete or bituminous concrete.

Michigan—May 9, by State Hy. Dept., at office Comrs. Muskegon Co., Muskegon, grading and surfacing 2.35 mi. State Trunk Line Rd. 24-26, 24,811 sq.yd. asphalt, concrete or bituminous concrete.

Michigan—May 12, by State Hy. Dept. at office Comrs. Missaukee Co., Lake City, grading and surfacing 3.32 mi. State Trunk Line Rd. 66-16, 31,810 sq.yd. asphalt, concrete or bituminous concrete.

Mich., Otsego—Apr. 30, by W. P. Jones, city clk., 26,000 sq.yd. concrete pavement, 13,000 lin.ft. curb and gutter. A. Lenderink, Kalamazoo, engr.; adv. E. N.-R. Apr. 24.

Ill., Elmhurst — May 5, by City Clerk, 65,000 sq.yd. paving with either vibrolithic warrenite, asphaltic concrete or rein.-con., 51,000 lin.ft. curb and gutter, 5,000 sq.ft. sidewalks adjusted, etc. $300,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Wisconsin—Apr. 30, by State Hy. Comn. at div. office 7, Court House, Rhinelander, grading and gravel surfacing Woodruff-Eagle River Rd., Project 344, Vilas Co., 46,630 cu.yd. earth excav., 4,978 cu.yd. top soil, 8,868 cu.yd. featheredge gravel, etc. A. R. Hirst, state highway engr.

Wisconsin—May 2, by State Hy. Comn. at div. office 1, State Capitol Annex, Madison, grading and surfacing Portage-Kilbourn Rd., Federal Aid Project 360, Sects. B and C, Columbia Co., incl. 55,938 cu.yd. earth excav., 22,798 cu.yd. top dressing, 11,244 cu.yd. gravel surfacing, etc. A. R. Hirst, Madison, state highway engr.

Wis., Fond du Lac—Apr. 30, by G. Treleven, comr. Fond Du Lac Co., grading, etc., 4.57 mi. Kewaskum-Campbellsport-Marblehead Rd., 17,600 cu.yd. earth and 1,500 cu.yd. loose rock excav., etc., 6.02 mi. Kinkers Corners West on County Trunk H, 15,800 cu.yd. earth, 5,500 cu.yd. loose rock and 1,768 cu.yd. borrow excav. Wisconsin Hy. Comn., Stephenson Bldg., Milwaukee, engrs.

Wis., Milwaukee—Apr. 28, by Dept. Pub. Wks., concrete paving, etc., 16,306 sq.yd. various alleys.

Ia., Des Moines—May 1 by Auditor Polk Co., grading 3.67 mi. Elkhart-Cambridge Rd., 2.5 mi. Army Post Rd., 2.76 mi. Hastie Rd. To exceed $25,000. F. O. Loing, co. engr.

Ia., Shenandoah—May 2, by F. H. Sanman, city clk., paving 6 blocks. $26,000.

Kan., Oskaloosa—May 16, by Clerk Jefferson Co., grading 6.958 mi. Federal Aid Project 227, Sect. A, 295 cu.yd. concrete, 3,500 cu.yd. barrow, 1,665 ft. bridge to be removed, 22,102 lb. reinforcing, 38,734 cu. yd. earth and 385 cu.yd. rock excav. R. C. Ham, co. engr.

N. D., Stanley—May 6, by F. J. Haines, aud. Mountrail Co., 6 mi. Federal Aid Project 248, 48,357 cu.yd. excav., etc., also 3.3 mi. Federal Aid Project 250 B, 24,399 cu.yd. earth and 4,888 cu.yd. rock excav., etc. $31,000.

Wyoming — May 2, by State Highway Comn., Cheyenne, seven grading projects. $300,000. Z. E. Sevison, state highway engr.

Ark., Pine Bluff—May 3, by Bd. Impvt. Dist. c/o Coleman & Gantt, 615 Citizens Bank Bldg., improvements in Paving Dist. 77, incl. 5,318 cu.yd. excav., 23,100 sq.yd. rein.-con., 14,000 lin.ft. curb and gutter, etc. F. Bennett, 410 Citizens Bank Bldg., engr.

Tex., Corpus Christi—May 6, by H. R. Sutherland, judge Nueces Co., grading, gravel surfacing and bituminous topping State Highway 12-A, Federal Aid Project 424-A, 3,915 cu.yd. roadway and 17,373 cu.yd. borrow excav., 49,113 sq.yd. bituminous macadam, 9,208 cu.yd. gravel and 9,208 cu.yd. limestone. C. E. Cocke, co. engr.

Streets and Roads (Continued)

Tex., Dallas—May 15, by A. D. Allen, judge Dallas Co., grading, crushed stone base with 2 in. Uvalde rock asphalt topping, etc., on 3.3 mi. State Highway 1, east of Mesquite, 18 ft. $55,000. Nagle Witt Rollins Eng. Co., Courthouse, co. engrs.

Tex., Georgetown — May 13, by F. D. Love, judge Williamson Co., grading, etc., 8.48 mi. State Highway 29, Liberty Hill-Leander Rd., 24 ft. $40,750. R. A. Nichols, co. engr.

Idaho, Emmett—May 5, by City Council, paving various streets and replacing present wood stone water mains with c.i. pipe. H. D. Carmichael, city clk.; adv. E. N.-R. Apr. 24.

Nevada — Apr. 30, by State Highway Comn., Carson City, road between Eureka and Eureka east county line, 63,000 cu.yd. excav. unclassified, 19,290 yd. sta. overhaul, preparing 10.16 mi. subgrade and shoulders, 11,000 cu.yd. load and screen gravel, 17,300 yd. mi. haul gravel, 11,000 cu.yd. spread gravel, etc.; from Campbell Creek Ranch to Summit of railroad pass, Lander Co., 66,000 cu.yd. excav. unclassified, preparing 18.02 mi. subgrade and shoulders, 21,000 cu.yd. load and screen gravel, 40,000 yd. mi. haul gravel, 21,000 cu.yd. spread gravel, etc.; between west county line and Pancake summit, White Pine Co., 70,000 cu.yd. excav. unclassified, 15,782 yd. sta. overhaul, preparing 13.65 mi. subgrade and shoulders, 15,000 cu.yd. load and screen gravel, 24,400 yd. mi. haul gravel, 15,000 cu.yd. spread gravel, etc. G. W. Borden, state highway engr. Noted Apr. 17.

Calif., Burbank—City Trustees taking bids grading and paving 20,000 ft. Pioneer Ave., 6 in. concrete; 1,000 lin.ft. Elmwood Ave., grading, oil macadam, curbs and walks; 1,000 lin.ft., Santa Anita Ave., oil macadam, curbs, gutters and walks; 800 lin.ft. Bonnywood Pl., paving, curbs, gutters and walks.

Calif., Gilroy—City Trustees taking bids improving various streets, Warrenite pavement. To exceed $350,000. C. E. Sloan, Santa Fe Bldg., San Francisco, engr. Noted Jan. 31.

Calif., Glendale—City Trustees taking bids improving Sonora Ave., etc., 274,600 sq.ft. grading, 149,650 sq.ft. oil macadam, 38,370 sq.ft. walks; Raymond Ave., 53,213 sq.ft. grading, 31,876 sq.ft. oil macadam, walks, curbs, etc. B. F. Dupuy, city engr.

Calif., Martinez — May 5, by Supervs. Contr. Costa Co., improving highway 1 mi. east of Clayton, Marsh Creek Route, 6,316 lin.ft. grading, 101,056 sq.ft. asphaltic surface, 1,960 tons rock and screenings, base course, and 975 rock and screenings for top course. R. R. Arnold, co. surv.

Calif., San Francisco—Apr. 30, by Bd. Pub. Wks., improving Palou Ave. between Phelps and Rankin Sts., 5,300 cu.yd. cut, 1,350 cu.yd. fill, 2,700 ft. concrete curb, 2,375 sq.ft. artificial stone walks, 72,900 sq.ft. asphaltic concrete. $30,000. M. M. O'Shaughnessy, city engr. Noted Dec. 13.

Calif., San Jose — May 5, by Supervs. Santa Clara Co., improving Bodfish Mill Rd., 6,400 lin.ft. grading and 6 in. graveling, 20 ft.; portion Sierra, Hanchett, Yosemite Aves., etc., 91,002 sq.ft. 5 in. concrete with expansion joints every 40 ft., or 5 in. asphaltic concrete, 12 ft. center strip (balance of work, 101,000 sq.ft. will be done by property owners under private contract); Fleming Ave. in Superv. Dist. 3, 157,775 sq.ft. oil macadam. R. Chandler, co. surv. Noted Mar. 20.

Calif., Santa Barbara — May 5, by Supervs. Santa Barbara Co., paving 25 mi. Santa Ynez Valley Rd. System, 28 ft., 6 in. rock macadam. O. H. O'Neill, co. surv. Noted Aug. 23.

Calif., Stockton — May 6, by Supervs. San Joaquin Co., improving Thorn and Smithson Rd., 2,900 cu.yd. grading, 4,300 tons road gravel or 3,650 tons rock for base course and 1,460 tons rock for top course, 560 bbl. asphaltic oil, 675 tons dressing for oil. F. E. Quail, co. surv.

BIDS RECEIVED

Maine—State Hy. Comn., Augusta, Apr. 17, paving State Highway B in Bridgton, 44,246 sq.yd. bituminous macadam, from Arborio Road Constr. Co., Inc., 408 Main St., Hartford, Conn., $104,086, engrs. est. $117,299; State Highway B in Raymond, 32,419 sq.yd. bituminous macadam, from A. D. Bridges Sons, Inc., Hazardville, Conn., $78,269, engrs. est. $88,862; State Highway S, in Paris and Woodstock, 7,568 cu.yd. gravel surfacing, 34,003 sq.yd. bituminous macadam, from Ford & Smiley, Skowhegan, $78,790 for gravel and $92,821 for bituminous macadam, engrs. est. $56,354 and $93,289; State Highway N, in Edmunds, 6,792 cu.yd. gravel, from McCabe & Giovannini, Boston, $65,585, engrs. est. $61,890; State Highway K, in Smyrna, 5,178 cu.yd. gravel, State Highway K, in Lincoln, 6,200 cu.yd. gravel, and State Highway K Spur, in Easton, 8,022 cu.yd. gravel, from Boone & Brewer, Presque Isle, $33,294, $50,074, and $50,759 respectively, engrs. ests. $34,771, $52,700 and $62,516 respectively; State Highway D, in Edgecomb, 2,500 cu.yd. gravel surfacing from M. Hughes, 105 3rd St., Bangor, $88,281, engrs. est. $89,507; State Highway V, in New Sharon, 7,070 cu.yd. gravel surfacing, and State Highway V in Hancock and Ellsworth, 7,110 cu.yd. gravel surfacing, from A. P. Wyman, Waterville, $63,659 and $56,317 respectively, engrs. ests. $57,437 and $56,100 respectively. Noted Apr. 3.

New York—A. W. Brandt, comr. highways, Albany, Apr. 18, (e.e. means engrs. est.) constructing and reconstructing 3.2-mi. Repair Contr. 1404, Highway 436, Jericho Turnpike-Plainview, Nassau Co., from Hinkle & Finlayson, Glen Cove, $154,586, e.e. $174,358; 2.02 mi. Highway 9106, Veterans Mountain Camp, 16 ft., St. Lawrence Co., from Hanratty Contg. Co., New York City, $110,780, e.e. $131,619; 3.1 mi. Highway 8173, Randolph-Rutledge Part 1, 16 ft., Cattaraugus Co., from P. N. Carll, 123 Fulton St., Olean, $124,602, e.e. $135,322; 1.64 mi. Repair Contr. 1389, Highway 42, 16 ft., Orange Co., from Hall & Hallenback, Central Valley, $77,236, e.e. $84,955; 1.43 mi. Highway 1679, Delanson-Western Turnpike, 16 ft., Schenectady Co., from S. B. Van Wagenen, Inc., Rondout, $73,875, e.e. $80,905; 9.54 mi. Highway 1685, Thomson-Ft. Edward, 16 ft., Washington Co., from G. D'Angelo, Binghamton, $154,888, e.e. $180,908; 6.32 mi. Highway 8187, Honeye-Vincent, 16 ft., Ontario Co., from Cold Spring Constr. Co., Ellicott Sq., Buffalo, $317,407, e.e. $336,407; 4.18 mi. Repair Constr. 1402, Highway 626, Burrs Mills-South Champlain, 16 ft., Jefferson Co., from J. Thompson, 614 State St., Carthage, $163,651, e.e. $175,726; 4.33 mi. Repair Contr. 1403, Highway 5213, Ithaca-Danby, Part 3, 16 ft., Tompkins Co., from H. W. Patterson, Hornell, $164,430, e.e. $187,968; 4.54 mi. Highway 1690, Aurora-Union Springs, Part 2, 16 ft., Cayuga Co., from Scott Bros., 31 Exchange St., Rochester, $162,773, e.e. $177,580. Noted Apr. 3.

N. Y., Buffalo—Dept. Pub. Wks., Apr. 18, paving and repaving with **(a)** asphalt **(b)** brick **(1)** Andover St. **(2)** Cable St. **(3)** Chelsea Pl. **(4)** Holly St. **(5)** Taunton Pl., from Rock Asphalt & Constr. Corp., Morgan Bldg., **(a1)** $23,426 **(a2)** $18,070 **(a4)** $20,691; H. P. Burgard Co., Fillmore Ave., **(a3)** $14,855 **(a5)** $17,554; B. F. Spire, 24 Colonial Circle, **(b2)** $19,762; Erie Contg. Co., Morgan Bldg., **(b3)** $16,450 **(b4)** $22,795. Noted Apr. 10.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Apr. 14, grading sidewalk space, etc., on Corona Ave., from Peace Bros., Inc., 57 North Laurence St., Flushing, $19,528; recurbing, reflagging and asphalt paving Goodrich and 101st Sts., from Highway Impvt. & Repair Co., $32,425 and $9,060 respectively; grading, curbing, laying sidewalks, etc., on Nicolls St., from R. A. Hess, Inc., 14 Queens St., Astoria, $6,255; grading sidewalk space and laying sidewalks on 101st St., from J. J. O'Brien, Jr., William St., Jamaica, $1,364, H. J. Mullin Contg. Co., Jamaica Ave. and 114th St., Jamaica, $1,364; grading, etc., 137th St., from Tuohey & Upton, Inc., 129 Bway., Flushing, $4,711. Noted Apr. 10.

N. Y., New York — H. Bruckner, pres. Bronx Boro., Apr. 15, curbing, laying sidewalks, etc., on East 132nd St., from J. Meehan & Son, 74 Cortlandt St., $69,082, engrs. est. $32,000; paving Spencer Ave., bituminous concrete, and West 236th St., sheet asphalt, from Asphalt Constr. Co., 208 Bway., $14,445 and $27,951 respectively; curb and sidewalks on Erickson Pl., from P. J. Donovan, 30 Church St., $38,198; grading width 60 ft. in Laconia Ave. from I. F. Cavaluzzo, 1538 Walton Ave., $42,857; grade width 30 ft., etc., in West 232nd St., from Fordham Contg. Co., $29,975; setting curb and laying sidewalks, etc., in Gleason Ave., from Spedero & Turiana, 3185 East Tremont Ave., $3,836. Noted Apr. 10.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., Apr. 16, regrading, curbing and flagging Seaman Ave., etc., from I. F. Cavaluzzo, 1538 Walton Ave., $103,590; granite block repaving West Bway., from J. Meehan & Son, 74 Cortlandt St., $110,395; curbing, recurbing, flagging, reflagging and asphalt paving West 174th and 175th Sts., from Asphalt Constr. Co., 208 Bway., $9,883 and $8,880. Noted Apr. 10.

N. Y., New York—Park Bd., Municipal Bldg., Apr. 17, repaving roadway Spuyten Duyvil Parkway, from J. E. Gaffney, 428 East 91st St., $152,481. Noted Apr. 10.

New Jersey—State Hy. Dept., Trenton, Apr. 21, improving Route 10, Sect. 1A, Arcadian Way to Fort Lee Ferry, Bergen Co., 18,400 sq.yd. rein.-con., 8,620 lin.ft. granite curb, from J. J. McGarry, Edgewater, $138,867; Route 12, Sect 6, Port Colden to Stephensberg, Warren Co., 23,788 cu.yd. earth excav., 64,810 sq.yd. rein.-con., from Korp & Korp, Phillipsburg, $384,694; Route 12, Sect. 7, Stephensberg to Hackettstown, Warren Co., 50,302 sq.yd. rein.-con., 4 small span bridges, from Public Service Production Co., 80 Park St., Newark, $288,178. Noted Apr. 3.

N. J., Newark—T. L. Raymond, dir. Pub. Wks., City Hall, Apr. 17, from J. B. Gilligan-Casey Co., 919 Broad St., sheet asphalt paving on 6 in. concrete Keer Ave. $12,202, North 7th St. $9,968, West End Ave. $39,023, Park View Terrace $22,095, North 11th St. $10,461, Grove Terrace $18,493, rein.-con. paving Prospect Row $1,955; from Standard Bitulithic Co., 50 Church St., New York City, sheet asphalt paving on 6 in. concrete, Montrose St. $10,741, Dover St. $4,878, Eastern Parkway $10,972, Valley Rd. $2,170, Cameron Rd. $5,951, sheet asphalt resurfacing Heller Parkway west $5,230, Heller Parkway east $10,702; from City of Newark Plant, sheet asphalt resurfacing South 11th St. $8,579, Fabyan Pl. $10,359. Noted Apr. 10.

Ohio—Dept. Highways and Pub. Wks., Columbus, Apr. 11, grading bridging and paving 3.056 mi. Sect. "A-2" Bellefontaine-Wapakoneta Rd., Auglaize Co., waterbound macadam, from Davis-Davenport Co., Spencerville, $16,547; 2.38 mi. Sect. "Nashville" Mansfield-Millerburg Rd., Holmes Co., plain and rein.-con., from Davis & Davenport, Spencerville, $46,759; 1.678 mi. Sect. "L-2" Mansfield-Millersburg Rd., Holmes Co., plain concrete, from Rice & Rice, Shelby, $30,105; 2.9 mi. Sect. "B-2" Newark-Mt. Vernon Rd., Knox Co., brick, from J. T. Irwin, Sunbury, $97,808; 6.549 mi. Sects. "C and D" Euclid-Chardon Rd., Lake Co., bituminous macadam, asphalt, from Neff & Rader, Circleville, $214,744; tar macadam, from Mahoning Contg. Co., Warren, $220,206; rein.-con., from Ohio Contg. Co., Newman Stern Bldg., Cleveland, $226,981; 1.55 mi. Sect. "G" Bucyrus-Tiffin Rd., Senaca Co., bituminous macadam asphalt, from W. H. and H. A. Souder, Fostoria, $36,961, tar macadam, also concrete from Seneca Constr. Co., Kansas, $37,543 and $47,574 respectively; 3.05 mi. Sect. "K" Tiffin-Bellevue Rd., Seneca Co., bituminous macadam asphalt, tar macadam, and concrete from Seneca Constr. Co., Kansas, $57,815, $58,252 and $63,655 respectively, Kentucky rock asphalt, from Forrest Constr. Co., Forrest, $74,473. Noted Apr. 3.

Michigan — State Hy. Dept., Lansing, shaping and surfacing 6.71 mi. State Trunk Line Rd. 43-7, Kalamazoo Co., 4,700 sq.yd. gravel, 70,858 sq.yd. bituminous wearing surface course, from Globe Constr. Co., Kalamazoo, $112,676; 3.187 mi. State Trunk Line Rd. 17-14, Van Buren Co., 37,400 sq. yd. asphalt, concrete or bituminous concrete, from Kalamazoo Paving Co., Kalamazoo, $81,440; 13.853 mi. Federal Aid Project 1:3, Sect. C, Kent Co., 162,545 sq. yd. asphalt, concrete or bituminous concrete, from G. P. Schail, Muskegon, $267,595; 0.747 mi. State Trunk Line Rd. 11-64, Berrien Co., 8,764 sq.yd. asphalt, concrete, or bituminous concrete and 1.25 mi. State Trunk Line Rd. 11-22 B, Berrien Co., from Woodley & Granger Constr. Co., 24 Tranchion Bldg., Benton Harbor, $23,397 and $36,445 respectively; 0.999 mi. State Trunk Line Rd. 47-5, Shiawassee Co., 11,733 sq.yd. concrete, and State Trunk Line Rd. 47-5, Shiawassee Co., 11,625 sq.yd. asphalt, concrete or bituminous concrete from Taylor Constr. Co., Birmingham, $21,263 and $29,809 respectively.

Wis., Janesville—Paving, etc., various streets, 163,850 sq.yd. concrete, 13,180 lin. ft. concrete curb and gutter, 52,000 cu.yd. earth, from R. Birdsall Constr. Co., 1025 12th St., Racine, $378,000. Noted Apr. 10.

N. D., Fargo—Paving, curbing, etc. (1) 8,500 sq.yd. Dist. 7 (2) 14,000 sq.yd. Dist. 8, from W. E. Kennedy, Fargo, rock concrete (1) $21,834 (2) $34,800, 3 in. brick (1) $27,744 (2) $48,849, bituminous concrete, oil (2) $38.092; from Butler & O'Connor, Hamm Bldg., St. Paul, Minn., vibrolithic concrete (1) $23,350 (2) $37,108; from S. Birch & Son, Great Falls, Mont., bituminous concrete, oil (1) $23,756 bituminous concrete, lake (1) $24,312 (2) $39,163. bitulithic, oil (1) $24,514 (2) $39,529, bitulithic, lake (1) $25,070 (2) $40,535, Warrenite bitulithic, lake (1) $25,070 (2) $40,535.

Streets and Roads (Continued)

Tex., Kerrville—Kerr Co., grading, surfacing with gravel and crushed stone 5.83 mi. State Highway 27, Federal Aid Project 405, 18 ft. base, 16 ft. top, from W. T. Montgomery, Alamo Bank Bldg., San Antonio, $55,526. Engrs. est. $65,632. Noted Mar. 27.

Colorado — State Hy. Dept., Denver, grading 1.0575 mi. Federal Aid Project 254-A, Grand Co., from Pioneer Constr. & Eng. Corp., Denham Bldg., Denver, $72,409, engrs. est. $90,891; concrete paving 0.892 mi. Federal Aid 116-B, El Paso Co., from J. L. Bussell, 1501 North Tejon St., Colorado Springs, $51,001, engrs. est. $75,573. Noted Apr. 17.

Colo., Denver — Asphalt paving, from Allied Contractors Inc., 803 Douglas St., Omaha, Neb., 12 blocks in East Denver Paving Dist. 14, $47.208, 12 blocks East Denver Paving Dist. 12, $33,114, 12 blocks South Capitol Hill Paving Dist. 1, $39.335, 12 blocks Capitol Hill Paving Dist. 8, $42,709, 12 blocks Capitol Hill Paving Dist. 7, $36,832; from New Mexico Constr. Co., Albuquerque, N. M., 12 blocks East Denver Paving Dist. 13, $35.589, 12 blocks West 33rd Ave. Paving Dist. 1, $36,853; from Western Paving & Constr. Co., International Trust Bldg., 12 blocks Capitol Hill Paving Dist. 10, $42,043, 12 blocks Capitol Hill Paving Dist. 4, $38,886; from J. Collier, 63 South Logan St., curbing, grading and surfacing in West Denver Impvt. Dist. 3, ¼ mi. wide, ½ mi. long, $33.097. Noted Apr. 10.

Washington—State Hy. Comn., Olympia, Apr. 8, grading 2.4 mi. State Rd. 1, High Line Rd. from Tacoma east, Pierce Co., from Tacoma Dredging Co., 113½ A St., Tacoma, $102,687.

Washington—State Hy. Comn., Olympia, grading and surfacing with crushed gravel, 3.4 mi. State Rd. 5, from Ajiune to Riffe, Lewis Co., to A. W. Lawler, Puyallup, $106,874, 2.11 mi. State Rd. 9 from Uncas to Port Townsend, Jefferson Co., to Beseloff & Brice, Thompson Bldg., Seattle, $55,474, 7.6 mi. State Rd. 22, from Harvey to Gifford, Stevens Co., to Morrison & Knudsen, Railroad and Reclamation Aves., Boise, Idaho, $43,415; paving 4.2 mi. Anacortes Highway from Anacortes east, Skagit Co., to Norris Bros., Bellingham. $116,817. Noted Mar. 27.

Wash., Aberdeen—City Council, Apr. 10, paving Arnold St. from 3rd to 2nd Aves., from F. A. Keasel, 1004 North Cushman St., Tacoma, asphaltic concrete $26,633; Greene Eng. Co., Aberdeen, vitrolithic $29,623. Engrs. est. $2,600.

Wash., Kelso—City Council, Apr. 8, 5,000 cu.yd. grading, 12,300 lin.ft. curbing and 26,700 sq.yd. paving in L. I. D. 5, West Kelso, from R. L. Roland & Co., Seattle, 7-in. concrete, $101,102; Yakima Paving Co., 2-in. asphaltic concrete on 3-in. bituminous, $90,771; United Contg. Co., Northwest Bank Bldg., Portland, Ore., 2-in. warrenite bituminous on 3-in. bituminous, $86,531, and 2-in. warrenite bituminous on 4-in. crushed rock, $81,728.

Wash., Port Angeles — Comrs. Clallam Co., grading 8.6 mi. Shadow-Twin Rd., from Dahlberg & Bourn, Port Angeles, $98,000.

Calif., Los Angeles—Improving 12th St. between Gaffney and Meyler Sts., to Griffith Co., Railway Bldg., grading $2,131, asphalt $0.24, concrete $0.24, bituminous base $0.12, curb $0.70, walks $0.21, gutters $0.25, sanitary sewers $4,000, total $25,000; 74th St. between San Pedro and Main Sts., to W. Liddington, 420 East 60th St., grading $4,257, concrete $0.228, Warrenite-bitulithic $0.29, curb $0.65, walks $0.195, gutters $0.30, total $44,000; Irolo St. between Wilshire Blvd. and San Marino St., to Warren Constr. Co., 5444 Hollywood Blvd., grading $5,800, Warrenite-bitulithic $0.259, curb $0.80, walks $0.23, gutters $0.31, bituminous base $0.12, total $34,385. Noted Apr. 10.

Calif., Los Angeles — Los Angeles Co., paving 2.8 mi. highway between Pasadena and Montebello Ave., concrete on asphaltic concrete, from W. Johnson & Sons, Whittier, $182,214; portion Whittier Blvd., 22,411 cu.yd. excav., 90,048 sq.ft. gutters, 37,136 sq.yd. asphaltic concrete, from G. H. Oswald, 366 East 58th St., $188,550. Noted Apr. 3.

Calif., San Diego—Improving Girard Ave. and Coast Blvd., from D. H. Ryan, 1615 Fern St., 118,601 sq.ft. paving 5 in. cement concrete $0.245. Noted Mar. 20.

Calif., Santa Monica—Improving Pennsylvania Ave., 362,382 sq.ft. grading for oil and rock pavement, 32,240 sq.ft. grading for bitulithic, 107,379 sq.ft. subgrading for oil and rock, 53,690 sq.ft. subgrading for bitulithic, curbs, walks, etc., from Keen Paving Co., Dudley Bldg., $66,375.

CONTRACTS AWARDED

N. Y., Buffalo—Erie Co., City Hall, paving Ebenezer-East Seneca Rd., concrete, also Waverly St., concrete and waterbound, to Stabell, Mumn & Beals, 1127 Niagara St., $163,000 and $60,000 respectively; Amsdell and Town Line Rds., concrete and waterbound, to Holmes & Murphy, Orchard Park, $83,000. Noted Mar. 27 and Apr. 3.

N. Y., Gloversville—Paving East State St. and 2nd Ave., 30 ft., rein.-con. with bituminous top, to Morrell Vrooman, Inc., Gloversville, $32,762 and $30,098 respectively. Noted Mar. 20.

N. Y., Johnstown—Fulton Co. will construct approximately 20 mi. new macadam highways, by day labor, under supervision of H. S. Gage, co. supt. highways.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, regrading, curbing, etc., Bway., to Garafano Contg. Co., $54,387; grading, curbing, laying sidewalks and crosswalks, on Tryon Ave., to Interstate Contg. Co., $11,187; sheet asphalt paving boro line of Bronx, to C. D. Beckwith, Inc., 2875 Bway., $159,720; paving West 188th St. and Walton Ave., both sheet asphalt, also Bailey Ave., bituminous concrete, to Brusstar Constr. Co., Harlem River and 150th St., $4.654, $32,303 and $52,481 respectively; grading, curbing, laying sidewalks, etc., on Worthen St., to Clementi Contg. Co., 1195 Spoffard St., $15,490. Noted Apr. 17.

N. Y., Tonawanda—R. K. Fuller, comr. Canals & Waterways, Albany, removing old superstructure, making fill and roadway across old Erie Canal bed and rebuilding approaches at Bouck St., here, to F. M. O'Neill, 207 Woodward Ave., Buffalo, $7,920. Noted Mar. 20.

New Jersey—State Hy. Dept., Trenton, concrete paving 29,505 sq.yd. Route 9, Sect. 12, Plainfield to Westfield, Union Co., to P. Camillo & Co., 335 Spring St., Westfield, $122,945; 67,905 sq.yd. Route 6, Sect. 14, Bridgeton to Marlboro, Cumberland Co., to Acchione & Canuso Paving Co., 804 South 12th St., Phila., $255,283. Noted Apr. 17.

N. J., Woodbury—Gloucester Co. concrete paving Sect. 2, Woodbury-Blackwood Rd., to M. Staub, Main St., Pitman, $129,456. Noted Mar. 27.

Pennsylvania—State Hy. Dept., Harrisburg, rein.-con. highways, **(R. means Route and A. means Application)**, 6,420 sq.yd. R. 1, Dauphin Co., to Continental Contg. Co., Knickerbocker Bldg., Baltimore, Md., $46,533; 27,668 sq.yd. R. 214, and A. 2758 Butler Co., to A. R. Cooper, Idamar, $142,067; 34,033 sq.yd. R. 88, Warren Co., to J. C. Devine Co., Alliance, O., $176,166; 52,969 sq.yd. R. 146, Montgomery Co., to McNichol Paving & Constr. Co., 1923 Cherry St., Phila., $197,298; 13,870 sq.yd. R. 272, Erie Co., to McDermott Constr. Co., 14 Butler St., Niles, O., $78,545; 44,238 sq. yd. R. 141, Berks Co., to D. L. Risser, 713 Walnut St., Lebanon, $200,584; 24,600 sq. yd. R. 68, Sect. 4, Westmoreland Co., to J. C. Mickey, 1601 Ligonier St., Latrobe, $116,779; 69,000 sq.yd. R. 325, Sect. 1, Washington Co., to Donora Constr. Co., Donora, $402,259; 49,748 sq.yd. R. 65, Venango Co., to Woods & Golder Constr. Co., 212 Mechanic St., New Castle, $230,832; 20,800 sq.yd. R. 211, McKean Co., to E. C. Jones, Great Valley, N. Y., $118.243; R. 170, Luzerne Co., to M. J. Malloy, Main St., Sugar Notch, $40,608; 8,438 sq.yd. R. 86, Erie Co., to C. M. Spillar, 329 West 21st St., Erie, $36.893; 38,678 sq.yd. R. 338, Clearfield and Jefferson Counties, to Avery & Bailey, Philipsburg, $193,040; 49,022 sq. yd. R. 189, Sect. 1, Armstrong Co., to L. H. Hileman Constr. Co., 1st Natl. Bank Bldg., New Kensington, $282,825. Noted Apr. 10.

Pa., New Castle—Improving Pennsylvania Ave. between Long and Lyndal Aves., vitr. paving blocks, rein.-con. curb, to Burns Bros., New Castle, $26,181.

Md., Baltimore — Bd. Awards, paving roads, Contr. 251-OA, 11,400 sq.yd. asphalt to Baltimore Asphalt Block & Tile Co., 1320 Monroe St., $45,184; Contr. 253-OANA, 12,625 sq.yd. concrete, to Aiello Constr. Co., Gough and 4th Sts., $32,006. Noted Apr. 17.

W. Va., Charleston—Surfacing with Trinidad lake asphalt, 7th and Park Aves. and 4 other streets, to Andrews Asphalt Paving Co., Charleston Natl. Bank Bldg., $53,445; concrete surfacing Summit Dr., Clay, Oak and Walnut Aves., to Ebersbach Constr. Co., Huntington, $30,548.

W. Va., Charleston—Kanawha Co. grading and concrete paving 1 mi. Martins Branch Rd., 18 ft., to Greybill & Bruce, Charleston, $44,672. Noted Mar. 27.

W. Va., Fairmont—Grading and bituminous macadam surfacing 2.5 mi. Morgantown Pike, to W. R. Bainbridge, Fairmont, $58,040. Noted Apr. 17.

W. Va., Huntington—Paving with brick and concrete 0.5 mi. 4th Alley, College Ave. and 24½ St., 14 ft., to J. A. Griffith, 1561 Washington Ave., $13,974; with brick 0.5 mi. 5th, 6th and Poague Sts., 18 ft., to L. J. Gillespie, 1751 5th Ave., 18,868, 1 mi. Marshall, 26th, Chase, 37th, Vernon, Court, Vinson and Wayne Sts., 22 ft., to Harrison & Dean, Old Walton Bldg., $35,696; with Trinidad lake asphalt on concrete 0.5 mi. Washington Blvd., Woodland and High Drives, 40 ft., to Andrews Asphalt Paving Co., Huntington, O., $49,520; with 3½ in. brick on concrete 0.5 mi. Burlington Rd., 18 ft., to J. Ullom, Huntington, $15,488. Noted Mar. 20 and Apr. 3.

W. Va., Huntington—Paving with 3½ in. brick on concrete 0.5 mi. Burlington Rd., 18 ft., to J. Ullon, Huntington, $15,488. Noted Mar. 20.

W. Va., Philippi—Barbour Co., grading and concrete paving Bonica Rd., to Monongahela Constr. Co., Fairmont, $31,549. Noted Mar. 27.

Ga., Columbus — Paving 11,500 sq.yd. Talbot St., one course concrete, to Barlow-Gordy Co., Columbus, $26,000. Noted Mar. 27.

Fla., Milton—Santa Rosa Co. improving or constructing 16.616 mi. Milton-Camp Walton Rd., to Collins & Hicks, Milton, 21.8 acres clearing, etc. $70, 17,553 cu.yd. excav. $0.35, 7,000 cu.yd. clay pit stripping $0.30, 6,235 cu.yd. sand clay 0 to 1 mi. $0.75, 3,546 cu.yd. sand clay 1 to 2 mi. $1.05, 1,859 cu.yd. sand clay 2 to 3 mi. $1.35, 1,636 cu.yd. sand clay 3 to 4 mi. $1.65, 11.348 mi. road machine grading $260, etc., total $28,424. Noted Mar. 20.

Alabama—State Hy. Dept., Montgomery, grading and cherting 1 mi. highway extending through Lafayette, 20 ft., to Town of Lafayette, $43,366.

Ala., Alabama City—Paving, curbing and guttering 4th St., asphaltic concrete on concrete, to Lasley Bros., Chattanooga, Tenn., $25,500.

Louisiana—State Hy. Dept., Reymond Bldg., Baton Rouge, grading, and hard surfacing 7.92 mi. State Project 393-D, Colfax-Pollock Highway, 18 ft., to McKiether Constr. Co., Baton Rouge. Bids on Project 337-C rejected. Noted Apr. 3.

Ohio—Dept. Highways & Pub. Wks., Columbus, grading, bridging and paving 2.555 mi. Sect. "A" New Athens-Morristown Rd., Harrison Co., bituminous macadam, tar, to H. R. Brown, Rayland, $40.733, 1.999 mi. Sect. "A-2" Versailles-Sidney Rd., Shelby Co., brick, to J. Franz, Sidney, $76,545; concrete bridge and approaches on Sect. "K-1" Marion-Caldwell Rd., Washington Co., to A. K. McCall, Columbus, $22,576. Noted Apr. 3.

Ohio—Dept. Highways & Pub. Wks., Columbus, grading, bridging and paving 1.536 mi Sect. "A-2" Fremont-Port Clinton Rd., Sandusky Co., rein.-con., to Modern Constr. Co., Fremont, $44,848; 3.43 mi. Sect. "J" Akron-Wooster Rd., Wayne Co., brick, to Holmes Constr. Co., Wooster, $146,227; 3.553 mi. Sect. "L" Athens-New Lexington Rd., Athens Co., brick, to F. H. Beckler, Athens, $146,841; 3.091 mi. Sect. "D" Mt. Vernon-Coshocton Rd., Coshocton Co., gravel, to Stein, Geisel & Stein, Niles, $43,942; 2.548 mi. and 3.14 mi. (extra width) Sect. "D" Waterville-Swanton Rd., Fulton Co., rein.-con., to G. L. La Boiteaux, Toledo, $15,032 and $3,722 respectively; Sect. "C" Swanton-Metamora Rd., Fulton Co., rein.-con., to J. A. Elder, Bryan, $59,449; 2.555 mi. Sect. "M" Columbus-Cincinnati Rd., Greene Co., waterbound macadam surface treated, to N. B. Putnam, Van Wert, $39,643; 0.902 mi. Sect. "A" Skelley-Empire Rd., Jefferson Co., bituminous macadam, tar, to H. F. Daugherty, Steubenville, $13,012; 3.44 mi. Sect. "K" Savannah-Vermillion Rd., Erie Co., waterbound macadam and brick, sandstone and waterbound base, to Ohio Road Building Co., Amherst, $101,920; 1.112 mi. Sect. "A" and 0.606 mi. Sect. "B" Ceylon-Norwalk Rd., Erie Co., asphaltic macadam, to Anstine & Carey, Kenton, $23,885 and $15,270 respectively; widening 1.72 mi. Sects. "D and N" Milan-Elyria Rd., Erie Co., plain concrete, to C. Wilmore, Middletown, $26,846. Noted Apr. 3.

O., Akron—Asphalt paving Chalker St., to T. E. McShaffrey, 171 South Forge St., $30,027. Engrs. est. $32,000.

O., Bexley (Columbus P. O.) — S. W. Roderich, village clk., to A. G. Pugh, 401 Commerce Bldg., Columbus, sheet asphalt paving 2,600 ft. Ardmore Rd., 24 ft., $42,126, 2,600 ft. Cassingham Rd., 24 ft., $42,223, 500 ft. Elm Ave., 24 ft., $7,111, 3,300 ft. Roosevelt Ave., 24 ft., $47,679. Noted Mar. 27.

O., Cleveland—Grading, curbing and paving 5,760 sq.yd. East 130th St., vitr. brick to Baldwin Bros., 4500 Euclid Ave., $32,308, 22,740 sq.yd. East 135th, East 137th, East

Streets and Roads (Continued)

139th and East 169th Sts., asphalt, to Highway Constr., 903 Lorain Co. Bank Bldg., Elyria, $127,947; vitr. brick paving Camden Ave., to Roehl Bros., Lorain Ave., $16,796, East 169th St., to H. G. Herring, Pavers Exch., $31,204, East 126th St., to Rieley Bros., The Arcade, $17,594, Sandusky Ave., to W. E. McHugh, Pavers Exch., $9,146; concrete sidewalks on Milverton Rd., to A. M. Pejsa, 3161 Derbyshire Rd., Cleveland Heights, $4,836. Noted Apr. 17.

O., Columbus—W. H. Duffy, dir. Pub. Serv., widening 1,661 ft. Spring St., 3 ft. on either side and repaving with asphalt, to A. W. Burns & Co., Columbus, $38,126. Noted Apr. 3.

O., Euclid—Grading, etc., South Lake Blvd., Shirley Rd., East 270th, East 228th and East 211th Sts., to F. B. Stein, Euclid, $31,403; Edgecliff Dr., East 196th, East 197th, East 199th and East 200th Sts., to E. Gedney, Ansel Rd., $20,144. Work involves 40,000 cu.yd. earth excav., 235,000 sq.ft. cement sidewalks. Noted Mar. 13.

Ind., Terre Haute—Vigo Co., paving J. E. Milks Rd., to J. L. Weeks, Farmersburg, $38,699. Engrs. est. $50,231. Noted Apr. 17.

Michigan—State Hy. Dept., Lansing, grading and surfacing 4.663 mi. State Trunk Line Rd. 19-4, Sects. B, C and D, St. Clair Co., 49,380 sq.yd. asphalt, concrete or bituminous concrete to C. W. Whitely, Marlette, $112,958; 1.87 mi. State Trunk Line Rd. 27-17, Sects. A, 4, 5 and 6, St. Clair Co., 22,135 sq.yd. asphalt, concrete or bituminous concrete, to J. Porath, 903 Free Press Bldg., Detroit, $40,539. Noted Apr. 17.

Michigan—State Hy. Dept., Lansing, shaping and surfacing 2.123 mi. State Trunk Line Rd. 27-4, B, St. Clair Co. and 2.731 mi. State Trunk Line Rd. 27-15, A, St. Clair Co., to J. H. Baker & Son, Port Huron, $41,670 and $55,279 respectively.

Michigan—State Hy. Dept., at dist. office St. Joseph, grading and surfacing 0.747 mi. State Trunk Line Rd. 11-64, Berrien Co., and 1.25 mi. State Trunk Line Rd. 11-22, B, Berrien Co., to Woodley & Granger Constr. Co., Benton Harbor, $23,680 and $26,598 respectively. Noted Mar. 20.

Michigan—State Hy. Dept. at office Comrs. Allegan Co., Allegan, 2.3 mi. North Otsego Rd., 1.025 mi. River Rd. and 2.988 mi. Todd Rd., to W. McCann, Allegan, $40,713.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, **(3-35A, Warren, means State Route 3, Sect. 35A, Warren Co.)**, to Cameron, Joyce & Co., Keokuk, Ia., grading 3-35A, Warren, 5-28A and 5-29A Jo Daviess, $29,260, 5-30A and 5-31A, Jo Daviess, $363,750, 9-41A, Fulton, $18,454, 41-12A, Fulton and 41-13A, Fulton and Knox, $85,681, paving 9-44, Fulton and Peoria, $140,018, 3-29, 3-32 and 3-34, Warren, $224,922; grading as follows: to Byers-Wilson Constr. Co., Des Moines, Ia., grading 9-25A, Hancock, $139,930; to Jenner Bros., Davenport, 9-37A, Fulton and McDonough, $18,996; to Tritt Bros., Belleville, 13-22A, Randolph and St. Clair, $23,513; to A. O. McCoy, Rushville, 36-10A, Adams, $32,044; to McAndrew & Hannahs, Keokuk, Ia., 9-24C, Hancock and McDonough, $37,967; to L. Gallagher & Son, Lincoln, 2-54A, Dewitt, $11,995; to A. F. Hartigan, 5614 Dorchester Ave., Chicago, 16-4A and 16-5A, Coles, $57,703; to Trompeter & Sons, Peru, 43A-1A, Menard, $38,711; paving as follows: to List & Gifford Constr. Co., 415 Railway Exch., Kansas City, Mo., 31-9, Brown, $85,319, 3-44, Schuyler, $12,619; to H. H. Hall Constr. Co., East St. Louis, 13-23, St. Clair, $161,389; to List & Weatherly Constr. Co., 416 Railway Exch., Kansas City, Mo., 36-9, Adams, $119,344; to Keeley Bros. Contg. Co., East St. Louis, 3-67, Monroe, $34,438; to H. A. Carpenter, Terre Haute, Ind., 13-9, Saline, and 13-10, Gallatin, $287,857; to J. J. Dunnegan Constr. Co., Shenandoah, Ia., 26-7, Ogle and Lee, $205,145. Noted Mar. 13 and 27, and Apr. 10.

Wisconsin—State Hy. Comn., Madison, grading and paving Sect. A Portage-Kilbourn Rd., Columbia Co., Project 360, to J. Gunnison & Sons, North Livingston and East Gorham Sts., Madison, 28,422 cu.yd. earth excav. $0.43, 10,793 cu.yd. gravel $1.05, etc., total $46,400, bids on Sects. B and C of above were rejected, will be readvertised; Sects. A and B, Watertown-Waupun Rd., Dodge Co., to J. P. Connell, Janesville, 49,111 cu.yd. earth excav. $0.68, 95,847 sq.yd. concrete $1.20, 44,475 sq.yd. concrete $1.26, etc., total $231,033.

Wisconsin—State Hy. Comn., Madison, grading and surfacing Snyderville Rd., Project 342, Outagamie Co., to Koepke Bros., Appleton, $53,263. Noted Apr. 17.

Wis., Fond du Lac—Fond du Lac Co. Hy. Com., concrete surfacing Sects. A and B, Ladoga-Brandon-Ripon Rd., to A. Kramp, Berlin, $83,837 and $90,322 respectively. Noted Apr. 17.

Wis., Juneau—Dodge Co. grading and surfacing, etc., to Universal Eng. Co., Medford, Juneau-Theresa Rd., 6,270 cu.yd. earth excav. $0.90, 29,125 sq.yd. concrete $1.29, etc., total $49,259, Lowell-Reeseville Rd., 12,500 cu.yd. earth excav. $80, 32,998 sq.yd. concrete $1.22, etc., total $59,623; to L. Young, Clyman, Hustisford-Horicon Rd., 23,000 cu.yd. earth excav. $0.52, 9,340 cu.yd. gravel $1.80, etc., total $33,909, Alderly-Washington Co. line Rd., 12,366 cu.yd. earth excav. $0.60, 4,212 cu.yd. gravel $1.85, etc., total $19,779, Reeseville-Hubbleton Rd., 11,679 cu.yd. earth excav. $0.60, 3,985 cu.yd. gravel $1.75, etc., total $16,730; to Colburn & Thurston, Anoka, Minn., Lowell-Beaver Dam Rd., 31,729 cu.yd. earth excav. $0.59, 14,103 cu.yd. gravel $2.13, etc., total $61,091; to Lind & Lindeman, Clyman, Clyman-Hustisford Rd., 5,963 cu.yd. earth excav. $0.50, 3,551 cu.yd. gravel $1.65, etc., total $9,788, Lomira-Campbellsport Rd., 3,931 cu.yd. earth $0.65, 1,608 cu.yd. gravel $2.25, etc., total $9,075, Huilsburg-Theresa Rd., 10,922 cu.yd. earth $0.50, 6,749 cu.yd. gravel $1.95, etc., total $22,691. Noted Apr. 3.

Wis., La Crosse—Bd. Pub. Wks., to T. E. Wooley, 148 West Ave., S., brick paving, etc., 22,092 sq.yd. 14th, 15th, 20th, Rose, Ferry and St. Andrew Sts. and alley, $3.27 per sq.yd., Main, State and Pearl Sts., $7,427; to E. H. Derr, 1508 Main St., 82,342 cu.yd. excav., $33,865.

Wis., Niagara—Concrete paving, etc. various streets, to C. Johnson, City Natl. Bank Bldg., Oshkosh, $70,000.

Wis., West Allis—Paving various streets, one course concrete and some vibrolithic, to R. Reisinger & Co., 464 Oakland Ave., Milwaukee, $118,000. Noted Mar. 27.

Wis., Wisconsin Rapids—Concrete paving, etc., 8th St., to Bossert Coal Co., Wisconsin Rapids. Noted Feb. 21.

Wis., Wisconsin Rapids—Wood Co. Hy. Com., grading and surfacing, etc., Marshfield-Lincoln Rd., in towns Lincoln and Marshfield, to A. Larson & Co., Eau Claire, 4141 cu.yd. earth excav. $0.88, 16,244 sq.yd. concrete $1.52, etc., total $30,857.

Ia., Oelwein—Improving various streets, 61,000 sq.yd. paving, 36,800 lin.ft. combined curb and gutter and 2,780 lin.ft. curb, to F. Carlson Paving Co., Decorah; 1,360 lin.ft. 10- to 42-in. storm sewer, to Bryant Asphalt Paving Co., 807 Black Hawk Bank Bldg., Waterloo. Noted Mar. 27.

Minn., Breckenridge—Wilkin Co., grading 4.5 mi. Job 2401, State Rd. 3, 27,132 cu.yd. excav., etc., to F. A. Matheson, Fairmont, N. D.; 7 mi. Job 2402, State Rd. 6, 53,454 cu.yd. excav., to Hanson & Carlson, Wolverton; culverts on Jobs 2401 and 2402, to Wheeling Corrugating Co., 155 26th Ave. S. E., Minneapolis. Engrs. est. $25,000. Noted Mar. 27.

Minn., Buffalo—Wright Co., 5.4 mi. Job 2401, State Rd. 1, 60,803 cu.yd. earth excav., etc., 4.3 mi. Job 2402, State Rd. 2, 26,334 cu.yd. earth excav., etc., and 2.19 mi. Job 2403, State Rd. 1, 19,896 cu.yd. earth excav., etc., to Thomas Bros., Foley, $32,818. Noted Apr. 3.

Minn, Fairmont—Martin Co., grading Job 2401, State Rd. 5, 56,000 cu.yd. excav., Job 2402, State Rd. 4, 53,000 cu.yd. excav., and Job 2404, State Rd. 10, 37,000 cu.yd. excav., to W. H. Duffy, Fairmont, $44,291

Minn., Mankato—Blue Earth Co., Job 2401, State Rd. 16, 41,217 cu.yd. excav., 59,550 cu.yd. overhaul, etc., and Job 2403, State Rd. 18, 19,258 cu.yd. excav., 24,710 cu.yd. overhaul, etc., to Bacon & Daufeneack, Mankata, $11,268 and $5,851 respectively; Job 2402, State Rd. 20, 31,749 cu.yd. excav., 31,900 cu.yd. overhaul, etc., to O. Winston & Sons, St. James, $9,698; Job 2404, State Rd. 21, 43,822 cu.yd. excav., 127,560 cu.yd. overhaul, etc., to A. Hanson & Sons, Lake Crystal, $14,119. Noted Mar. 20.

Kan., Atchinson—Grading and surfacing 15.154 mi. Federal Aid Project 83, Sects. A and B, Atchinson Co., to Harrison Eng. & Constr. Co., 506 Mutual Bldg., Kansas City, Mo., $412,474. Noted Mar. 20.

Kan., Iola—Grading, surfacing and bridging 2.036 mi. Federal Aid Project 168, 18 ft., to Fry Bros., Iola, $103,431. Noted Apr. 17.

South Dakota—State Hy. Comn., Pierre, grading **(F. A. P. means Federal Aid Project)**, 3.77 mi. F. A. P. 146 B, and 108 B, Corson Co., to H. Pickus Constr. Co., 309 Mass Bldg., Sioux City, Ia., $21,053; 15.59 mi. F. A. P. 95 A, Faulk Co., to Dowd Bros. & Schreiber, Watertown, $43,555; 28 mi. F. A. P. 165 B, Lyman Co. and 6.92 mi. F. A. P. 178 A, Bon Homme Co., to Diamond Eng. Co., Grand Island, Neb., $55,344 and $20,172 respectively; [illegible] mi. F. A. P. 127, Hughes and Sully Counties, to Stanley Bros., St. Cloud, Minn., $21,282; 10.92 mi. F. A. P. 145, Beadle Co., to H. J. Parrett, Mitchell, $27,704; 0.28 mi. F. A. P. 118 B, Lyman Co., to R. P. England, Murdo, $2,407; 0.21 mi. State Aid 84, Butte Co., to R. Ginter, Strool, $2,124.

S. D., Yankton—Yankton Co. grading 15 mi. Co. Highway 19 and 8-9, to W. H. Culver, Yankton, $24,495, concrete bridge to W. H. Pierce, Vermilion, $16,223.

N. D., Rolla—Rolette Co., grading 8.67 mi. Federal Aid Project 196, 64,730 cu.yd. earth and 1,280 cu.yd. rock excav., to E. M. Nelso, Bottineau, $21,167; 7 mi. Federal Aid Project 238, 56,138 cu.yd. earth and 1,105 cu.yd. rock excav., to E. M. Lilleby, Dunseith, $25,590.

Missouri—State Hy. Dept., Jefferson City, grading 4.962 mi. and 4.339 mi. Kansas City-St. Louis Rd., 34 ft., Boone Co., to Short Bramer & Cox, Monett, $38,652 and $39,801 respectively. Noted Mar. 6.

Missouri—State Hy. Dept., Jefferson City, grading road from Anderson south, McDonald Co., to V. C. Cossota, Oklahoma City, Okla., $62,057, 2.165 mi. road from Mansfield east, and 3.051 mi. road from Mansfield west, 26 ft., Wright Co., to Summerfield-Jones, Billings, $19,524 and $18,412 respectively; concrete paving 4.89 mi. and 5 mi. road from Maryville south, 18 ft., also grading 4.89 mi. and 5 mi. road from Maryville south, Nodaway Co., to C. H. Atkinson Paving Co., Watertown, S. D., $78,493, $81,308, $34,339 and $31,942 respectively; grading 3.579 mi. road from Grant City north and south, 30 ft., Worth Co., to M. Haase, Trenton, $24,463, 2.335 mi. road from Anderson south, 26 ft., McDonald Co., to C. I. Williams, Monett, $18,329; gravel surfacing 4.992 mi. road from Eldon east, 12 ft., Miller Co., to Fogelman & Thompson, Eugene, $23,573, 3.771 mi. Benton-Charleston Rd., 16 ft., Scott Co., to Energy Coal & Supply Co., Poplar Bluff, $34,203, 4.344 mi. road from Marshall north, 26 ft., Saline Co., to Missouri Bridge & Iron Co., Fullerton Bldg., St. Louis, $19,497, 0.872 mi. road from Bloomdale north, 16 ft., St. Genevieve Co., to C. P. O'Reilley & Co., Wainright Bldg., St. Louis, $37,648, 4.924 mi. Vienna-Dixon Rd., 12 ft., Maries Co., to J. M. Birmingham, Vienna, $27,580, 1.719 mi. road from Advance north, 16 ft., Stoddard Co., to J. L. Richmond, Advance, $19,159; concrete paving 1.97 mi. road from Springfield south, 18 ft., Greene Co., to Springfield Constr. Co., Springfield, $43,696; improving 3.23 mi. road from Bernie south, 16 ft. gravel, 40 ft. concrete, Stoddard Co., to Dexter Constr. Co., Dexter, $42,904. Noted Apr. 3.

Mo., St. Louis—Bush-Burns Realty Co., 1105 Chestnut St., 5,500 ft. Union and Natural Bridge Aves. in Hedgleigh Subdivision, incl. grading, laying streets, sidewalks, curbing, sewers, etc., to Fruin-Colnon Constr. Co., Merchants-Laclede Bldg. Engrs. est. $200,000. Noted Mar. 27.

Tex., Greenville—Hunt Co. grading and gravel surfacing 2.61 mi. State Highway 1, Greenville-Commerce Rd., 16 ft., to T. W. Maloney Co., Commerce $11,687; timber pipe trestle bridges and concrete culverts, to Austin Bridge Co., 1813 Clarence St., Dallas, $31,249. Noted Apr. 10.

Tex., Houston—Paving 10,200 sq.yd. Capitol Ave., rock asphalt, to C. K. Horton, Box 1025, $37,905.

Tex., Rosebud—Bituminous paving various streets, to P. M. Skinner, Marlin. $36,000.

Okla., Grandfield—Grading and paving 5 blocks 2nd St., 11,000 sq.yd. 6-in. concrete, 2,100 lin.ft. curbing, 3,666 cu.yd. excav., to A. M. Pearce, Edmond, $2.70 per sq.yd. for paving, total $39,682. Noted Apr. 10.

Okla., Tulsa—Grading and paving 9 blocks Greenwood Ave., 17,300 sq.yd. concrete, to Standard Paving Co., 1742 East 6th St., $83,263. Noted Apr. 3.

Idaho—Bureau of Highways, Boise, 1.82 mi. grading and 8.01 mi. surfacing on Lewis & Clark Highway, Clearwater and Lewis Counties, Federal Aid Project 50 A-B-C-D, to R. A. Burns, Lewiston, 7,318 cu.yd. solid rock excav. $1.05, 2,251 loose rock excav. $0.80, 3,805 cu.yd. earth excav. $0.36, 9,003 cu.yd. broken stone surfacing $2.22, etc., total $39,944; engrs. est. $41,950.

Idaho—State Bureau of Highways, Boise, grading and surfacing 6.9 mi. Clarks Fork Highway near Laclede, Bonner Co., Project 71 and 81, to E. A. Webster & Co., 617 Hutton Bldg., Spokane, Wash., $213,303. Noted Mar. 27.

Nevada—State Highway Comn., Carson City, grading and graveling 8.03 mi. high-

Streets and Roads (Continued)

way between Derby and Fernley, Washoe and Lyon Counties, to King & Malone, Cheney Bldg., Reno, $45,127. Noted Apr. 10.

Ore., Oregon — Clackmas Co., grading and paving 7 sections county road, to Oregon Contg. Co., Blake McFall Bldg., Portland, 19,826 cu.yd. common excav. $0.60 per cu.yd., 15,125 cu.yd. intermediate excav. $0.70, 10,700 sq.yd. concrete $2.13, 10,795 sq.yd. concrete $2.14, 20,020 sq.yd. concrete $2.13, 9,600 sq.yd. concrete $2.31, 6,200 sq.yd. concrete $2.21, 10,295 sq.yd. concrete $2.36, 25,232 sq.yd. concrete $2.35, etc., total $309,934.

Wash., Raymond—City Council, paving Duryea St. et al., 4,750 sq.yd. 8-in. concrete, and 3rd St. et al., 6,200 sq.yd. 6-in. concrete, to J. Slotte & Co., Astoria, Ore., $24,728 and $37,664 respectively. Engrs. ests. $26,598 and $41,230 respectively. Noted Mar. 27.

Wash., Seattle—Bd. Pub. Wks., grading and paving West Spokane St., 7,275 sq.yd. 8-in. concrete, to J. L. Smith, Pioneer Bldg., $2.20 per sq.yd., etc., total $56,486. Engrs. est. $59,752. Noted Apr. 17.

California—State Highway Comn., Sacramento, paving 2.78 mi. between Pasadena Ave. and Montebello, to G. H. Oswald, 366 East 58th St., Los Angeles, 18,120 cu.yd. roadway excav. $0.65, removing 2,680 cu.yd. old macadam $0.70, placing 46,680 sq.yd. old macadam and disintegrated granite sub-base $0.35, 10,450 lin.ft. Class A concrete curb $0.65, 84,620 sq.ft. Class A concrete gutter $0.32, 37,280 sq.yd. Class B concrete base $2.20, 37,280 sq.yd. asphaltic concrete surface $0.72, 8 Class A concrete culverts Type A (Plan 4) $769, 3 Class A concrete culverts Type B (Plan 4) $593, one Class A concrete culvert Type B (Plan 4) $1,200, etc., total $183,864; engrs. est. $199,056. Noted Mar. 20.

Calif., San Rafael—Marin Co., improving Manzanita-Bolinas Rd., Sects. 4, 5 and 6, 112,694 cu.yd. grading, 3,040 lin.ft. 8- to 60-in. corrugated metal pipe, 70,990 cu.yd. excav., to Guerin Bros., 425 4th St., San Francisco, $53,858. Noted Apr. 3.

Calif., South San Francisco (Branch San Francisco)—Improving various alleys, incl. 238,000 sq.ft. 5 in. concrete, 32,500 sq.ft. 4 in. concrete with 1½ in. Topeka surface, 6,300 cu.yd. grading, etc., to C. Lindgren, Box 146, Burlingame, $61,780. Noted Mar. 20.

Industrial Works

PROPOSED WORK

N. Y., Buffalo—Factory—Debrah Silk Corp. plans 3 story, 60 x 382 ft., brick and concrete, Skillen St. $180,000. W. B. Falkins, Olean, vice-pres.

N. Y., Buffalo—Factory—See "Buildings."

N. Y., Colliers (Colliersville P. O.) — Transformer Station — See "Unclassified under New York."

N. Y., New York—Plant—Houbigant, Inc., 16 West 49th St., having plans prepared by Lockwood, Greene & Co., engrs. and archts., 101 Park Ave., 11 story and basement, 100 x 125 ft., rein.-con.

N. Y., Perry — Station — Dairymens League Co-operative Assn., 333 Lafayette St., Utica, plans station, here. $160,000-$175,000.

N. Y., Wolcott — Warehouse — Building Com. Packers Assn., c/o F. Hill, chn., North Rose, plans 5 story, 100 x 125 ft., concrete and steel, here. $150,000.

Pa., Butler — Plant — Standard Plate Glass Co. having plans prepared by J. W. Cruikshank Eng. Co., Arcade Bldg., Pittsburgh, 1 story steel addition.

Fla., Sarasota — Electric Plant — City plans election to vote on $125,000 bonds enlarging electric plant.

La., Lake Charles—Mill—Lake Charles Rice Milling Co., c/o J. A. Foster, plans to rebuild 1 and 2 story, mill recently destroyed by fire. $600,000. Engineer and architect not announced.

Tenn., Knoxville — Shops — See "Railways."

Tenn., Memphis — Lumber Mill — E. L. Bruce Co., Thomas St., plans lumber mill near here. $100,000.

Ky., Louisville—Factory—Levy & Rans Co., c/o Louisville Industrial Foundation, Col. Bldg., plans factory. $40,000.

Ky., Louisville—Lumber Warehouse—W. J. Hughes & Son Lumber Co., 14th and Maple Sts., plans 1 story, 200 x 250 ft. $40,000.

O., Cleveland—Service—See "Buildings."

O., Cleveland—Shop—C. O. Bartlett & Snow Co., French and Winter Rds., having plans prepared by Allen-Osborn Co., Rose Bldg., 1 and 2 story, brick and steel, Harvard Ave. $175,000.

O., East Cleveland (Cleveland P. O.)—Sub Station—Cleveland Electric Illuminating Co., c/o E. J. Cook, engr. of construction, Illuminating Bldg., Cleveland, had plans prepared 1 story, 57 x 102 ft., brick, steel and concrete, Euclid Ave., here. $60,000. Private plans.

Ind., Columbus—Plant—I. C. Morgan, Scottsburg, plans packing plant, here. $90,000.

Ind., Evansville — Plant — Ohio Valley Roofing Co., 222 Division St., plans 3 story, 147 x 179 ft. addition to plant, Pennsylvania and Short Sts. $65,000.

Mich., Detroit—Factory—Capitol Brass Co., 2306 Franklin St., having plans prepared by Lane, Davenport & Peterson, Charlevoix Bldg., 1 story, 85 x 420 ft., brick and steel, plain foundation, West Jefferson Ave.

Mich., Wyandotte — Mill — Williamson Lumber Co. plans addition to mill. $70,000.

Ia., Davenport—Plant—Union Carbide & Carbon Co., 30 East 42nd St., New York City, plans rein.-con. and brick, plain foundation. $700,000. Private plans.

Minn., Detroit—Power Plant—City had plans prepared by L. P. Wolff, engr., 1000 Guardian Life Bldg., St. Paul, and soon takes bids 1 story, 40 x 120 ft. addition to power plant station, also furnishing and installing two 250 hp. watertube boilers. $60,000.

Minn., Fergus Falls—Power Plant, etc. —Defeated $650,000 bonds for municipal light and power plant. Noted Mar. 20.

Minn., Minneapolis—Factory—H. D. Lee Mercantile Co., 200 North 3rd St., plans factory, 2nd Ave. N. and 3rd St. $500,000. C. A. Reynolds, mgr.

Tex., Houston—Factory—W. H. Jones, Gulf Bldg., and associates plan blanket factory along Ship Channel. $500,000.

Tex., Houston — Factory — Texas Fireworks Co., South Houston St., plans factory. $75,000. Engineer and architect not announced.

Tex., Italy—Mill—Italy Oil Mill plans cotton oil mill. $75,000. Engineer and architect not announced.

Tex., San Antonio—Factory—San Antonio Macaroni Co., 1906 South Flores St., plans 70 x 240 ft., rein.-con. and brick, plain foundation. $150,000.

Calif., Oakland—Gas Generating Unit—Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans gas generating unit, here. $150,000, incl. auxiliary equipment. Private plans.

Calif., San Francisco—Substation—Pacific Gas & Electric Co., 445 Sutter St., plans rein.-con., Substation I, Junipero Serra Blvd. and Ocean Ave. To exceed $50,000. Private plans.

Calif., Turlock—Power Plant—Turlock Irrigation Dist. plans power plant at La Grange dam. $100,000. A. Sorenson, secy.

Ontario—Ontario Hydro Electric Power Comn., 190 University Ave., Toronto, preparing plans high voltage stations at Guelph, Preston, Woodstock, Stratford, and other points in Kent and Essex Counties. $500,000.

Ont., Toronto—Plant—Dominion Tar & Chemical Co., foot Bathurst St., plans 2 story, rein.-con., brick and steel, plain foundation, Logan and Keating Ave. S. $200,000. Engineer and architect not selected.

BIDS DESIRED

N. Y., Raybrook—Storehouse and Cold Storage Plant—Apr. 29, by F. Erdwurm, pres. Bd. Trustees State Hospital for Treatment of Incipient Pulmonary Tuberculosis, at Dept. Architecture, Albany, storehouse and cold storage plant, here. S. W. Jones, Albany, archt.; adv. E. N.-R. Apr. 24. Noted Feb. 7.

Wis., Oshkosh—Print Shop—Goettmann Printing Co., 38 Main St., taking bids 2 story, 42 x 125 ft., brick and tile, plain foundation. Washington Blvd. $40,000. Private plans.

Wis., West Bend—Shop—W. Warnkey, Main St., taking bids 2 story, 40 x 70 ft., brick and timber, plain foundation. $40,000. Federal Eng. Co., 444 Milwaukee St., engrs. Noted Apr. 17.

Ia., Ames—Laundry—May 5, by State Bd. Educ., Des Moines, W. H. Gemmill, secy., 1 story and basement, brick and concrete, for Iowa State College, here. $40,000. Proudfoot, Bird & Rawson, 810 Hubbell Bldg., Des Moines, archts.

BIDS RECEIVED

N. Y., Brooklyn—Housing Station—Dept. Plant & Structures, Municipal Bldg., New York, Apr. 21, housing station, 2nd Ave., 11th and 12th Sts., here, from Eastern Constr. Co., 110 West 40th St., New York, $101,623. Noted Apr. 17.

N. Y., Long Island City—Housing Station—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Apr. 14, general contract, rein.-con., brick and steel, plain foundation, Beach 63rd St. and Thursby Ave., from M. J. Irwin & Son, 19 Hulst St., Brooklyn, $32,485. Noted Apr. 10.

N. Y, New York — Housing Station — Dept. Plant & Structures, Municipal Bldg., rein.-con., brick and steel, plain foundation, 139th St. and Harlem River, from W. W. Constr. Co., 15 East 40th St., $658,381. Noted Apr. 17.

CONTRACTS AWARDED

Mass., Cambridge (Branch of Boston)—Factory—Rinulai Tile Co., Inc., 264 Atlantic Ave., 3 story, 48 x 105 ft., brick and steel, Carleton St., to F. J. Van Etten Co., 100 Boylston St., Boston. Archts. est. $65,000.

R. I., Providence—Factory—Gutta Percha Paint Co., Dudley St., 3 story, 60 x 80 ft., brick and steel addition, Dudley St., to O. D. Purington, Industrial Trust Bldg. Archts. est. $60,000.

N. Y., Hornell — Shop — Erie R.R., 50 Church St., New York, will build wheel repair shop, steel and concrete, here, by day labor, under supervision of Eng. Dept. $50,000-$75,000.

N. Y., Minetto — Mill — Columbia Mills, Inc., 4 story and basement, brick, steel and concrete, to Drass Bros., Niagara Falls, $150,000.

N. J., Trenton — Pottery — T. Maddock Sons Co., Ewing and Perry Sts., 1 and 2 story, 250 x 1,750 ft., to C. J. Smith Constr. Co., 202 Academy St., $750,000. Noted Jan. 31.

Pa., York—Plant—U. S. Chain Co., 1 story, 60 x 200 ft. addition to plant, to Fort Pitt Bridge Wks., Canonsburg.

Tenn., Nashville—Shoe Factory—Jarman Shoe Co., 2nd and Shelby Sts., 2 story, rein.-con. and steel, to J. L. Webb Lumber Co., Shelby Ave., $40,000.

Ky., Louisville—Mill and Warehouse—W. J. Hughes & Sons Lumber Co., 14th and Maple Sts., rebuilding lumber mill, warehouse, etc., to C. A. Koerner Co., 318 East Burnett St. Est. cost incl. machinery $225,000.

Ky., Paducah — Mill — Priester Hosiery Mills, 2 story addition, rein.-con. and brick, 9th St. and Kentucky Ave., to J. Cole, Paducah. Est. cost $40,000.

Ill., East St. Louis—Foundry—East St. Louis Steel Castings Co., 1 story, brick, concrete and steel, to Keeley Bros., Belt and State Sts. Archts. est. $40,000.

Wis., Racine—Factory—Wisconsin Metal Products Co., 16th and Ann Sts., 1 story, 98 x 246 ft., brick and timber, plain foundation, to Bondgard & Christensen, 1135 Mound Ave. $60,000. Noted Mar. 27.

Wis., Racine—Foundry—Belle City Malleable Iron Co., Kewaunee St., 1 story, 117 x 306 ft., brick and steel, plain foundation (2nd unit) to Nelson & Co., Janes Bldg. Archts. est. $80,000. Noted Jan. 10.

Wis., South Milwaukee—Tool Room—Bucyrus Co., 1 story, 30 x 100 ft., brick and steel, plain foundation, to P. Riesens Sons, 1012 Humboldt Ave., Milwaukee. $40,000.

Minn., Duluth — Plant — Stone-Orden-Wells Co., South West 5th Ave., 5 story and basement, 85 x 135 ft., rein.-con. and steel, general contract to G. H. Lounsberry, 322 East Superior St., $108,135. Archts. est. $150,000 complete. Noted Apr. 10.

Minn., Minneapolis — Factory, etc. —Bureau of Engraving, 500 4th Ave., S., 3 story and basement, 100 x 100 ft., rein-con., brick and tile, addition to factory, school, etc., 500 4th Ave. S., to Madsen & Peterson, 646 Builders Exch. $100,000. Noted Nov. 15.

Kan., Fredonia — Power Plant, etc. — Power plant and oil storage tank, to F. C. Randal Constr. Co., Wichita, $19,780; Diesel oil engine generating units, switchboard, and installation, to Worthington Pump & Mchy. Co., 825 Scarritt Bldg., Kansas City, Mo., $61,375; distribution and street lighting system, to Nebin Bros. Electric Constr. Co., Muskogee, Okla., $31,483. Noted Apr. 3.

Ark., Little Rock — Plant — Arkansas Brick & Tile Co., 111 Center St., 1 story, steel plant, to Ingalls Iron Wks., 720 Ave. D, Birmingham, Ala. Archts. est. $40,000.

Industrial Works (Continued)

Mo., St. Louis—Marble Works—Bradbury Marble Wks., 3417 Morganford Rd., 1 story, 133 x 186 ft., steel and concrete, to Illinois Steel Bridge Wks., Jacksonville, Ill., $40,000.

Mo., St. Louis—Factory—Hadley Bros. & Uhl Co., 3952 West Pine Blvd., 2 story and basement, 50 x 113 ft., brick and concrete, to J. W. Mullins, 4569 Laclede St.

Calif., San Bernardino—Machine Shop—Atchison, Topeka & Santa Fe Ry., Kerckhoff Bldg., Los Angeles, building Unit 4, 180 x 220 ft., here, to Sumner Sollitt Co., Delta Bldg., Los Angeles.

B. C., Essondale—Power Plant—Dept. Pub. Wks., Victoria, 2 story, 50 x 160 ft. rein.-con., brick and steel, on hospital grounds, here, to McDougall & McNeill, Birks Bldg., Vancouver, $140,000. Noted Mar. 27.

B. C., Point Grey—Power Plant—Dept. Pub. Wks., Victoria, 45 x 56 x 120 ft. steam heat and power plant, on University grounds, here, for University of British Columbia, 10th and Willow Sts., Vancouver, to Smith Bros. & Wilson, 850 Hastings St. W., Vancouver, $93,000. Noted Mar. 27.

B. C., Stave Falls—Power Plant—British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, will build new generator unit, by day labor; generator, etc., to Canadian General Electric Co., 1065 Pender St. W., Vancouver, $500,000; turbine to Allis-Chalmers Co., West Allis, Milwaukee, Wis., $150,000.

Buildings

PROPOSED WORK

Mass., Cambridge—Warehouse—Haskell Adams Co., 5 Commercial St., Boston, plans warehouse, Henry St., here. $150,000-$200,000.

Mass., Lynn—High School—School Bd. plans to build school to replace one recently destroyed by fire. $400,000-$500,000.

Mass., Newton—Hospital—Newton Hospital plans ward building. $300,000-$400,000. L. B. Rogers, 28 Lenox St., West Newton, member of committee.

N. Y., Bath — Lodge — Local Masonic Fraternity had plans prepared by F. Empey, Bath, for new lodge. $150,000-$175,000.

N. Y., Buffalo—Church—Building Com. Evangelical Lutheran Church plans brick, stone and concrete, 2 Wallace St. $250,000. P. J. Kuhns, 2792 Main St., chn.

N. Y., Buffalo—Office—Amer. Radiator Co., 1803 Elmwood St., plans brick, concrete and steel addition. $150,000.

N. Y., Brooklyn — Synagogue — Union Temple, Bedford and Lafayette Aves., had plans prepared by A. H. Brunner, 101 Park Ave., New York City, brick, steel and stone, plain foundation, Eastern Parkway and Plaza St. $1,000,000. Noted Jan. 17.

N. Y., Canton—School—Bd. Educ. had plans prepared by D. D. Kieff, Flower Bldg., Watertown, 2 story and basement, brick, stone and concrete. $150,000. Noted Feb. 28.

N. Y., New York — Apartment — L. A. Abramson, archt. and engr., 48 West 46th St., making sketches 14 story, brick, stone and steel, plain foundation, Madison Ave. and 59th St. Owner's name withheld.

N. Y., New York—Apartment—V. Astor, 23 East 26th St., having plans prepared by C. A. Platt, archt. and engr., 101 Park Ave., 12 story, brick, stone and steel, plain foundation, 5th Ave. and 65th St. $1,500,000.

N. Y., New York City — Apartment — Dochterman Realty Co., c/o J. M. Felson, archt. and engr., 1133 Bway., had plans prepared 10 story, brick, stone and steel, plain foundation, Ft. Washington Ave. $750,000.

N. Y., New York—Apartment—D. H. Jackson, 565 5th Ave., having sketches prepared by J. Craig Severance, 36 West 44th St., 16 story, 100 x 125 ft., brick, stone and steel, plain foundation, Riverside Dr. and 122nd St. $2,000,000.

N. Y., New York—Apartment—One Fifty One East 79th St. Corp., c/o Rouse & Goldstone, ar hts. and engrs., 512 5th Ave., having plans prepared 15 story, brick, steel and stone, plain foundation, East 79th St. $500,000.

N. Y., New York — Apartment — K. P. Walker, c/o Mott B. Schmidt, archt. and engr., 14 East 46th St., having plans prepared 15 story, brick, steel and stone, plain foundation, Park Ave. and 88th St. $2,000,000.

N. Y., New York—Apartment Hotel—S. B. Behrman, c/o R. T. Lyons, archt. and engr., 342 Madison Ave., soon takes bids 15 story, brick, steel and stone, plain foundation, West End Ave. $1,000,000.

N. Y., New York—Garage—B. J. Catts, c/o Block & Hess, archts. and engrs., 18 East 43rd St., having preliminary plans prepared 5 story, 100 x 100 ft., rein.-con. and brick, plain foundation, East 55th St.

N. Y., New York—Loft—Selmour Realty Corp., c/o Schwartz & Gross, archts. and engrs., 347 5th Ave., will build brick, steel and stone, plain foundation, 250 West 40th St., by day labor. $600,000.

N. Y., New York—Warehouse—R. W. Realty Co., Inc., 121 Duane St., having plans prepared by Lockwood, Greene & Co., engrs. and archts., 101 Park Ave., 6 story and basement, 110 x 120 ft., rein.-con.

N. Y., Syracuse—Lodge—Building Com. Syracuse Lodge Elks 31, plans new lodge building. $200,000. J. B. Spencer, chn. Engineer and architect not selected.

N. J., Asbury Park—High School—Bd. Educ. plans high school. $1,000,000. E. A. Arend, Kinmoth Bldg., archt.

N. J., Jersey City — Store House — Bd. Educ. having sketches made by J. T. Rowland, archt. and engr., 100 Sip Ave., 3 story, brick, steel and stone, plain foundation, Park St. $220,000.

N. J., Newark—High School—Bd. Educ., City Hall, having sketches made by Guilbert & Bettelle, 2 Lombardy St., for West Side High School, steel and stone, plain foundation, South Orange Ave. and South 12th St. $500,000.

N. J., Newark—High School—Bd. Educ. having plans prepared by Guilbert & Bettolle, 2 Lombardy St., brick and stone, plain foundation, Van Buren St. $500,000.

Pa., Johnstown — Office — Johnstown Water Co., Locust St. and Lee Pl., plans 3 story and part basement, 100 x 200 ft., concrete, brick and steel office, storehouse, etc., Locust St. $150,000. C. W. Runkle, supt.

Pa., Johnstown — Safety — City having plans prepared by Hersh & Sholler, Commerce Bldg., Altoona, 5 story and basement, 85 x 100 ft. Washington St. $150,000.

Pa., Phila.—Office—Maryland Casualty Co., 324 Walnut St., plans office, Walnut St.

Pa., Pittsburgh—School and Chapel—Church of Nativity, 4068 Franklin Rd., having plans prepared by C. G. Strong, Union Bank Bldg., 3 story and basement, 55 x 100 ft., brick and tile, Franklin Rd. $150,000.

Pa., Williamsport—Church—Evangelical Church Extension Bd. plans 2 story and basement, 100 x 130 ft., stone, Lycoming Rd. and Roosevelt Ave. $150,000. C. I. Raffensberger, Williamsport, presiding elder.

Pa., Windber—Church—St. Marys Greek Catholic Church, having plans prepared by H. L. Reinhold, 1513 Walnut St., Phila., 2 story and basement, 120 x 150 ft. stone, Somerset Ave. $175,000.

Md., Baltimore — High School — Pub. Impvt. Com., Hearst Tower, rejected bids 3 story and basement, 50 class rooms, Gwynns Falls Park. Will readvertise shortly. Smith & May, Calvert Bldg., engrs. Noted Mar. 27.

D. C., Wash.—Apartment—Stern & Tomlinson, archts., Continental Trust Bldg., preparing plans apartment house. $200,000. Owner's name withheld.

D. C., Wash.—Garage and Plant—Chestnut Farm Dairy had plans prepared garage and plant. $300,000. Private plans.

D. C., Wash.—Home—A. B. Mullett & Co., Union Trust Bldg., preparing plans Henry and Annie Hurt Home for Blind. $250,000.

D. C., Wash. — School — St. Martins Church had plans prepared by M. F. Moore, Colorado Bldg., parochial school. $175,000.

Va., Grundy—School—Christian Church having plans prepared by Mahood & Van Dusen, Bluefield, W. Va., administration building, boys and girls dormitory, auditorium with chapel, gymnasium, industrial shops, central heating plant, all native stone, for Mountain Industrial Institute. $300,000.

W. Va., Bluefield—Church—Westminster Presbyterian Church having plans prepared by H. L. Cain, 501 Grace St., Richmond, Va., 3 story and basement, brick. $150,000.

W. Va., Huntington—Church and Gymnasium—First Presbyterian Church, 1015 5th Ave., having plans prepared by R. L. and S. L. Day, 1st Natl. Bank Bldg., 3 story church and gymnasium. $150,000.

W. Va., Huntington—Lodge—I. O. O. F. (Fidelity Lodge 123) having preliminary plans prepared by L. J. Dean, Foster Bldg., lodge, $150,000.

Fla., Miami—Church—Christian Science Church, c/o S. R. Shearston, chn. building board, had plans prepared by A. Geiger, Townley Bldg., 85 x 174 ft., terra cotta and limestone, O'Reilly and Havana Sts. $220,000.

Fla., Sarasota—Hotel—W. H. Pepkorn, 712 Park St., Milwaukee, Wis., had plans prepared by F. A. Hammill, Tampa, 10 story, 50 x 100 ft., rein.-con. and steel, Main St. and Palm Ave., here. $225,000.

Fla., Tampa—Hotel—W. Curry, Bradentown, having plans prepared by F. J. James, Citizens Bank Bldg., 2 story addition to Park View, Lafayette St., here. $200,000.

Fla., Tampa—Hotel—W. C. Gaither having plans prepared by F. J. James, Citizens Bank Bldg., 3 story, 70 x 135 ft., rein.-con., brick and tile, Magnolia and De Leon Sts. $185,000.

Ala., Birmingham—Office—Jefferson Co. Building & Loan Assn., 113 North 21st St., plans 8 story, 40 x 100 ft., concrete and reinforced steel, 21st St. and 2nd Ave. Engineer and architect not selected.

La., Shreveport—Church—First Presbyterian Church having plans prepared by Jones, Roessle & Olschner, 1023 Masin Blanche Bldg., New Orleans and 218 Ardis Bldg., Shreveport, and takes bids about May 30, brick, steel and stone. $250,000.

Tenn., Nashville — Hospital — Tennessee Baptist Convention plans hospital. To exceed $150,000. R. M. Dudley, Rosebank Ave., member building committee. Engineer and architect not selected.

Tenn., Nashville — Hotel — C. Loridans Hotel Co. having plans prepared by Marr & Holman, Stahlman Bldg., 12 story and basement, 80 x 175 ft., concrete, cut stone, brick and steel, 6th and Dedderick Sts. $1,500,000. Noted Sept. 13.

Ky., Lebanon — Church — Nevin, Wischmeyer & Morgan, archts., Starks Bldg., Louisville, opens bids about June 1 (extended date), church and Sunday School, for United Presbyterian Church, here. $150,000. Noted Mar. 20.

Ky., Louisville — Garage and Store — Platoff & Bush, 122 West Liberty St., plans 2 story and basement, 75 x 125 ft., 833 South 3rd St. $150,000.

Ky., Louisville—Memorial Auditorium—Louisville Memorial Auditorium Comn., City Hall, having plans prepared by Carrere & Hastings, 52 Vanderbilt Ave., New York City, memorial auditorium. $1,250,000. Noted Dec. 10.

Ky., Louisville—Sunday School—Second Presbyterian Church, 2nd and Bway., having plans prepared by A Loomis, Todd Bldg., 2 story and basement addition. $150,000.

O., Cincinnati—Law College—University of Cincinnati, Clifton Ave., plans 2 story, brick and stone. $250,000. H. Hake, Telephone Bldg., archt.

O., Cleveland—Church—St. Johns Cantius Roman Catholic Church, 906 College Ave., had plans prepared by Potter-Gabele Co., Prospect-4th Bldg., 1 story, 90 x 190 ft., brick and steel, Professor and College Sts. $200,000.

O., Cleveland — Dance Hall — B. Karp, Union Bldg., having plans prepared by Q. J. Goldstein, Ohio Bldg., 2 story, 106 x 227 ft., brick and steel, East 96th St. and Euclid Ave. $175,000.

O., Cleveland—Sales Room, etc.—T. H. Towell, pres. and treas. Cleveland Cadillac Co., 1935 Euclid Ave., having plans prepared by W. S. Lougee, Marshall Bldg., 10 story, 84 x 200 ft. salesroom and office building, 4 story, 84 x 200 ft. service building, and 4 story, 92 x 300 ft. store, brick, steel and concrete, Euclid Ave. $1,500,000.

O., Cleveland — School — Holy Trinity Church, 7211 Woodland Ave., having plans prepared by J. M. Miller, Plymouth Bldg., 2 story, 60 x 160 ft., brick, steel and concrete, East 72nd St. $150,000.

O., Cleveland Heights (Warrensville, P. O.)—Office, Commercial and Apartment—H. Caplan, 3464 East 123rd St., Cleveland, plans 3 story and basement, brick, Coventry and Hampshire Rds., here. $250,000. Engineer and architect not selected.

Ind., Holton—High School—Bd. Educ. plans 2 story and basement. $150,000. H. P. Henkel, Connersville, archt.

Mich., Detroit—Apartment—Lennane & McIlvenna, 1121 Beck Bldg., having plans prepared by Williams & Coughlan, 1111 Kresge Bldg., 4 story and basement, 60 x 100 ft., brick, plain foundation, Pine and National Sts. $150,000.

Mich., Detroit — Apartment — A. Cohen, c/o A. F. Herman, archt., 710 Owen Bldg., had plans prepared 8 story and basement, 110 x 190 ft. rein.-con., brick, steel and stone, plain foundation, 2nd Blvd. and Peterboro St. $1,000,000.

Buildings (Continued)

Mich., Detroit—Hotel—F. C. Shipman, 1348 Penobscot Bldg., had plans prepared by H. T. Millar, 242 West Lafayette Ave., 3 story and part basement, 100 x 110 ft. brick and steel, plain foundation, Kercheval and Lenox Aves. $155,000.

Mich., Detroit—Lodge—Arbiter Society, E. Krause, pres., 5970 Crane Ave., having plans prepared 3 story and basement, 71 x 102 ft. rein.-con., brick and steel, plain foundation. Mack and Seminole Aves. $155,000. Architect's name withheld.

Mich., Detroit—School—Christians Church, c/o W. Garstecki, archt., 403 Hoffman Bldg., plans 2 story and basement, 60 x 100 ft. brick and steel, plain foundation, McDougall Ave., $150,000.

Mich., Detroit—Y. M. C. A., A. G. Studer, genl. secy., Y. M. C. A. Bldg., having plans pepared 6 story and basement, 1,000 rooms, rein.-con., brick and steel annex, plain foundation, Elizabeth St. Architect's name withheld.

Mich., Highland Park (Detroit P. O.)—Church — St. Pauls Methodist Episcopal Church, Highland Park, having plans prepared by Butterfield & Butterfield, 32 Campau Bldg., Detroit. 3 story and part basement, 90 x 90 ft., rein.-con., brick and stone, plain foundation. $150,000.

Mich., Highland Park (Detroit, P. O.)—Office—Wayne Co. Bond & Mortgage Co., 812 Free Press Bldg., Detroit having plans prepared by Bonnah & Chaffee, archts., 528 Farwell Bldg., Detroit, 1 story and basement, 60 x 75 ft. rein.-con. brick and terra cotta, plain foundation, Woodward Ave.

Mich., Owosso—High School—Bd. Educ. having plans prepared by Lane, Davenport & Peterson, Charlevoix Bldg., Detroit, two 2 story and basement, one 60 x 200 ft., and other 100 x 240 ft., rein.-con., brick and steel, plain foundation, $350,000.

Ill., Aurora—Office and Bank—Second Natl. Bank having plans prepared by G. G. Elmslir, 122 South Michigan Ave., Chicago, 3 story, 50 x 200 ft., fireproof. $150,000.

Ill., Chicago — Apartment — Claremont Building Corp., c/o R. F. France, archt., 155 North Clark St., having plans prepared 7 story, 50 x 150 ft., fireproof, 509 Belmont St. $700,000.

Ill., Chicago—Apartment—Owner c/o A. V. Teisen, archt., 4804 North Kedgie St., having plans prepared 3 story and basement, 90 x 160 ft., fireproof. $150,000.

Ill., Chicago—Office—W. F. Hall Printing Co., 466 West Superior St., having plans prepared by Weiss & Niestadt, 53 West Jackson Blvd., 2 story, 100 x 500 ft., fireproof, Diversey and Kilpatrick Sts. $1,000,000.

Wis., Madison—Dormitory—University of Wisconsin, J. D. Phillips, business mgr., Administration Bldg., having plans prepared by A. Peabody, State Capitol, 4 story, 50 x 120 ft., brick, rein.-con. and stone, plain foundation. $150,000.

Wis., Madison—Gymnasium—University of Wisconsin, J. D. Phillips, business mgr., Administration Bldg., plans gymnasium and field house, rein.-con., brick and steel, plain foundation. $350,000. Engineer and architect not selected.

Wis., Milwaukee—Garage—N. W. Motor Car Co., 2418 North Ave. having plans prepared by Voelz & Siebert, 373 Bway., 2 story and basement, 67 x 116 ft., brick and concrete, plain foundation. $150,000.

Wis., Oshkosh—Church—First Methodist Congregation, C. C. Smith, pastor, 108 Jefferson Ave., having plans prepared by Auler & Jensen, F. R. A. Bldg., 2 story, 62 x 120 ft., brick and stone, plain foundation, Main St. $150,000.

Ia., Iowa City—Memorial—University of Iowa Alumni, c/o Boyd & Moore, archts., 1020 Grand Ave., Des Moines, had plans prepared 3 story and basement, rein.-con., brick, tile and stone, on campus. $200,000. First unit of $1,000,000 project. Noted Jan. 31.

Kan., Wichita—Apartment—W. H. Gaines, c/o Eaton Hotel, having preliminary plans prepared 5 story and basement, rein.-con., brick and terra cotta, Poplar and Douglas Sts. $300,000.

Neb., Grand Island—Temple and Office—Kirsche & Baker, archts., Ryan Bldg., take bids about June 1, 7 story and basement, 33 x 52 ft., rein.-con., brick and steel, Locust St., for Masonic Lodge, c/o C. H. Menck, 118 South Division St.

Neb., Omaha—Hotel—R. and D. Kitchin, Paxton Hotel, plan 8 story and basement, 66 x 66 ft., 14th and Farnum Sts. $750,000. Engineer and architect not selected.

Neb., Omaha—High School—Bd. Educ. having plans prepared by J. Latenser & Sons, 732 Peters Trust Bldg., remodeling high school, 20th and Dodge Sts. $200,000.

Neb., Omaha—Theatre—Orpheum Theatre, c/o W. H. Hartung, mgr., plans theatre. $300,000.

Mo., Columbia — Church and Sunday School—Christian Church, c/o Pastor 1st Christian Church, plans 2 story and basement, rein.-con., brick and stone. $250,000. Engineer and architect not selected.

Mo., Jefferson City—High School—Plans election in May $300,000 bonds, 3 story high school. Engineer and architect not named. Noted Jan. 31.

Mo., St. Louis—Garage—P. Brockman, pres. Police Dept., 112 South 12th Blvd., takes bids about Apr. 21, 2 story and basement, 143 x 150 ft., rein.-con., brick and stone, Laclede Ave. $150,000. H. G. Clymer, Wainwright Bldg., archt.

Mo., St. Louis—Hospital—Hoetner, Baum & Froese, archts., Federal Reserve Bldg., open bids about May 15, 4 story, 65 x 160 ft., rein.-con., brick and stone, Carter and Newstead Sts., for Christian Hospital, 3540 North Grand Blvd. $275,000. Noted June 7.

Mo., Webster Groves (branch of St. Louis)—Seminary—Evangelical Synod of North America, c/o Evangelical Theological Seminary, St. Louis, plans new seminary, here. $1,000,000.

Tex., Dallas—Auditorium—R. H. Hunt & Co., archts., Southwestern Life Bldg., takes bids in 30 days, 3 story and basement, brick, steel and concrete, Campus for Southern Methodist University, Dallas. Noted Feb. 21.

Tex., Dallas—Hotel—B. F. Easterwood and associates c/o B. D. Easterwood, archt., Liberty Bank Bldg., Waco, having plans prepared 20 story and basement, 83 x 144 ft. $2,000,000. Noted Mar. 13.

Tex., El Paso—Hotel—R. B. Orndorff, Orndorff Hotel, had plans prepared 10 story and basement, brick and concrete, Mills St. $500,000. Engineer and Architect not announced.

Tex., El Paso—Schools—Election Apr. 30, $500,000 bonds, schools. Address Mayor Dudley.

Tex., Lubbock—College—Texas Technical College, c/o A. G. Carter, chn. Bd. Regents, Star Telegram Bldg., Ft. Worth, takes bids within 60 days, administration and chemical buildings, power house and president's home. $500,000 for 1st unit. Robert & Co., Interurban Bldg., Dallas, engrs. Sanguinet Staats & Hedrick, First Natl. Bank, Ft. Worth, archts. Noted Mar. 13.

Tex., Waco—Municipal—Plans election $500,000 bonds, new municipal building. V. G. Koch, city engr.

Wash., Everett — School — School Bd. having plans prepared by Morrison & Stimson, Lumber Exch. Bldg., Seattle, 3 story, 40 classrooms, etc. $300,000.

Calif., Los Angeles—Apartment—El Cantano Apartments, 507 Citizens Natl. Bank Bldg., having preliminary plans prepared by E. P. Lewis, 934 Burck Pl., 10 to 12 story and basement, rein.-con., Highland and Sycamore Sts. To exceed $350,000.

Calif., Los Angeles—Club—Commercial Club having plans prepared by E. Bergstrom, Citizens Natl. Bank Bldg., 13 story and basement, 50 x 112 ft., rein.-con., South Bway. $500,000.

Calif., Orange—Club, Lodge and Store—B. P. O. E. having plans prepared by H. N. Thornton, Hill Bldg., Santa Ana, fireproof, on 75 x 120 ft. site, Orange St. $150,000 or more.

Calif., Pittsburg—Store and Lodge—Elks Hall Assn. (B. P. O. E.) plans store and lodge rooms. $150,000.

Calif., San Diego — Hotel, etc. — M. J. Lyon, archt., 916 Kearny St., San Francisco, preparing plans, hotel, wharf concessions, brick and terra cotta manufacturing plant, mill rock crushing plant, waterworks, sewerage system, street improvements, etc., here. Owner's name withheld. Architect desires catalogues of materials and equipment for project.

Calif., San Francisco — Apartment — M. Cohn, c/o Baumann & Jose, archts., 251 Kearny St., having plans prepared, 6 story and basement, rein.-con., Ellis St. near Hyde St. $150,000.

Calif., San Francisco—Apartment—L. D. Stoff, 1035 Sutter St., having plans prepared by Baumann & Jose, 251 Kearny St., 4 story and basement, rein.-con., Sacramento St. near Franklin St. $150,000.

Que., Montreal—Bank—City and District Savings Bank, St. James St., plans addition, St. James and Notre Dame Sts. $150,000.

Que., Montreal—Church—St. Cecile Parish plans church. $250,000. Gascon & Parent, 502 St. Catherine St. E., archts.

Que., Montreal—Garage—P. Labelle, 721 Dorchester St. W., plans 4 story, 115 x 170 ft. rein.-con. garage, Bishop and Dorchester Sts. $150,000.

Que., Montreal—School—Catholic School Comrs., 87 St. Catherine St., plans school on Rouen St., to replace Meilleur School, which was destroyed by fire. $200,000.

Que., Montreal—Office—Bell Telephone Co. of Canada, Notre Dame St. W., plans 3 story, 80 x 90 ft. rein.-con. and brick, Papineau St. $150,000.

Que., Sherbrooke — Hospital — Catholic Organizations of Sherbrooke having plans prepared by J. W. Gregoire, Sherbrooke, addition to St. Vincent de Paul Hospital, also addition to seminary of St. Charles Borromee, presbytery in St. Jean Baptiste Parish. $1,200,000.

Que., Sherbrooke — Normal School — Catholic Organizations of Sherbrooke having plans prepared by L. N. Audet, Sherbrooke, normal school in St. Therise d'Avila in North Ward. $300,000.

Ont., London — Exchanges, etc. — Bell Telephone Co. of Canada, 118 Notre Dame St. W., Montreal, Que., plans to expend $600,000 in city as follows: $157,000 for branch exchange on Dundas St., $440,000 for equipment, $64,000 improving main exchange. W. G. Carmichael, 118 Notre Dame St. W., Montreal, Que., archt.

Ont., Stratford—School—Bd. Educ. plans 3 story and basement, 20 room, rein.-con., brick and steel, plain foundation, $250,000. Engineer and architect not selected.

Ont., Toronto — Nurses Home — Western Hospital, Bathurst St., having plans prepared by E. J. Lennox, 164 Bay St., 4 or 5 story and basement, rein.-con., brick and steel, plain foundation, Bathurst St. $250,000.

Ont., Toronto—Stores and Offices—J. H. McKnight, 88 St. David St., having plans prepared 4 story and basement, 70 x 100 ft., rein.-con., brick and steel, plain foundation, Bay and Dundas Sts., $150,000. Private plans.

Ont., Toronto—School—Bd. Educ., 155 College St., having plans prepared by C. Dyson, 155 College St., 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation. $150,000.

BIDS DESIRED

N. Y., Binghamton—High School—May 14, by Bd. Contr. & Supply, East Junior High School, Broad Ave. and Robinson St. $425,000. T. I. Lacey & Son, Press Bldg., archts. Noted Mar. 27.

N. Y., Creedmoor (Jamaica, P. O.)—Hospital—May 7, by State Hospital Comn., Albany, construction work, pump house for disposal plant, tunnel extension for underground heating system and reservoir for water supply system, etc., at Creedmoor Div. Brooklyn State Hospital, here. S. W. Jones, Albany, state archt.; adv. E. N.-R. Apr. 24.

N. Y., Garden City—School—May 12, by Bd. Trustees Common School Dist. 18, Hempstead, elementary school, Stewart and Cherry Valley Aves., here. Starrett & Van Vleck, 8 West 40th St., New York City, archts.; adv. E.N.-R. Apr. 24.

N. Y., New York—High School—May 13, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, addition to High School of Commerce, West 65th St. and Amsterdam Ave., here, for Bd. Educ., 500 Park Ave.

N. Y., New York—Nurses' School—May 1, at office General Medical Superintendent, Bellevue Hospital, 415 East 26th St., additional wings to Bellevue training school for nurses. J. J. McGrath, pres.

N. Y., Stamford — Library and Gymnasium—May 1, by Bd. Educ. U. F. School Dist. 1, for Dr. Churchill Memorial library and gymnasium. To exceed $150,000. O. Epps, Stamford, archt.

N. Y., Wende (Millgrove P. O.)—Jail—Apr. 29, by Bd. Supervs. Erie Co., City Hall, Buffalo, 400 x 500 ft., rein.-con. and brick cell building, 40 ft. high, for Erie Co. Penitentiary, here. $600,000. W. J. Beardsley, 49 Market St., Poughkeepsie, archt.

N. J., Trenton — School — Apr. 28, by Hamilton Twp. Bd. Educ., 1770 Nottingham Way, 2 story and basement, 87 x 132 ft. Former bids rejected. $150,000. H. J. McCall, pres. W. A. Kleman, 1st Natl. Bank Bldg., archt. Noted Apr. 10.

Pa., Jersey Shore—High School—May 8, by J. F. Person, chn. building com. Bd.

Buildings (Continued)

Educ., 3 story and basement, 90 x 130 ft. concrete, brick and steel, $150,000. Lawrie & Greeney, 116 Locust St., Harrisburg, archts.

Pa., Phila.—Hospital, etc.—May 2, by W. Krusen, dir. Pub. Health, 584 City Hall, building construction, plumbing, heating, electrical work, extensions to Bldgs. E and F and alterations to boiler house, iron fences, gates, macadam roads and grading at Phila. Hospital for Insane at Byberry, 35th Ward, constructing Bldgs. L, M, N & O and connecting corridors, extending dining room and kitchen, power house, at Phila. Institute for Feeble Minded at Byberry, 35th Ward. $2,000,000.

Pa., Phila.—Warehouse—Apr. 28, by C. Wunder, archt., 1520 Locust St., 2 story and basement, brick, plain foundation, Stokley Ave. west of Westmoreland St., for Ritter Bros. & Co., 1022 Race St. $150,000.

Md., Baltimore — Animal House and Aviary—Apr. 30, by Bd. Awards, 1 story and basement, 60 x 410 ft., brick and stone, plain foundation, Druid Hill Park. $175,000. T. W. Pietsch, Amer. Bldg., archt. Noted Oct. 18.

Md., St. Marys City—Seminary—Apr. 28, by S. Russell, archt., 11 East Lexington St., Baltimore, 3 story and basement, 42 x 152 ft., concrete and brick, plain foundation, here, for St. Marys Female Seminary.

W. Va., Bluefield — Church and Gymnasium—Westminster Presbyterian Church taking bids and opens same about May 1, 3 story and basement, $150,000. H. L. Cain, 501 Grace St., Richmond, Va., archt. Noted Apr. 17.

W. Va., Parkersburg—Hotel—Apr. 28, by E. A. Brast, 6 story and basement, 56 x 75 ft., rein.-con. and brick, plain foundation, West South 7th St., and South Market Sts. $700,000. Pleasants Pennington, 2 East 41st St., New York City, engrs.

La., New Orleans—School—May 9, by Orleans Parish School Bd., City Hall, constructing McDonough School 28, 3 story, 170 x 186 ft., brick, limestone and stucco, Esplanade and White Sts. $250,000. Noted Apr. 10.

Ky., Louisville—Theatre, Club and Hotel Annex—J. G. Brown, Brown Hotel, taking bids and opens same about May 10, 7 story, Bway. near 4th St. $1,000,000. J. B. Bradshaw, International Life Bldg., St. Louis, Mo., archt. Noted Mar. 27.

O., Cleveland—Apartment—Van Sweringen Co., c/o W. Pease, engr., Marshall Bldg., taking bids completing 3 brick apartments, Shaker Blvd. Total cost $650,000. A. W. Harris, Discount Bldg., archt.

O., Cleveland — Home — Eliza Jennings Home, c/o C. S. Orr, pres., 10503 Detroit Ave., taking bids 3 story, 90 x 160 ft., brick, steel and concrete. $250,000. Meade & Hamilton, 1002 Natl. City Bldg., archts. Noted Jan. 3.

O., Youngstown—Bank—Apr. 30, by A. Kahn, archt., 1000 Marquette Bldg., Detroit, Mich., 13 story and basement, brick, steel, rein.-con. and stone, plain foundation, here, for Mahoning Natl. Bank, Market St. and Public Sq. To exceed $500,000.

Mich., Highland Park (Branch Detroit) —School—Apr. 29, by R. A. Palmer, business mgr. Bd. Educ., 2 story and basement, 120 x 200 ft. rein.-con., brick and steel, plain foundation, 2nd Blvd. and Midland Ave. $275,000. Burrowes & Eurich, 2631 Woodward Ave., Detroit, archts.

Mich., Wayne—School—May 5, by Secretary Bd. Educ. Dist. 9, 2 story and part basement, 150 x 150 ft. rein.-con., brick and steel, plain foundation. Warren-Holmes Power Co., Lansings, archts.

Ill., Urbana—University—May 16, at office J. M. White, superv. archt., 256 Administration Bldg., University of Illinois, general work, heating, plumbing and electric wiring of dairy manufactures building; heating, ventilating, plumbing and electric wiring of library; heating and ventilating of commerce building; plumbing and electric wiring of men's gymnasinm; adv. E. N.-R. Apr. 24.

Wis., Kohler—Office—Brust & Philipp, archts., 405 Bway., Milwaukee, taking bids 3 story and basement, 64 x 210 ft., brick and concrete, plain foundation, for Kohler Co. $300,000.

Wis., Madison—School—Bd. Educ., H. W. Pickford, clk., 22 West Dayton St., taking bids 2 story, 111 x 163 ft., brick, rein.-con. and steel addition, plain foundation. $175,000. F. L. Kronenberg, Carroll Blk., archts.

Wis., Milwaukee—Apartment—Clas, Shepherd & Clas, archts., 445 Milwaukee St., taking bids 3 story and basement, 79 x 115 ft., brick and concrete, plain foundation, Grand Ave., for A. Kuzmanovic, 68 South 6th St. $150,000. Noted Jan. 17.

Wis., White Fish Bay—School—May 2, by School Dist. 1, W. A. Klatte, clk., 2 story and basement, 92 x 116 ft., brick, concrete and tile, plain foundation. $150,000. M. Tullgren & Sons, 425 East Water St., Milwaukee, archts. Noted Mar. 27.

Ia., Hamberg—School—May 12, by Bd. Educ., 2 story and basement, rein.-con., brick, tile and stone. $150,000. Dougher, Rich & Woodburn, 320 Veterans Natl. Bank Bldg., Des Moines, archts. Noted Mar. 31.

Ia., Sioux City—Hospital—May 20, by Methodist Episcopal Hospital Assn., 14th and Jones Sts., G. T. Notson, supt., 4 story and basement, 42 x 132 ft. and 45 x 75 ft., rein.-con., brick and tile, 29th and Douglas Sts. $250,000. Beuttler & Arnold, 406 Grain Exch. Bldg., archts.

Minn., Duluth—Hotel—Apr. 30, by M. Tullgren & Sons, archts., 425 East Water St., Milwaukee, Wis., 13 story and basement, rein.-con. and brick, plain foundation, here, for Hotel Duluth Co., c/o W. Schroeder, 86 Michigan St., Milwaukee, Wis. $1,250,000 complete. Noted Feb. 28.

Minn., Northfield — Science — Apr. 28 (change of date), by P. O. Holland, business mgr. St. Olafs College, 3 story and basement, 84 x 164 ft., rein.-con., brick and tile. $250,000. Coolidge & Hogdon, 134 South La Salle St., Chicago, archts. Noted Apr. 17.

Minn., St. Paul — School — Apr. 29, by Dept. Educ., City Hall, 3 story and basement, rein.-con., brick and tile, Albert St. and Pascal Ave. $300,000. F. X. Tewes, city archt. Noted Apr. 10.

Kan., Chanute—Memorial and City Hall —May 2, by C. O. Woods, clk., 3 story, rein.-con., brick and stone, plain foundation. $200,000. Lorentz, Schmidt & Co., 516 4th Natl. Bank Bldg., Wichita, archts. Noted Apr. 3.

Calif., Los Angeles—High School—May 7, by Bd. Educ., 1, 2 and 3 story with basement, brick, known as Foshay Junior High School. $300,000. F. J. Soper, Kerckhoff Bldg., archt. Noted Feb. 7.

Calif., Oakland — Club — Athens Athletic Club, Henshaw Bldg., 6 to 8 story, Class A, probably rein.-con., Clay and 12th Sts., to MacDonald & Kahn, 130 Montgomery St., San Francisco, to exceed $650,000. Contractors ready for sub-figures.

BIDS RECEIVED

N. Y., Brooklyn—Station House, Prison and Garage—Police Dept., 240 Centre St., New York, general contract new 75th Precinct Police Station house, prison and garage, New York Ave. and Empire Blvd., here, from W. W. Constr. Co., 15 East 40th St., New York, $219,895.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 150 x 184 ft. rein.-con., brick and steel, plain foundation, Beaumont Ave., from Rosewarne, McNab & Worswick, 333 State St., $307,903.

Wis., North Milwaukee — High School — School Bd., E. F. Neumann, clk., general contract 2 story and basement, brick and tile, plain foundation, Custer Ave., from Foster Constr. Co., 114 Grand Ave., Milwaukee, $111,000; D. B. Danielson, 874 Layton Blvd., Milwaukee, $109,000. Noted Apr. 10.

CONTRACTS AWARDED

N. Y., Buffalo—Bank and Office—A. C. Bossom, archt. and engr., 680 5th Ave., New York City, 24 story, 60 x 350 ft., brick, steel and stone, Main and Court Sts., here, to John Gill & Sons, Citizens Bldg., Cleveland, O., for Liberty Bank. Archts. est. $2,000,000. Noted Mar. 27.

N. Y., Elmira — Hall — Keuka College, constructing John Rogers Hegeman Hall, to F. H. Johnston, 306 West Church St., $200,000.

New York—Schools—Bd. Educ., 500 Park Ave., P. S. 126, Van Alst Ave., in Astoria, to O'Day Constr. Co., 1639 Bway., New York City, $1,001,464; P. S. 82, West 176th St., in New York, to M. F. Kelly Co., Inc., $777,000; P. S. 83, Rhinelander Ave., in New York, to Watt & Sinclair, Inc., 348 West 27th St., New York, $745,494; P. S. 217, Newkirk Ave., in Brooklyn, to G. F. Driscoll Co., 115 Schermerhorn St., Brooklyn, $743,900; P. S. 220, 9th Ave., in Brooklyn, to Waters & Coxwell, $973,000; P. S. 216, Ave. X, in Brooklyn, to Dooley Stapleton Corp., $772,700. Noted Apr. 17.

N. Y., New York—School—Church of St. Rose of Lima, c/o R. J. Reiley, archt. and engr., 50 East 41st St., 4 story, brick, steel and stone, plain foundation, 164th St. between Amsterdam and St. Nicholas Aves., to J. Kennedy & Co., 1133 Bway. Archts. est. $250,000. Noted Nov. 29.

N. Y., New York — Warehouse and Garage—Charles & Co., 48 East 43rd St., 100 x 105 x 175 ft., rein.-con. and brick, plain foundation, 1st Ave. and 44th St., to Ruggles Robinson Co., 311 Madison Ave. Archts. est. $750,000. Noted Feb. 21.

N. J., Glen Ridge—School—Bd. Educ., brick, steel and stone, plain foundation, High St., to Mark C. Tredennick, 25 West 45th St., New York. Archts. est. $190,000. Noted Dec. 27.

Pa., Bradford—High School—School Bd., 2 story and basement, 211 x 232 ft. brick, tile and steel, to Havins Constr. Co., Oleans, N. Y. Archts. est. $200,000. Noted Feb. 21.

Pa., Forty Fort—High School Bd., 2 story and basement, 125 x 234 ft brick and steel, general contract to E. J. Corcoran, Planis, $217,352; heating to J. B. and F. C. Schreiber, Wilkes-Barre, $36,974. Noted Apr. 10.

Pa., Phila.—Church and School—St. Hubert Parish, Cottman St. and Towesdale Ave., 2 story and basement, 67 x 120 ft. stone, plain foundation, to H. J. Sadler, 1117 Bway., Quakertown. Noted Mar. 6.

W. Va., Huntington—Church and Sunday School—Second Presbyterian Church, 2 story and basement, 9th and Jefferson Aves., to Hatfield Constr. Co., 418½-10th St. Archts. est. $150,000. Noted Feb. 21.

Ky., Louisville—Garage and Sales Room — Reo-Spalding-Kelley Co., 210 East Bway., 2 story and basement, 57 x 200 ft., to General Constr. Co., 229 5th St. Archts. est. $150,000.

Ky., Louisville—Theatre and Apartment —Mammoth Realty Co., 608 West Walnut St., 6 story, 70 x 150 ft., Walnut St., to Platoff & Bush, 122 West Liberty St., $225,000. Noted Apr. 17.

O., Cleveland—Office and Warehouse—Industrial Realty Co., c/o C. E. Tousley, archt., 5005 Euclid Ave., 1 story, 80 x 360 ft., rein.-con. and brick, Lorain Ave., to W. Moore Co., 1278 West 4th St. Archts. est. $250,000. Noted Apr. 3.

O., Cleveland Heights (Warrensville, P. O.)—School—St. Anns Roman Catholic Church, 3 story and basement, 65 x 192 ft., brick and rein.-con., Stillman Rd., to W. J. Peirik, 7016 Euclid Ave. Archts. est. $250,000. Noted Apr. 17.

O., Dayton — Hospital — Miami Valley Hospital, Apple St., 3 story and basement, rein.-con. and brick addition, plain foundation, to M. Penker & Sons, 123 Valencia Mt. Aub., Cincinnati, $500,000. Noted Mar. 13.

O., Oxford — Recitation — H. Irwin, clk. Bd. Trustees Miami University, 17 East 3rd St., Dayton, 3 story and basement, L shaped, rein.-con. and brick, on campus, here, to Woods Constr. & Supply Co., 427 Amer. Bank Bldg., Lima, $112,500.

O., Steubenville — Theatre — Tri State Amusement Co., 3 story, 80 x 100 ft., rein.-con. and brick, plain foundation, to G. White Constr. Co., Canton, $500,000. Noted Mar. 27.

Ind., Mishawaka — Bank — First Natl. Bank, 2 story and basement, rein.-con., brick and stone, general contract to Fleisher Constr. Co., 1000 Builders Exch., Minneapolis, $250,000.

Wis., Bloomington—School—Bd. Educ., G. Ballantine, clk., 2 story, 70 x 90 ft., brick, rein.-con. and steel, plain foundation, to A. R. Coffeen Co., Dubuque, Ia. $150,000. Noted Mar. 27.

Wis., Marinette—Store—Lauerman Bros., Dunlap Sq., 3 story and basement, 60 x 120 ft., brick and concrete, plain foundation, to Hutter Constr. Co., 128 Western Ave., Fond du Lac. Archts. est. $150,000. Noted Oct. 4.

Wis., Oshkosh—Temple—Masonic Organizations, c/o F. A. Fuller, 50 West Polk St., 4 story and basement, 90 x 100 ft., brick, stone and concrete, plain foundation, to C. R. Meyer & Sons, 50 State St. Archts. est. $250,000. Noted Apr. 10.

Tex., Dallas — Apartment — R. Grady, Milam Hotel, will build 3 story and basement, 49 x 114 ft., brick and stone, Maple St., by day labor. $150,000. Private plans.

Tex., Houston—Office—J. M. West, 2nd Natl. Bank Bldg., 6 story and basement, 48 x 112 ft., brick and concrete, Main St., to Southwestern Constr. Co., West Bldg., $150,000. Noted Mar. 6.

Buildings **(Continued)**

Tex., Houston — School — Sisters of Charity of Incarnate Word, 8 story, 70 x 167 ft. chapel, 3 story and basement, 98 x 260 ft. main building and 1 and 2 story, 56 x 88 ft. power house, brick, stone and concrete, Telephone Rd., to J. Antill, 210½ Main St., $481,300. Noted Jan. 31.

Wash., Seattle—Apartment—Bergman & Bergman, Melhorn Bldg., 3 story, brick and stone, Bellevue and Roy Sts., to H. Pederson, Alaska Bldg. Archts. est. $200,000.

Colo., Denver — Church — St. Dominic Church, West 29th St. and Federal Blvd., general contract 76 x 180 ft., to A. Danielson & Son, McMann Bldg., $128,380; Boise stone, to Boise Stone Co., Boise, Mont., $75,000.

Calif., Los Angeles — Hotel — I. Levin, 3115 5th Ave., will build 4 story and basement, brick, Westlake Ave., by day labor. $150,000.

Calif., Los Angeles—Hotel and Store—United Realty Co., c/o Walker & Eisen, archts., Great Republic Bldg., 4 story and basement, brick, Hollywood Blvd. and Western Ave., to C. Thoren, 867 Hawthorne St., $152,000.

Calif., San Francisco—Hotel—Clift Hotel Co., Geary and Taylor Sts., 15 story and basement, Class A, addition, to contain 200 rooms, to P. J. Walker Co., Monadnock Bldg., $1,500,000.

B. C., Vancouver—University—University of British Columbia, 10th and Willow Sts., 2 story, frame and stucco buildings on concrete, on campus, to E. J. Ryan Contg. Co., Ltd., 445 Granville St., $700,000. Noted Mar. 27.

Federal Government Work

PROPOSED WORK

N. Y., Great Sodus—U. S. Engineers Office, Buffalo, plans concrete superstructure on breakwater in Great Sodus Harbor, (will replace 1,000 ft. wooden superstructure).

Ala., Florence—Bridge—U. S. Engineers Office, Florence, opens bids about May 15, steel bascule bridge, 100 ft. long, over lock, at Wilson Dam.

Ky., Louisville—Steel Dredges—U. S. Engineer, P. O. Box 62, Louisville, plans to purchase 2 steel dipper dredges 7 x 36 x 120 ft.

Ky., Pikesville—Hospital—U. S. Veterans Bureau, Room 791, Arlington Bldg., Wash., D. C., rejected bids constructing complete U. S. Veterans Hospital here. Noted Mar. 20.

Ky., Owensboro—Clam Shell Buckets—U. S. Engineer, P. O. Box 72, Louisville, takes bids about Apr. 22, furnishing six ½ cu.yd. and two 2 cu.yd. heavy clam shell buckets, f.o.b. Owensboro.

Ky., Uniontown—Yellow Pine—U. S. Engineer plans to purchase 125,000 ft. yellow pine for Dam 49, here, 1,750 pieces 2 x 12 in., 20 and 24 ft. lengths, 500 pieces 6 x 8 in. 24 ft. lengths, and 10 x 12 in. 20 ft. lengths.

BIDS DESIRED

N. Y., Binghamton—Heating Plant—May 12, by Treas. Dept. Supervision Architect's Office, alterations to heating plant in U. S. Post Office, Court House, etc.; adv. E. N.-R. Apr. 24.

N. Y., Brooklyn—Pavement, etc.—Spec. 4953—Apr. 30, by Bureau Yards & Docks, Navy Dept., Wash., D. C., concrete pavements and walls.

N. Y., West Point—Stadium—May 12, by E. T. Timberlake, quartermaster U. S. Military Academy, rein.-con. stadium to seat 16,000. Osborn Eng. Co., 7016 Euclid Ave., Cleveland, O., engrs. Noted Feb. 14.

N. J., Woodbury—Post Office—May 14, by Treas. Dept. at office Supervising Architect, Wash., D. C., 1 story, 61 x 69 ft. brick and tile post office; adv. E. N.-R. Apr. 24.

Pa., Aspinwall—Hospital—May 20, by U. S. Veterans Bureau, Room 791, Arlington Bldg., Wash., D. C., constructing infirmary, ambulant quarters, recreation building, nurses quarters, attendants quarters, officers quarters, garage, storehouse, boiler house, steel water tower and tank, septic tanks and house, also roads, drainage gutters, and walks at U. S. Veterans Hospital, here; adv. E. N.-R. Apr. 24.

S. C., Charleston—Electric Crane—Spec. 4962—May 7, by Bureau Yards & Docks Navy Dept., Wash., D. C., electric traveling bridge crane, here. Noted Apr. 10.

Fla., St. Petersburg—Jetty—U. S. Engineer Office, Jacksonville, takes bids about May 5, jetty here. Noted Apr. 10.

O., Sandusky—Dredging—May 1, by U. S. Engineers Office, Buffalo, N. Y., dredging in Sandusky Harbor.

Ill., Chicago—Dredging—May 22, by U. S. Engineer Office, 537 South Dearborn St.; dredging in North Branch Chicago River; adv. E. N.-R. Apr. 24.

Kan., Kansas City—Revetment—May 15, by U. S. Engineer Office, Kansas City, Mo., 1,500 ft. revetment between Goose Island and Jersey Creek, Missouri River, near here.

Mo., Liberty — Post Office — May 15, by Treas. Dept. at office Supervising Architect, Wash., D. C., 1 story, 62 x 64 ft. brick and tile post office; adv. E. N.-R. Apr. 24.

Calif., San Diego—Buildings, etc.—Spec. 4933 May 14, by Bureau Yards & Docks, Navy Dept., Wash., D. C., constructing barracks, storehouse, 7 quarters, concrete roads and walks, railroad siding, sewer, water, steam, gas, electric power and light, and telephone connections at Naval Operating Base, here; adv. E. N.-R. Apr. 24.

BIDS RECEIVED

Ky., Uniontown—Yellow Pine—U. S. Engineer, P. O. Box 72, Louisville, 120,000 ft. No. 2 yellow pine common for Dam 49, here, from Nicola, Stone & Meyers, Hattiesburg, Miss., $32.42 per M. Noted

Mich., Hastings — Post Office — Treas. Dept. Office Supervising Architect, Wash., D. C., post office here from A. M. Lundberg, Times Bldg., St. Louis, Mo., $58,589. Noted Mar. 20.

Mont., Poplar—Sewers—Dept. Interior, Office of Indian Affairs, Wash., D. C., sewerage system at Fort Peck School, here, from W. D. Lovell, 1415 8th St. S. E., Minneapolis, Minn., $4,545. Noted Mar. 27.

CONTRACTS AWARDED

N. Y., New York—Dredging—U. S. Engineer, Army Bldg., Whitehall St., dredging and rock removal in Hackensack River, N. J., 224,000 cu.yd. dredging to Arundel Corp., Pier 2, Pratt St., Baltimore, Md., $0.448, 3,500 cu.yd. rock removal to E. Breymann, 17 Battery Pl., $4. Noted Mar. 13.

Ky., Louisville—Cement—U. S. Engineer, P. O. Box 72, (1) 15,000 bbl. cement for Dam 44, Ohio River, f.o.b. Kosmosdale, (2) 25,000 bbl. cement for Dam 45, Ohio River, f.o.b. Addison, to Kosmos Portland Cement Co., Kosmosdale, (1) $2.55 per bbl., (2) $2.84.

Ky., Louisville—Pumps—U. S. Engineer, P. O. Box 72, Louisville, 2 horizontal duplex piston-pattern oil pumps, to Worthington Pump & Mchy. Corp., 1504 First Natl. Bank Bldg., Cincinnati, O., $2,186. Noted Mar. 20.

O., Cincinnati—Power Houses—U. S. Engineer, power houses at Dams 34, 35 and 38, Ohio River to W. McDonald Constr. Co., St. Louis, Mo., $36,150, power house on Dam 36 to G. Griffiths Constr. Co., Central Natl. Bldg., St. Louis, Mo., $17,333. Noted Mar. 20.

Ind., Leavenworth—Turbine—U. S. Engineer, P. O. Box 72, Louisville, 33 in. water turbine with gearing for Dam 44, Ohio River to J. Leffel & Co., 426 East St., Springfield, O., $1,298. Noted Apr. 3.

Mo., Glasgow—Current Retards—U. S. Engineer, Office, Kansas City, furnishing and placing 750 ft. current retards at Cambridge Bend, in Missouri River, here to Woods Bros. Constr. Co., Lincoln, Neb., $47,250. Noted Apr. 3.

Calif., Livermore—Ice and Refrigerating Plant—U. S. Veterans Bureau, Room 791, Arlington Bldg., Wash., D. C., ice making and refrigerating plant at U. S. Veterans Hospital, here, to Vulcan Iron Wks., Francisco and Kearney Sts., San Francisco, Calif., $11,300. Noted Feb. 14.

Unclassified

PROPOSED WORK

Transmission Line—New York—Adirondack Power & Light Co., 511 State St., Schenectady, had plans prepared 45 mi. transmission line from Beardsley Falls to Colliers, also transformer station at Colliers, $1,000,000.

Transmission Line—New York—Kingston Light & Power Co., Kingston, plans transmission line through Olive and Hurley Twps. to serve hamlets of Ashokan and Shokan. $50,000.

Marine Tower, etc.—Buffalo, N. Y.—Washburn-Crosby Milling Co., Chamber of Commerce Bldg., plans steel marine tower and gallery, foot of Michigan Ave. $60,000.

Ornamental Street Lighting System — Lackawanna, N. Y.—Common Council plans ornamental lighting system along Ridge Rd. and South Park Ave. $30,000-$35,000.

Transmission Line—Walworth, N. Y.—Walworth Light & Power Co., plans transmission line to serve Walworth and Macedon Twps. with electricity. $40,000.

Park—Trenton, N. J.—City plans enlarging Cadwalader Park, $40,000, also constructing comfort station in park, $14,000. J. E. English, city engr.

Grandstand—Clearfield, Pa.—Boro. Council had plans prepared by Osborne Eng. Co., 7016 Euclid Ave., Cleveland, O., first wing of grandstand, (3,000 seating capacity), concrete and steel, at Clearfield Park.

Dry Dock—Slidell, La.—Canulette Shipbuilding Co., plans dry dock. $75,000.

Light and Power Lines, etc.—Nashville, Tenn.—Nashville Railway & Light Co., Watkins Bldg., plans to expend $500,000 for new light and power lines, substation, relaying 12.58 mi. track, power plant equipment, etc. B. C. Edgar, vice pres.

River Terminal — Uniontown, Ky. — Illinois Central R.R., 135 East 11th Pl., Chicago, plans rebuilding terminal on Ohio River, here, incl. track, etc. F. L. Thompson, ch. engr.

Subways, etc.—Cleveland, O.—Pennsylvania Co., 5716 Euclid Ave., plans subways and bridges, steel and rein.-con. $650,000. B. A. Moore, 5716 Euclid Ave., engr.

Transmission Line — Indiana — Indiana Electric Corp., 505 Guaranty Bldg., Indianapolis, plans high tension line across Wabash River from new power plant 9 mi. southwest of Terre Haute, Work incl. structural steel towers, 780 ft. span across river. $25,000. F. G. Dana, c/o owner, engr.

Stadium—Madison, Wis.—University of Wisconsin, J. D. Phillips, business mgr., plans rein.-con. athletic stadium, at Camp Randall, 3 concrete additions, 25 x 62 ft., 50 x 62 ft. and 22 x 450 ft. $50,000.

Park Improvements—Omaha, Neb.—City, c/o J. B. Hummel, having preliminary plans prepared improving Levi Carter Parks, incl. lake dredging, and general improvements. $50,000. H. Beal, city engr.

Stadium—Austin, Tex.—Universal Memorial Stadium Assn., M. Fichtenbaum, secy., having plans prepared and soon takes bids rein.-con. athletic stadium, first unit to consist of 2 sections, each 118 x 435 ft. with rein.-con. tower, 30 x 60 x 125 ft. high with 41 ft. extension, end walls of hollow tile and stucco, curtain walls of tower, hollow tile and stucco. $500,000. H. M. Greene Co., 620 North Texas Bldg., Dallas, archts. and engrs.

Electrolier System—Bakersfield, Calif.—Having plans prepared electrolier system on portion Sonora and H Sts. $25,000 or more. E. D. Clarke, city engr.

Subway — Fresno, Calif. — City having surveys made subway across Southern Pacific tracks, connecting east and west sections Monterey St. (property owners will finance portion of cost in co-operation with city and railroad). $100,000. W. Stranahan, city engr. Noted Feb. 7.

Parapet and Wall—San Francisco, Calif.—City and San Francisco Co. having plans prepared Sutro Heights parapet and wall. $25,000. M. M. O'Shaughnessy, city engr.

Retaining Wall — Venice, Calif. — See "Streets and Roads."

Harbor and River Work — Canada — Dominion of Canada, Dept. Pub. Wks., Parliament Bldg., Ottawa, Ont., plans harbor and river work in following provinces: Ontario $626,750, Nova Scotia $589,175, New Brunswick $123,850, Prince Edward Island $84,100, Quebec $727,175, Manitoba $54,670, Saskatchewan, $25,395, and British Columbia $331,250. Work includes wood and concrete wharves, dredging, repairs, etc. K. M. Cameron, ch. engr.

Harbor and River Work—Ontario—Dept. Pub. Wks., Parliament Bldg., Ottawa, plans harbor and river work throughout province as follows: Bell River $30,000, Blind River $10,000, Burlington Channel $50,000, Chatham $4,000, Cobourg $50,000, Cockburn Island $4,600, Collingwood $50,000, Dyers Bay $1,300, Goderich $50,000, Haileybury $12,000, Huntsville $3,400, Jacksons Point $4,600, Jeannettes Creek $1,000, Kincardine $20,000, Kingsville $5,000, Kemptville $900, Leamington $1,000, Lafaivre $3,500, Lions Head $1,900, New Liskeard $1,150, Oshawa $50,000, Pelee Island $37,000, Pembroke $50,000, Port Bruce $1,500, Port Burwell $60,000, Port

Unclassified (Continued)

Colborne $11,000, Port Stanley $20,000, Rondeau $2,500, Saulte Ste. Marie $2,500, Thessalon $25,000, Tiffin $3,000, Washago $2,000,' Wendover $5,000, Toronto $400,000, Windsor $1,000, work will include wood pile, timber wharf work, concrete, mass and rein.-con., dredging, etc.

Rink—Toronto, Ont.—Ravina Rink, 50 Rowland Ave., plans 1 story, 80 x 175 ft., brick, rein.-con. and steel, plain foundation. $160,000. Engineer and architect not selected.

BIDS DESIRED

Bank Protection—New York—May 20, by R. K. Fuller, comr. Canals & Waterways, 55 Lancaster St., Albany, bank protection at various locations along Erie Canal from 1 mi. east of Schenectady to Canajoharie, Contr. 221, also at various locations along Erie Canal between Canajoharie and Lock 19, Contr. 222; adv. E. N.-R. Apr. 24.

Heating and Ventilating Apparatus — New York, N. Y.—May 8, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus, etc., in master's house, dormitory buildings, infirmary, power hopse, etc., for Parental School, on westerly side of road between Flushing and Jamaica, about 1,700 ft. south of North Hempstead Turnpike, Flushing.

Foundations—Brooklyn, N. Y.—May 2, by Transit Comn., 49 Lafayette St., New York, foundations for electrical repair shop at Coney Island Yard, here. G. McAneny, chn.

Heating and Ventilating Apparatus — Brooklyn, N. Y.—May 8, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., heating and ventilating apparatus in P. S. 202, Hegeman Ave. from Atkins Ave. to Berriman St., also in P. S. 206, Ave. V from Elmore to Delamere Places, for Bd. Educ., 500 Park Ave., New York.

Heating and Ventilating Apparatus — Jamaica, N. Y.—May 8, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 116, Wren Pl., from Polhemas Ave. to Rex Rd. and extending to Fern Pl., South Jamaica, for Bd. Educ., 500 Park Ave.

Heating and Ventilating Apparatus — New York, N. Y.—May 8, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 71, Roberts Ave. from Jarvis to Hobart Aves., Bronx Boro, here, for Bd. Educ., 500 Park Ave.

Signal Tower, etc.—New York, N. Y.—May 2, by Transit Comn., 49 Lafayette St., signal tower in Lenox Ave. and 148th St. Yard, Agreement "DA"; tracks for portion of Lenox Ave.-148th St. Yard; structural steel for Westchester Ave. Yard of 7th Ave.-Lexington Ave. Rapid Transit R.R., Routes 19 and 22. G. McAneny, chn.

Heating and Ventilating Apparatus — Richmond Hill (Jamaica P. O.), N. Y.—May 8, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 121, 109th (Suwanee) Ave. between 126th and 127th Sts., here, for Bd. Educ., 500 Park Ave., New York.

Trolley Poles—San Francisco, Calif.—Apr. 30, by Bd. Pub. Wks., trolley poles, rein.-con., along Ocean View extension of municipal railway. $25,000. M. M. O'Shaughnessy, city engr.

Tunnel—British Columbia—May 5, by British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, boring 3,561 ft. tunnel, 14 x 14 ft. between Alouette and Stave Lakes. $360,000. J. I. Newell, c/o owner, engr. Noted Apr. 10.

BIDS RECEIVED

Subway Entrance—New York, N. Y.—Transit Comn., 49 Lafayette St., Apr. 16, additional entrance to Canal St. Sta. (Loop Line) of Bway.-4th Ave. Rapid Transit R.R., from Gustin Morris Contg. Co., Anabel Pl. and Creek St., Long Island City, $39,000. Noted Apr. 3.

CONTRACTS AWARDED

Heating and Ventilating Apparatus—Brooklyn, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in James Madison High School, Bedford Ave. from Ave. P. to Quentin Rd., for Bd. Educ., 500 Park Ave., New York City, to Austin Eng. Co., 124 West 42nd St., New York City, $246,475. Noted Apr. 3.

Heating and Ventilating Apparatus—New York, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in James Monroe High School, Boynton Ave. from East 172nd to East 173rd Sts., to E. Rutzler & Co., 404 East 49th St., $242,673; P. S. 99, 100th St., between Exterior St. and 1st Ave., extending through to East 99th St., to Daniel J. Rice, 405 Lexington Ave., $139,670. Noted Apr. 3.

Bulkhead — Miami, Fla. — L. T. Cooper, 1,600 ft. bulkhead in Biscayne Bay, here, to Comer-Ebarsy Foundation Co., Miami, to exceed $25,000.

Oil Tank, Engine, Distribution Lines, etc. —Fredonia, Kan.—See "Industrial Works."

Culvert—Colusa, Calif.—Recl. Dist. 108 rejected bids for culvert 385 ft. long, 115 ft. of corrugated iron pipe and 207 ft. rein.-con. box 6 x 6½ ft.

High Voltage Line—British Columbia— British Columbia Electric Ry., 425 Carroll St., Vancouver, renewing 20 mi. high voltage line from here to Lake Buntzen, also 2 mi. new line from Lake Buntzen to Deer Lake, to Humble & Rumole, 647 Columbia St., New Westminster, $50,000.

Material and Equipment

PROPOSED WORK

Road Oil—Oshkosh, Wis.—Bd. Pub. Wks., B. C. Meyer, comptroller, soon takes bids 100,000 gal. road oil having 50 per cent ashphaltic content.

Street Signs—San Francisco, Calif.—City and San Francisco Co. plan to purchase street signs. $15,000. M. M. O'Shaughnessy, city engr.

Fire Hydrants — Stockton, Calif. — City plans to purchase fire hydrants. $7,250. C. Ashburner, city mgr.

BIDS DESIRED

Motor Trucks—Long Island City, N. Y.—Apr. 29, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., motor trucks and equipment.

Bituminous Materials, etc. — Harlingen, N. J.—May 5, by Montgomery Twp. Com., Twp. Hall, 4,576 gal. bituminous materials, 5,976 sq.yd. scarifying and resurfacing, 3,177 lin.ft. patching, 18,306 lin.ft. regrading shoulders. H. C. Van Emburgh, 149 North Ave., Plainfield, engr.

Paving Blocks—Wheeling, W. Va.—See "Streets and Roads." B. D.

Pipe—South Carolina—Apr. 29, at office State Highway Engineer, Columbia, rein.-con. culvert pipe, (alternate double strength v.c. pipe) in divisions as follows: Central Div. incls. Aiken, Chester, Chesterfield, Edgefield, Fairfield, Kershaw, Lancaster, Lexington, Richland, Saluda and York Counties, 3,447 lin.ft. 15 in., 3,317 lin.ft. 18 in., 1,941 lin.ft. 24 in., 932 lin.ft. 38 in., 984 lin.ft. 36 in., Western Div., Abbeville, Anderson, Cherokee, Greenville, Greenwood, Laurens, McCormick, Newberry, Oconee, Pickens, Spartanburg and Union Counties, 1,038 lin.ft. 15 in., 1,158 lin.ft. 18 in., 820 lin.ft. 24 in., 345 lin.ft. 30 in., 345 ft. 36 in., Southeastern Div., Allendale, Bamberg, Barnwell, Beaufort, Berkeley, Calhoun, Charleston, Colleton, Dorchester, Hampton, Jasper and Orangeburg Counties, 3,745 lin.ft. 15- to 36-in. pipe, Northeastern Div., Claredon, Darlington, Dillon, Florence, Georgetown, Horry, Lee, Marion, Marlboro, Sumter and Williamsburg Counties, 691 lin.ft. 15- to 36-in. pipe.

Spindles—Lansing, Mich.—Apr. 28, by F. F. Rogers, comr. State Hy. Dept., manufacture, freighting and delivering in small lots at various points, number of spindles, 2,000 to 4,000.

Patrol Graders—Appleton, Wis.—A. C. Brusewitz, highway comr. Outagamie Co. taking bids several patrol graders.

Dump Trucks, etc.—Cloquet, Minn.—Apr. 28, by city, 1 ton dump truck, alternate bids on (a) complete with open type seat, one yard dump body and gate equipment with chains for spreading gravel (b) one ton truck chassis with open seat only. J. A. Parks, clk.

Truck—Minneapolis, Minn.—May 2, by F. S. Gram, city purch. agt., one 3½-ton truck. N. W. Elsberg, city engr.

Street Sweeper — Minneapolis, Minn. — Apr. 29, by F. S. Gram, city purch. agt., 1 motor-driven pickup street sweeper. N. W. Elsberg, city engr.

Road Oil—St. Paul, Minn.—May 5, by G. J. Ries, aud. Ramsey Co., 300,000 gal. road oil. P. N. Coates, 900 Guardian Life Bldg., co. surv.

Bridge Timbers—Houston, Tex.—May 5, by Comrs. Harris Co., miscellaneous bridge timbers creosoted. $15,000. Howe & Wise, co. engrs.

Shell—Houston, Tex.—May 1, by H. L. Washburn, aud. Harris Co. Navigation Dist., Court House, 12,000 cu.yd. shell for railroad ballast. E. A. Tucker, Court House, engr.

BIDS RECEIVED

Sand Grit, etc.—Long Island City, N. Y.—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., 5,000 cu.yd. sand grit, broken stone, etc., from Tuohey & Upton, Inc., 129 Bway., Flushing, L. I., 12,650. Noted Mar. 27.

Trucks—St. George, N. Y.—J. A. Lynch, pres. Richmond Boro, Boro Hall, one 1½ ton and one 2 ton automobile trucks with dump bodies, from Kruger Motor Car Co., $2,585 and $2,685 respectively. Noted Apr. 10.

CONTRACTS AWARDED

Tie Plates—New York, N. Y.—Transit Comn., 49 Lafayette St., tie plates (order 6) for use in construction of Rapid Transit Railroad, to Dilworth Porter & Co., Inc. $35,489. Noted Apr. 17.

Asphaltic Cement, etc.—St. George, N. Y.—J. A. Lynch pres. Richmond Boro, Boro Hall, to Standard Oil Co., 26 Bway., New York, 225 tons asphaltic cement $4,478; to J. Johnson Sons, 455 Bway., West New Brighton, 2,900 cu.yd. asphalt sand $2,250, 1,600 cu.yd. broken stone $5,719, 2,700 cu.yd. broken stone $12,789, 1,425 cu.yd. broken stone $5,130; to Barrett Co., 40 Rector St., New York, 100,000 gal. bituminous road surfacing material $10,300, 93,500 gal. tar macadam $13,090; to J. E. Donovan, 2205 Richmond Terrace, Port Richmond, 93,500 gal. asphaltic macadam binder $13,090, 1,050 cu.yd. pea gravel $2,888, 1,450 cu.yd. pea gravel $4,713; to Liberty Mason Supply, 3,400 cu.yd. broken stone $12,852, 1,500 cu.yd. pea gravel $6,900. Noted Apr. 10.

Road Oil—Milwaukee, Wis.—For 400,000 gal. medium light road surfacing oil, to Camden Petroleum Co., 232 South Clark St., Chicago, $0.0694 per gal.; 50,000 gal. light bituminous binder, 200,000 gal. medium tar, 150,000 gal. heavy tar, 100,000 gal. heavy tar to Amer. Tar Products Co., 208 South La Salle St., Chicago, $0.102, $0.104, $0.104 and $0.10 per gal. respectively. Noted Apr. 17.

Road Oil—Racine, Wis.—For 10,000 to 130,000 gal. road oil having 55% to 60% asphaltic content, to Standard Oil Co., 68 Wisconsin St., Milwaukee, $0.0625 per gal. Noted Mar. 27.

Tractor—Benson, Minn.—Swift Co., gas tractor, crawler type, to Holt Mfg. Co., 417 Washington Ave. S., Minneapolis, $6,250 (f.o.b. factory). Noted Apr. 3.

Culverts — Buffalo, Minn. — Wright Co., furnishing f.o.b. cars at all shipping points in county, various sizes corrugated metal and sectional concrete culverts for 1924, to Berger Mfg. Co., 1701 North East Bway., Minneapolis. Noted Apr. 3.

Culverts—Timber Lake, S. D.—C. Hauan, aud. Dewey Co., furnishing 2 carloads metal culverts, Grade A, to Sioux Falls Metal Culvert Co., 500 East 6th St., Sioux Falls, 12 in. $1.04, 15 in. $1.27, 18 in. $1.52, 24 in. $2.35, 30 in. $2.91, Grade B to Timber Lake Lumber Co., Timber Lake, 12 in. $0.84, 15 in. $1.03, 18 in. $1.22, 24 in. $1.91, 30 in. $2.39, also 1 carload bridge lumber and piling $31.90 per M. for bridge lumber. Noted Apr. 3.

Grader — Devils Lake, N. D. — J. A. Kramer, aud. Ramsay Co., one large elevating grader with engine hitch and rigid disk plow and carrier, 40 in. wide, 18 ft. long, to Austin Western Road Mchy. Co., 375 Cedar St., St. Paul, Minn., $2,135. Noted Mar. 27.

Road Machines—Grand Forks, N. D.—Grand Forks Co., 6 road maintenance machines: 3 to Russell Grader Mfg. Co., 2005 University Ave., S. E., Minneapolis, Minn., $194 each; 1 to Galion Iron Wks. & Mfg. Co., Galion, O., $188; 1 to Austin Western Road Mchy. Co., 375 Cedar St., St. Paul, Minn., $199; and 1 to Northwestern Sheet Iron Wks., Wahpeton, $215. Noted Mar. 20.

Refined Tar—Clayton, Mo.—St. Louis Co., 100,000 gal. refined tar, more or less for use on roads during 1924, to Barrett Co., Laclede Gas Bldg., St. Louis, $0.1223 per gal. delivered, total $12,230. Noted Mar. 20.

Pipe—Dallas, Tex.—For 200 tons 6 in. Delavaud pipe and 80 tons 10 in., to U. S. Cast Iron Pipe Co., Magnolia Bldg., $0.949 and $1,818 respectively. Noted Mar. 27.

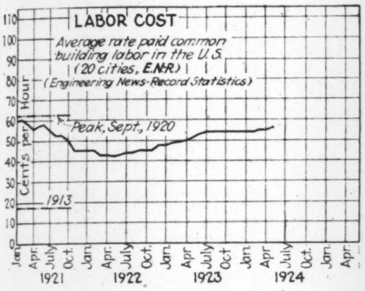
CONSTRUCTION NEWS

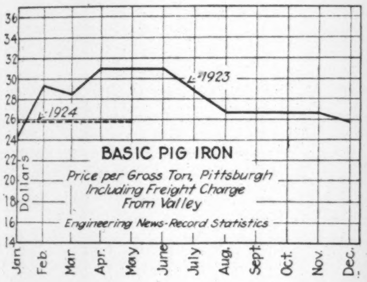
Engineering News-Record, May 1, 1924

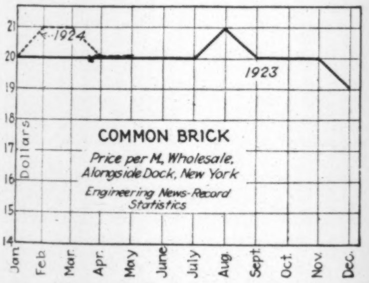
The Construction Barometer

Prices Weaker Owing to Lessening of Demand—Labor Cost Mounting Higher—No Buying for Replenishment of Stocks

THE price situation in most of the basic materials is weaker owing to gradual lessening of demand. Reserve stocks of building materials are ample and for this reason chances of higher prices in the immediate future are very small. The tendency of buyers at the present time is to keep down indebtedness and inventories. Decreased demand and sharper competition for business has resulted in a slight lowering of steel prices. Reports received within the week from the lumber industry, however, indicate a revival of production, shipments and new orders. While there are at present no strikes of importance in the building industry, the cost of common as well as skilled labor is mounting higher, as shown by the accompanying chart.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Apr. 10	16,276,000	17,337,000	33,613,000
Apr. 17	28,549,000	22,293,000	50,842,000
Apr. 24	22,575,000	12,153,000	34,728,000
3 weeks	$67,400,000	$51,783,000	$119,183,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

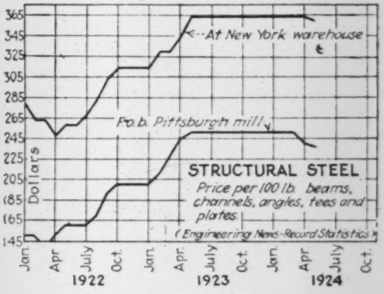
Week Ended	No.	Public Work	No.	Private Work
Apr. 10	13	2,548,000	31	11,075,000
Apr. 17	16	4,210,000	49	16,139,000
Apr. 24	10	5,810,000	24	9,124,000
3 weeks	39	$12,568,000	104	$36,338,000

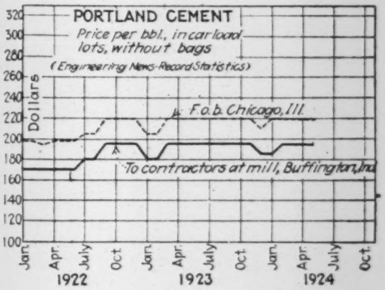
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

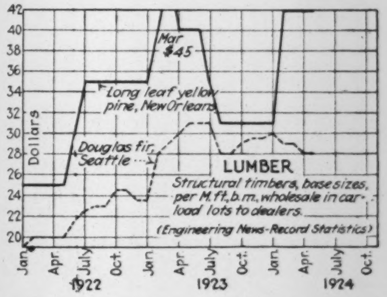
			Public		
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
Apr. 10	48	54	120	41	289
Apr. 17	42	52	109	41	254
Apr. 24	25	51	104	55	282

MATERIALS PRICES EASIER—RISE IN LABOR COST

	Quoted on May 1 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.25 @2.50	$2.30 @2.50	Apr. 10
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	63.00	64.00	Apr. 10
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.56	.55	Apr. 24







Waterworks

PROPOSED WORK

N. Y., Avon-by-Sea—Plans drilling wells and constructing pumping station. $42,000. J. Thomson, mayor. Engineer not selected.

N. C. Walnut Cove—See "Sewers."

La., Glenmore—Having preliminary plans prepared water works plant and distribution system, sewers, etc. $25,000. H. A. Mentz, Magnolia, Miss., engr.

Tenn., Knoxville—Having surveys made new filtration plant and reservoir. Approximately $2,000,000. B. H. Klyce Co., 4th and 1st Natl. Bank Bldg., Nashville, consult. engr.

Ky., Louisville — Louisville Water Co., 13th St., plans 42-in. mains in Eastern Parkway from Shelby to Preston Sts. $65,000.

Ky., Morganfield—Soon takes bids waterworks improvements, incl. pumping plant, 6 mi. 8-in. pipe, 800,000 gal. filter plant. $100,000. Gennett, Seeley & Fleming, Randolph Bldg., Memphis, Tenn., engrs. Noted Apr. 10.

Ky., Ormsby—(Lakewood P. O.)—Louisville and Jefferson County Childrens Home plans water supply system for home, here. $20,000. W. T. Harrigan & Co., Realty Bldg., Louisville, engrs.

O., Cleveland—Takes bids this summer 16 c.i. mains $62,800, also c.i. mains in Luke and Abell Aves., $40,000. A. V. Ruggles, City Hall, engr.

O., Garfield Heights (Cleveland, P. O.)—Takes bids after July 1, 4 mi. 6 and 8 in. c.i. mains. R. F. Munz, Town Hall, engr.

Wis., Madison—Having plans prepared c.i. mains and connections in various streets. $69,000. E. E. Parker, city engr. Noted Mar. 27.

Ia., Storm Lake—Plans waterworks improvements, incl. sedimentation basin, aerator, filter bed, etc. $15,000. R. U. Kinne, city clk.

Kan., Coffeyville—C. Potteck, city clk., plans to purchase 2,000 kw. steam turbo generator and surface condenser for waterworks.

Kan., Riley—Voted $31,000 bonds, 50,000 gal. tank on tower, 11,136 lin.ft. 4- to 8-in. c.i. pipe, 3,700 lin.ft. 2-in. galvanized pipe, 25 hydrants, deep well, etc., Hensington Eng. Co., Natl. Bldg., Omaha, Neb., engrs. Noted Apr. 10.

Ark., Altheimer — See "Contracts Awarded."

Tex., Colorado—Preparing plans 12 in. main from pumping plant to city, also miscellaneous laterals. $25,000. W. J. Powell, Municipal Bldg., Dallas, engr.

Tex., Dallas—Making plans 10 in. main in North Henderson St., from McMillan

Waterworks (Continued)

to McKinney Sts., $17,000; 10 in. main in Raitman St. from Lindell St. to city limits north, $15,000. E. A. Kingsley, city engr.

Tex., Dallas—Preparing plans 12 in. main in Good St. $40,000. E. A. Kingsley, city engr.

Tex., Midland—See "Sewers."

Okla., Davenport—Plans new waterworks incl. mains, well, pumping equipment and elevated tank. $45,000. Gant & Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs.

Okla., Stillwater—Voted $200,000 bonds earth dam, pipe lines, main extensions, etc. G. F. Matkin, city clk. Noted Jan. 17.

Wash., Bellingham—Plans $200,000 bond issue, extending and improving water system in northern part of city.

Wash., Kelso—Election May 20, $250,000 bonds, water system. Baar & Cunningham, engrs., Spalding Bldg., Portland, Ore., prepared report, and G. North, city engr., completed plans. Noted Apr. 10.

Calif., Santa Monica—Plans to purchase centrifugal pump, 1,000 g.p.m., 220 ft. direct connected to 220 volt motor. J. Morton, city engr.

Ont., Essex—Having palns prepared extending water system, 6 in. c.i. mains, concrete or steel reservoir. $40,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Ont., Leamington—Having plans prepared 12 in. pipe line to lake, pumping plant and 220,000 gal. storage tank, $75,000. Prices wanted on materials and carload of various size gas and water pipe. R. M. Selkirk, City Hall, engr.

Ont., Toronto—Plans to install high pressure fire pump at main pumping station. $112,000. R. C. Harris, city engr.

BIDS DESIRED

N. Y., Brooklyn—May 6, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Farragut Rd., Bedford, Coney Island, New York, P, Q, M, N, Foster, 8th and 10th Aves., 55th, 61st, 62nd, 64th, 68th, 71st, East 87th, East 95th, East 96th, East 98th, East 99th, East 100th, West5th, East 2nd, East 8th, East 13th, East 18th, East 27th, East 28th, East 34th, East 51st, East 52nd, East 53rd and West 11th Sts., Delamere, Elmore and Kenmore Places, here.

N. Y., Long Island City—May 5, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Bway., Poe Pl., 6th, 15th and Fillmore Aves., Peel, 10th, 43rd and 44th Sts., here.

N. Y., New York—May 5, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Grand Concourse, East Moshulu Parkway, Aqueduct, Montgomery, Van Cortlandt and Waldo Aves., East 136th, East 190th, West 175th, West 180th and West 197th Sts.

N. Y., New York—May 7, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Reservoir Oval East, Holt Pl., Crotona, Hull, Reservoir, Rochambeau, Van Cortlandt, Barnes, Boyd, Bussing, Gunther, Bruner, Monticello, Murdock, Nereid, Pittman, Wickham and DeReimer Aves., East 223rd, East 234th, East 206th and East 211th Sts.

Pa., Phila.—May 6, by Bureau Water, Dept. Pub. Wks., City Hall, pipe and fittings for high pressure fire system incl. 3,800 lin.ft. 16 in., 6,780 lin. ft. 12 in. and 2,700 lin. ft. 8 in. pipe Contr. 668; laying high pressure fire mains Contr. 669; safety devices for pumping stations Contr. 670; 12 ten in. twin or duplex strainers for Lardners Point pumping station, Contr. 671; auxiliary heating coils for headquarters Contr. 672; furnishing and installing 2 sand machines at Towesdale, Roxborough, Queen Lane, and Belmont filters, Contr. 674; 1 c.i. high pressure engine cylinder for Lardners Point pumping station, Contr. 675; 600 single nozzle fire hydrants, Contr. 679; 200 six in., 50 eight in. and 25 twelve in. valves, Contr. 680.

O., Bexley (Columbus P. O.)—May 12, by S. W. Roderick, village clk., 12,530 ft. 4- to 8-in. mains in Broad and Main Sts., Powell and Fair Aves., Remington, Stanwood and Hartley Rds., $32,100. Jennings-Lawrence Co., 511-512 Hartman Bldg., Columbus, engrs.

O., Cleveland—May 7, 13,000 cu.yd. excav. and 3,880 tons c.i. pipe, Contr. 33; 13,500 cu.yd. excav. and 995 tons c.i. pipe, Contr. 33 A. A. V. Ruggles, City Hall, engr.

O., Cleveland—May 7, by Cuyahoga Co., 11,700 ft. 6 and 12 in. c.i. mains in Mayfield Rd., Impvt. 350 C. To exceed $25,000. R. F. MacDowell, Court House, engr.

Mich., Port Huron—May 8, by E. C. Fitzpatrick, city clk., furnishing and installing one 10 m.g. and one 15 m.g. motor driven centrifugal pumps. E. R. Whitmore, city engr.

Wis., North Milwaukee—May 6, by W. E. Chase, city clk., 9,251 lin.ft. 6- to 8-in. c.i. mains in 8 streets. $20,000-$25,000. H. C. Webster, City Hall, engr.

Wis., Racine—June 2, by Racine Water Dept., 1.8 m.g. coagulation basin, pipe, valves, etc.; adv. E. N.-R. May 1.

Minn., Minneapolis—May 8, by F. S. Gram, city purch. agt., two 1-ton trucks for Water Dept. N. W. Elsberg, city engr.

Neb., Kearney—May 7, by M. E. Burke, city clk., 3 wells 18 in. inside diam., 1 m.g. concrete reservoir, power house, well houses, pole line connections, two 300 hp. oil engine units, switchboard and transformer, 3 motor driven pumps, furnishing and laying c.i. pipe. $135,000. Burns M. McDonnell, Interstate Bldg., Kansas City, Mo., engrs. Noted Feb. 21.

Colo., Denver—June 10, by City and Denver Co., by and through its Bd. Water Comrs., 1509 Cleveland Pl., Contr. A, 64 m.g. rapid filter plant, Contr. B, intake from lake to filter plant, all located on north side of Marston Lake. B. Lowther, ch. engr.; adv. E. N.-R. May 1.

BIDS RECEIVED

N. Y., Albany—Filtration plant, from J. J. Finn & Son, 176 Sherman St., $445,992. Noted Apr. 10.

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Apr. 28, mains in Aves. K and M, Mansfield Pl., Kingston, Lott, Newport and 3rd Aves., Carroll, Malta, 57th, 80th, 81st, 8th, 12th, 28th, 29th, 58th, 59th and 91st Sts., from Wattaga Contg. Co., 308 Lenox Ave., New York, $14,500. Noted Apr. 24.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Apr. 28, mains in Fresh Pond Rd., Caldwell, Clermont, Firth, Flushing, Homans, Mount Olivet, Phelps, Prospect and Wilton Aves., Delia, Harrow, Henry, Hosack, Madison, Mazeau, Proctor, Ramsey, Seabury, Stockholm, Van Horn, Van Tassel and Weirfield Sts., here, from Stanhey Constr. Co., $15,000. Noted Apr. 24.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., from Wattaga Contg. Co., 308 Lenox Ave., New York, mains in Claflin, Johnson, Netherland and University Ave., Whalen and West 195th Sts., Grand Concourse and Woodwin Terrace, $13,555. Jerome and Walton Aves., East 169th, 171st, 175th and 180th Sts., Elliot, Osborne and Wythe Places, $13,284. Noted Apr. 24.

O., Ashtabula—For 1,300 ft. tunnel, from Rice-Jones Co., Union Bldg., Cleveland, $113,200.

O., Cleveland—For 2,630 tons 60 in. c.i. mains in Woodland Ave., Sect. 30E, from D. Lowensohn, 6795 Wakefield Ave., $261,948. Noted Apr. 10.

O., Cleveland—Cuyahoga Co., Apr. 16, 15,000 ft. 6 and 8 in. c.i. mains, Impvt. 13, from M. Stein, 8016 Whitethorn Ave., $43,599. Noted Apr. 10.

Minn., St. Paul—See "Material and Equipment."

CONTRACTS AWARDED

N. C., North Wilkesboro—Coagulating basin and two 500,000 gal. filter units, to Boyd Higgins & Goforth, Realty Bldg., Charlotte, $36,000.

N. C., Robersonville—For two 8 in. deep wells, 100,000 gal. steel tank and tower, 75,000 gal. concrete storage reservoir, necessary pumping equipment, septic tank, 32,000 ft. 2- to 10-in. c.i. mains, 22,600 ft. 8- to 10-in. sewer lines, to Boyd, Higgins & Goforth, Realty Bldg., Charlotte, $92,000.

Ark., Altheimer—For 75,000 gal. tank on 100 ft. tower, to Chicago Bridge & Iron Wks., 817 Praetorian Bldg., Dallas, Tex. Bids on 1,395 ft. 6 in. and 6,865 ft. 4 in. c.i. pipe, 16 fire hydrants and 13 gate valves were rejected. Noted Apr. 10.

La., Houma—City Clerk, City Hall, 250 to 500 water meters ⅝ in. with ¾ in. connections and 15-50 water meters 1 in. with 1 in. connections, to Henry Mfg. Co., South Boston, (Boston Sta.), Mass.

O., Cleveland—For 1,875 tons 60 in. c.i. mains in Woodland Ave., Sect. 30 W, to J. Connelly Constr. Co., 7016 Euclid Ave., $184,267. Noted Apr. 24.

O., Shaker Heights (Cleveland P. O.)—For 7,555 ft. 6 and 8 in. c.i. mains in 4 streets, to Hanna & Michael, 2259 Cedar Ave., Cleveland, $22,221; Scottsdale Rd. (west section), to A. Marra Constr. Co., Ulmer Bldg., Cleveland, $15,188, 7 streets, to Great Lakes Constr. Co., Hickox Bldg., Cleveland, $45,634 work on latter 2 projects involves 23,120 ft. 6 and 8 in. c.i. pipe.

Wis., Hurley—Waterworks improvements, pumping and supply station, to Lyne-Bowler Chicago Co., 37 West Van Buren St., Chicago, $42,000. Noted Feb. 14.

Minn., Minneapolis—F. S. Gram, city purch. agt., 3 Venturi meters and 10 rate controllers for new filtration plant unit, to Builders Iron Fdry. Co., 9 Codding St., Providence, R. I., $5,205 and $14,900 respectively.

Kan., Junction City—Improving waterworks: 3 wells to G. Austin Mchy. Corp., North Kansas City, Mo., $6,200; 200,000 gal. concrete reservoir to Merkle Mchy. Contg. Co., 1733 Walnut St., Kansas City, Mo., $13,980; 75 hp. oil engine unit, to Fairbanks Morse Co., 1218 Liberty St., Kansas City, Mo., $8,700. Noted Apr. 17.

Mo., Ava—Russell & Axon, engrs., McDaniels Bldg., Springfield, water pipe lines here, to Brooks & Coon, Oklahoma City, Okla., for city. $18,138. Noted Apr. 3.

Mo., St. Louis—Will lay 12 in. c.i. main in Hall St., by day labor. $24,500. E. E. Wall, City Hall, comr.

Calif., Oakland—East Bay Water Co., 512 16th St., Upper San Leandro Storage Project, incl. storage dam, earth fill type, 185 ft. high, 656 ft. long on crest, crest width 75 ft., base about 1,150 ft., 1,260,000 cu.yd. earthwork, spillways, tunnels, fitration plant, 36 in. riveted steel pipe line, to Bates & Borland, Bank of Savings Bldg., cost plus, about $3,000,000.

Ont., Ottawa—Will build 5 mi. c.i. mains, by day labor. $70,000. A. F. Macallum, city engr.

Ont., Port Colborne—I. H. White, town clk., filtration building to W. J. Westaway, Hamilton, $16,800, filters to Gardner Constr. Co., Welland, $24,200. Noted Mar. 20.

Sewers

PROPOSED WORK

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., withdrew bids which were to be opened Apr. 15, sewer in Hammels Blvd. and Amstel Ave. Will readvertise.

N. J., Orange—Essex Co. (Newark), plans 5,621 ft. 15- to 24-in. rein.-con. storm water drain in Scotland St., here. $27,330. W. A. Stickel, Court House, Newark, engr.

N. C., Walnut Cove—Making plans 10,500 ft. 8- and 10-in. sanitary sewers and water mains. Piedmont Engineers, 421½ Trade St., Winston-Salem, engrs.

La., Glenmore—See "Waterworks."

O., Garfield Heights (Cleveland, P. O.)—Takes bids in July, 5 mi. vitr. and segmental blocks sewers. R. F. Munz, Town Hall, engr.

Mich., Detroit—Having plans prepared 26,050 ft. Lateral 4122, 680 ft. 4 ft. 6 in., vitr. pipe and 2 ring brick, incl. 548 ft. 4 ft., 548 ft. 3 ft. 6 in., 284 ft. 3 ft., and 345 ft. 2 ft. 6 in.; 1,700 ft. Lateral 4114, 12-15 in vitr. pipe; 2,678 ft. Lateral 4119, 12-24 in.; 770 ft. Lateral 4121, 18-30 in. pipe. G. Jerome, city engr.

Mo., Hannibal—Making preliminary plans 36,000 ft. storm and sanitary sewers in South Side Sewer Dist. $76,000. W. R. Gettler, City Hall, engr.

Mo., St. Louis—Making preliminary plans repairing Southern sewer and extending its outlet into Mississippi River. $113,500. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Soon takes bids Ohio Montrose Sewer, 14,050 ft. 8- to 24-in. vitr. clay pipe, 10,655 ft. brick or segmental block pipe and 2,635 ft. concrete and rein.-con. pipe, etc. $550,000. W. W. Horner, 300 City Hall, engr. Noted Dec. 13.

Tex., Midland—Election May 21, $68,000 bonds modern sewerage system, also $7,000 bonds for waterworks improvements. T. P. Barron, mayor.

Wash., Centralia—Voted $60,000 bonds, extension to sanitary sewerage system Noted Mar. 20.

Wash., Hoquiam—Plans sewerage system for East Side. $46,500. W. L. Lovejoy, city engr.

Ore., Marshfield—Takes bids in about 90 days, Mill Slough sewer. $80,000 for wood, $160,000 concrete. J. T. Brand, Marshfield, engr.

Ont., Port Elgin—Plans election to vote on $50,000 bonds, sewerage system. Prices wanted on materials and equipment. W. Storrie, Confederation Life Bldg., Toronto, engr.

Ont., Riverside—Having plans prepared 19,000 ft. 8-24 in. vitr. sanitary and storm sewers in various streets. $35,000. A. Smith, city engr.

Sewers (Continued)

BIDS DESIRED

N. Y., Brooklyn—May 7, by E. Riegelmann, boro pres., Boro Hall, sewers in 71st to 45th Sts., 20th, 21st, Brooklyn and 11th Aves.

N. Y., Long Island City—May 5, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in 7th, Clermont, Millwood, Cooper and 91st Aves.; Justice, Ivy, Lake, Sandol, and Pansy Sts.

N. Y., New York—May 6, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Pelham Parkway S., East 153rd St., Neill, Lydig, Waring, Matthews and Barnes Aves.

N. Y., New York—May 6, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Waring Ave. and Pelham Parkway. Noted Apr. 24.

N. Y., Port Chester—May 19, by F. G. Schmidt, village clk., sewer and tunnel or conduit in connection therewith; adv. E. N.-R. May 1.

N. J., Plainfield—May 5, by Common Council, about 3,000 lin.ft. 8- to 10-in. sanitary sewers from 8- to 14-ft. deep, incl. about 1,200 lin.ft. 4 in. c.i. house connections, No. 233; about 2,500 lin.ft. 12- to 30-in storm sewers from 4- to 7-ft. deep, No. 234. A. W. Vars, city engr.

D. C., Wash.—May 28, by Dist. Comrs., 4,470 lin.ft. sewers; adv. E. N.-R. May 1.

O., Cleveland—May 8, sewers in Abeil Ave. S. E., from East 123rd to East 130th Sts., Abell Ave. S. E. from East 130th to East 135th Sts., Castalia Ave. N. E., Corlett Ave. S. E., Highland Rd. S. W., Moltke Court S. W., Ridge Rd. S. W., Rosewood Ave. S. E., Saratoga Ave. S. W., Stimson Court S. W., Tampa Ave. S. W., Thrush Ave. S. W., East 69th Pl., East 143rd St., East Blvd., relief sewers in Miles Ave. S. E., Harvard Ave. S. E., East 114th St. and Locust Ave. N. W. To exceed $100,000. R. Hoffman, City Hall, engr.

Ind., Tell City—May 6, by City Council, sewer in Fulton St. $88,148. McCormick & Bennett, 2511 North 8th St., Terre Haute, city engr.

Mich., Detroit—May 5, by Dept. Pub. Wks., 4,561 ft. Wyoming Ave. Sewer Sect. 7, 1,635 ft. 6 ft. 9 in., 2,555 ft. 5 ft. 3 in., 266 ft. 5 ft. and 33 ft. 4 ft. 6 in. cylinder, 765 ft. Joann Ave. Extension Sewer in Joann Ave. Arm, 5 ft. 3 in. cylinder; 2,757 ft. Harper Arm East Ashland Ave. Sewer, 938 ft. 6 ft. and 1,409 ft. 5 ft. cylinder, 410 ft. 24 in. crock. G. Jerome, city engr.

Wis., Madison—May 9, by Bd. Pub. Wks. at office H. C. Buser, city clk., grading site for Nine Spring Sewage Disposal Works, in town Blooming Grove. E. E. Parker, city engr.; adv. E. N.-R. May 1.

Wis., North Milwaukee—May 6, by W. E. Chase, city clk., 10,380 ft. 8 in. sanitary sewers in 12 streets. $25,000. H. C. Webster, City Hall, engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Apr. 23, **e. e. means engineers estimate,** sewer in Benson Ave., from J. W. Murphy, 8866 26th St., $27,300; sewer in 65th St., from Tomasetti & Co., Inc., 1133 60th St., 86.86% e. e. ($33,770); in Bay 34th St., from Nazzarro & Querriero, 82.41% e. e. $6,083; 73rd, West 23rd, East 37th and West 7th Sts., on Delamere Pl., from S. Ambrosio, 106 69th St., 88% e. e. $5,510, 93% e. e. $800, 81% e. e. $1,400, 84.98% e. e. $470, 80% e. e. $800 respectively; 80th St. and Ft. Hamilton Parkway, from Manmill Constr. Co., 2035 Douglass St., 88.8% e. e. $4,618 and 98.2% e. e. $1,740 respectively; 7th Ave. from C. F. Vacharas, 645 40th St., 93% e. e. $4,037; Ft. Hamilton Parkway, from Tozzi Contg. Co., 95.75% e. e. $1,406. Noted Apr. 17.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Apr. 23, Sect. 2C, Modification and extension of biological plant, 26th Ward disposal works, from Niewenhouse Co., Inc., 316 East 161st St., New York, $558,726. Noted Apr. 17.

N. J., Plainfield—Common Council about 7,000 lin.ft. 18- to 54-in. storm sewers, from Orange Eng. Constr. Co., 77 South Centre St., Orange, $42,893. Noted Apr. 10.

O., Shaker Heights (Cleveland, P. O.)—From Iafornaro Constr. Co., 2218 Murray Hill Rd., Cleveland, sewer in Newell Rd. $7,342, Lynnfield Rd. $15,379, Scottdale Rd. east section $22,466, Scottdale Rd. west section $18,215, Lattimore Rd. $9,390, Gridley Rd. $10,507, Rawnsdale Rd. $8,736; from W. B. Smith, Cleveland, sewer in Winchell Rd. $21,316, Lomond Blvd. $51,513, Sherrington Rd. $14,409.

Mich., Detroit—Dept. Pub. Wks., vitr. crock sewers from Cousino Mercier Co., 13183 Wark St., Sewer 4094 $10,364, Sewer 4103 $4,134, Sewer 4104 $8,065, Sewer 3854 $6,940, Sewer 4102 $14,053. Noted Apr. 17.

Mich., Detroit—Dept. Pub. Wks., lateral sewers between Outer Dr., City Line and Peters and Beatrice Aves., vitr. crock and brick, from S. Fattore, 2201 St. Joseph Ave., $19,439; Lateral 3939 in Dexter Blvd. and Dorris Ave., from Labelle to Livernois Aves.; from Detroit Drainage Constr. Co., 400 Penobscot Bldg., $33,730.

CONTRACTS AWARDED

N. Y., Long Island City — M. E. Connolly, pres. Queens Boro. 3rd and Tremont Aves., to E. Muccinni, sewers in Cooper Ave. $15,068, Whitlock Ave. $1,628, 86th Rd. $1,707, North Vine St. $5,216. Noted Apr. 3.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Strang Ave., to C. Petrillo Co., $15,890; West 255th St., to A. Mussumeea, $9,498; Taylor Ave., to McDonald & Wilson, $22,301. Noted Apr. 24.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, sewers in Arthur Ave., etc., to J. J. Johnson Sons, 455 Bway., West New Brighton, $18,008. Noted Apr. 24.

Pa., Phila.—Dir. Pub. Wks., Northeast sewerage treatment works, superstructure for 1 story, 27 x 42 ft. brick and steel locker building, also 1 story, 65 x 114 ft. brick and steel heating plant to Kober Constr. Co., 34 South 17th St., $22,950 and $86,000 respectively; mechanical equipment for heating plant to Roberts Filter Co., Darby, $87,490. Noted Apr. 24.

Md., Baltimore—Bd. Awards, constructing storm water drains in Dist. 48, Storm Water Contr. 66, 17,000 cu.yd. excav., 2,500 cu.yd. concrete masonry, 4,000 lin.ft. rein.-con. pipe drains from 24- to 54-in. diam., to Ryan Constr. Co., 8 Light St., $108,479. Noted Apr. 24.

N. C., Robersonville—See "Waterworks."

O., Cleveland — For 565 ft. 5 x 8 ft. rein.-con. sewer in Ontario St., to W. McDowell & Son, 10309 Miles Ave., $57,838; 85 ft. 6 ft. 3 in., 2,930 ft. 6 C and 510 ft. 5 C concrete sewer in Bellaire Rd. and East 187th St., to Graham & Henderson, 1274 West 108th St., $43,438 and $31,989 respectively. Noted Apr. 24.

O., Shaker Heights (Cleveland P. O.)—Sewers in Lytle and Sutherland Rds., to A. Marra Constr. Co., Ulmer Bldg., Cleveland, $13,395 and $10,278 respectively; Traver Rd., to Hanna & Michael, 2295 Cedar Ave., $8,278; Trayham Rd., to A. Lanese Co., 15820 Kinsman Rd., Cleveland, $7,934.

Mich., Dearborn—Laying 9,247 ft. 12-42 in. vitr. clay sewers in Michigan Ave. Dist., to Coffman Crane Service, 708 Empire Bldg., Detroit, $57,509. Noted Apr. 10.

Ont., Sarnia—Dominion Alloy Steel Corp., Royal Bank Bldg., Toronto, 12,500 ft. 8-12 in. vitr. pipe sewers at plant, to Webster Constr. Co., London.

Ont., Toronto — Sewers in University Creek to J. O. Jerau, 90 Curzon St., $86,548; St. Johns Rd. and 2 lanes to W. E. Taylor, 22 Falcon St., $423,497 and $797 respectively; lane north of Lappin Ave. to Murphy Contg. Co., 8 Wychwood Ave., $726, Tyrell Ave. to W. R. Worthington, 57 Lascelles Blvd., $38,993, Wychwood Ave. and 2 lanes to Grant Contg. Co., 50 Front St. E., $3,395, $960 and $583 respectively.

Waste Disposal

BIDS DESIRED

O., Euclid — May 5, incinerator plant. $61,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs. Noted June 7.

Bridges

PROPOSED WORK

O., Dayton — Montgomery Co. plans 2 span, 300 ft. steel truss highway bridge, 20 ft., over Miami River at Troy Pike, above here. $150,000. W. O. Pease, co. surv. Noted Apr. 12, 1923.

Michigan — State Hy. Dept., Lansing, **(B. means Bridge)** plans B. 8101006 over Ann Arbor R.R., Washtenaw Co., B. 800101, 90 ft. span across Paw Paw River, St. Joseph Co., B. 771703, 120 ft. span across Pine River, St. Clair Co., B. 750803, 90 ft. span across Fox River, Schoolcraft Co., B. 740901, two 60 ft. spans across Cass River, Sanilac Co., B. 740301, 75 ft. span across Black River, Sanilac Co., B. 680101, 150 ft. span across Au Sable River, Oscoda Co., B. 6313001, over Pere Marquette R.R., Oakland Co., B. 6206001, 175 ft. span over Pere Marquette R.R., Newaygo Co., B. 611201 across Cedar River, Muskegon Co., B. 550702 over Menominee River, Menominee Co., B. 520601, 75 ft. span across Yellow Dog River, Marquette Co., B. 4706001 over Grand Trunk R.R., Livingston Co., B. 8210002, Wayne Co., B. 8216002, over Pere Marquette R.R., Wayne Co., B. 8216001 over Pere Marquette R.R., Wayne Co., B. 821104, over Rouge River, Wayne Co., B. 8221001, under Michigan Central R.R. subway, Wayne Co., B. 821601, 80 ft. span over Rouge River, Wayne Co., B. 821304, two 40 ft. spans across Rouge River, Wayne Co., B. 821607, two 35 ft. spans over Rouge River, Wayne Co., B. 821004, two 100 ft. spans, Wayne Co., B. 820301, 120 ft. span over Rouge River, Wayne Co., B. 771301, two 75 ft. spans over Black River, St. Clair Co., B. 731301, over Tittabawassee River, Saginaw Co., B. 701402, five 90 ft. spans across Grand River, Ottawa Co., B. 390703, over Kalamazoo River, Kalamazoo Co., B. 061101, 90 ft. span over AuGres River, Arenac Co. G. C. Dillman, ch. engr.

Kan., Wichita—Sedgwick Co. had plans prepared Chisholm Bridge, 150 ft. concrete span. M. Roseberry, co. engr.

Neb., Broken Bow — See "Streets and Roads."

Neb., Rushville — See "Streets and Roads."

Missouri — State Hy. Dept., Jefferson City, plans thirteen 20 ft. rein.-con. slab spans, 20 ft. roadway, over drainage ditch, also two 200 ft. and two 120 ft. steel truss spans, 3 rein.-con. piers, etc., over Meramec River, St. Louis Co. B. H. Piepmeier, state highway engr.

Mo., St. Louis—Illinois Power & Light Co., 232 South Clark St., Chicago, soon takes bids widening roadway of bridge from 16 ft. to 40 ft., strengthening steel supports, additional approaches on St. Louis side, elevating tracks and rearranging track connections on Illinois side, etc. $3,500,000. Mojeska & Angier, Chicago, engrs. Bridge used by Illinois Traction System (subsidiary of owner), to cross Mississippi River. Noted Mar. 6.

BIDS DESIRED

Vermont—See "Streets and Roads."

Mass., Holyoke—May 13, by Bd. Pub. Wks., Room 2, City Hall, deck steel girder bridge, 100 ft. long, 40 ft. wide, steel work encased or covered with rein.-con., over second level canal, Cabot St. From $35,000 to $45,000; adv. E. N.-R. May 1. Noted Mar. 20.

N. Y., New York—May 2, by E. W. Buckley, comr. Purch., Municipal Bldg., machinery and steel for North Channel bridge, to Dept. Plant & Structures.

Virginia—See "Streets and Roads."

W. Va., Clarksburg—See "Streets and Roads."

Tennessee—May 9, by State Dept. Hys. & Pub. Wks., Nashville, one 100 ft. steel, four 30 ft. and two 40 ft. concrete spans over Collins River, and one 26 ft. concrete span over Mud Creek, on McMinnville-Rock Island Rd., Federal Aid Project 202, Warren Co.; one 100 ft. steel and nineteen 24 ft. concrete spans over Harpeth River, and one 24 ft. concrete span over Turners Creek, Federal Aid Project 205, Cheatham Co.; two 26 ft. concrete spans at Sta. 1057 plus 46, six 26 ft. spans at Sta. 1064 plus 89, one 66 ft. steel span at Sta. 1151 plus 57, Federal Aid Project 204, Tipton Co. J. G. Creveling, highway comr. Noted Apr. 24 under "Streets and Roads."

Mich., Ishpeming—May 5, by Marquette Co. Rd. Comn., two 40 ft. I beam spans on rock filled timber cribs, over Yellow Dog River, Bridge No. 520,601.

Kan., Great Bend — See "Streets and Roads."

BIDS RECEIVED

La., New Orleans—Comn. Council, City Hall, Apr. 15, 600 ft. viaduct to connect new ferry house at Canal and North Front Sts. with ferry landing at foot of Canal St., from O'Brien Constr. Co., Bd. Trade Bldg., $26,600, also furnishing 105 tons structural steel and 7 tons ornamental iron from Lukens Steel Co., 626 South Peters St., $12,267. Expense to be borne jointly by Louisville & Nashville R.R., Southern Pacific R.R., New Orleans Public Belt R.R. and New Orleans Pub. Serv. Inc., all in New Orleans.

O., Cleveland — Cuyahoga Co., concrete bridge, Hilliard Rd., from Walsh Constr. Co., 308 Euclid Ave., $809,624. Noted Apr. 10.

Bridges (Continued)

Tex., Decatur—See "Streets and Roads."

California—State Highway Comn., Sacramento, rein.-con. bridges at various points, from T. H. and M. C. Polk, Chico, $40,099.

CONTRACTS AWARDED

Maine—State Hy. Comn., Augusta, Holt Stream Bridge in Norway, and bridge over Barker Brook, in Lisbon, to Smith & Tweedie, Westfield, $7,132 and $5,740; Mile Stream Bridge in Howland, to E. A. Dekin, Howland, $8,340; Upper Corner Bridge over Narraguagus River, in Cherryfield, and Fernald Bridge over Pushaw Stream, in Alton, to Hunt & Palmer, Island Falls, $45,385 and $18,858 respectively; Passaconaway Bridge over Cape Neddick River, in York, to Robie Constr. Co., Manchester, N. H., $47,749. Noted May 1.

N. Y., Scarsdale—Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, constructing Bronx River Parkway Dr. Bridge 28, over tracks New York Central R.R., here, to Triest Contg. Corp., 247 Park Ave., New York, $195,230. Noted Apr. 3.

Ga., Columbus—City and Central of Georgia R.R. Co., Savannah, viaduct over 13th St., to Davis Constr. Co., Walton Bldg., Atlanta. About $300,000. Noted Mar. 6.

Ia., Primghar—O'Brien Co., 22 concrete culverts to H. J. Jenson, Thompson, $11,977, 3 pony and 1 high truss, to Iowa Bridge Co., 1263 East 19th St., Des Moines, $28,490. five I-beam spans, to Graves Bros., Melvin, $9,600. Noted Mar. 20.

Ia., Webster City—Bd. Supervs. Hamilton Co., 3 concrete culverts, 2 pony truss, two I-beam and 2 slab spans, to A. Swanson Co., Webster City, $34,375.

Minn., St. James—See "Streets and Roads."

S. D., Chamberlain—State Hy. Dept., Pierre, 1,472 ft. high truss bridge over Missouri River, here, to Missouri Valley Bridge & Iron Co., Leavenworth, Kan., $346,234. Noted Mar. 13.

Mont., Polson—See "Streets and Roads."

Dams

PROPOSED WORK

Mich., French Landing (mail Romulus)—Detroit Edison Co., 2000 2nd Blvd., Detroit, having plans prepared concrete dam 35 ft. high, flanked on either end with earthen embankments, concrete power house 1,000 kw., wasteways, etc. Private plans.

Railways

CONTRACTS AWARDED

Ontario—Canadian Pacific Ry., Windsor Sta., Montreal, Que., will do following work in province, 44 mi. rock ballasting in Sudbury Div., 22 mi. rock ballast in Toronto-Sudbury Div., replacement of 137 mi. of 85 lb. steel with 102 lb. steel, in Northbay, Cartier, Sudbury and Toronto, by day labor. $2,000,000. J. M. Fairbairn, ch. engr.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, will reballast (gravel) and relay 40 mi. 80 lb. rails, by day labor. $750,000. S. B. Clement, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Minn., Glencoe—McLead, Wright and Meeker Counties had plans prepared Judicial Ditch 14. $20,000. C. Madsen, Hutchinson, engr.

Ark., Osceola—Comrs. Sub. Dist. 1, of D.D. 12, plans to issue $100,000 bonds, for drainage work. Ayres & Miller, McCall Bldg., Memphis, Tenn., engrs.

Tex., Corsicana—Powell Salt Water Co. plans ditching and dredging Cedar and Crabb Creeks, Powell Oil field to Trinity River. $25,000. Private plans.

Calif., Los Angeles—Los Angeles Harbor Comn. plans dredging Slip 1, fronting Pier A. $80,000. C. J. Colden, pres.

Canada—Dept. Railways & Canals, Parliament Bldgs., Ottawa, Ont., plans to expend $50,000 on Soulanges Canal, $125,000 on Welland Canal and $210,000 on Trent Canal. Work includes dredging, concrete work, piling, repairs, etc. W. A. Bowden, Parliament Bldg., Ottawa, ch. engr.

BIDS DESIRED

N. C., Washington—May 7, by Bd. Drainage Comrs. South Creek D. D. at office Small, McLean & Rodman, Washington, deepening and widening South Creek to give width of 30 ft. and depth of 7 ft., involving 52.3 acres cleaning, 132,500 cu. yd. excav., constructing 3 bridges and leveling canal bank. $65,000. R. L. Bonner, Aurora, chn.

Fla., Tampa—May 14, by W. J. McDonald, treas. Dover D. D., Room 32, Giddens Bldg., draining 11,339.95 acres, 630,000 cu.yd. excav. $189,000. McElroy Eng. Bldg., Giddens Bldg., engrs. Noted Nov. 29.

Wyo., Riverton—May 16, by Bd. Comrs. Delfelder D. D., at office of O. N. Gibson, attorney, 1st State Bank Bldg., 7.7 mi. open ditch drains, 228,000 cu.yd. excav., etc. H. F. Bell, Cody, engr.

Wyo., Riverton—May 16, by Bd. Comrs. Big Bend D. D., at office of O. N. Gilson, attorney, 1st State Bank Bldg., 3.7 mi. tile drains, incl. 13,938 lin.ft. 10 in., 1,750 lin.-ft. 12 in. and 3,778 lin.ft. 15 in. tile; 4.7 mi. open ditch drains, 132,000 cu.yd. excav.. etc. H. F. Bell, Cody, engr.

Wash., Vancouver—May 10, by Shillapoo-Vancouver Lake D. D., for drainage system. $520,000. W. A. Schwartz, Vancouver, engr. Noted Dec. 6.

Calif., Oroville—May 10, by W. J. Monro, secy. Oroville-Wyandotte Irrigation Dist., 21,800 lin.ft. ditch.

BIDS RECEIVED

N. Y., Buffalo—Dept. Pub. Wks., Apr. 18, from Great Lakes Dredge & Dock Co., D. S. Morgan Bldg., dredging and refilling trench across City Ship Canal at Michigan St. for 16 in. submerged pipe $8,000, dredging and refilling trench across Buffalo River for 16 in. submerged pipe $11,950, laying 16 in. submerged pipe across City Ship Canal and Buffalo River $9,500. Noted Apr. 17.

Neb., Norfolk—Sanitary Dist. at office J. C. Stitt, clk., Norfolk Natl. Bank Bldg., constructing cut off B of North Fork of Elkhorn River, 80,000 cu.yd. dragline excav., from R. S. Morrow & Son, 430 Brandeis Theatre Bldg., Omaha, $0.124. Noted Apr. 3.

CONTRACTS AWARDED

New York—R. K. Fuller, comr. Canals & Waterways, Albany, dredging canal from Waterford west to Schenectady, to W. J. Morrissey, Saratoga Springs, $167,045.

Ark., Newport—Brown Creek D.D., 95,800 cu.yd. excav., 6,700 BF No. 2 timber bridging, 36 cu.yd. concrete in abutments, 3,000 lb. structural steel, to Miller & Harris Bros., Constr. Co., Shelby, Miss., $15,000.

Streets and Roads

PROPOSED WORK

Maine—State Hy. Comn., Augusta, plans paving State Highway S in Gray, 3,155 cu. yd. bituminous macadam, 13,703 cu.yd. earth excav.; State Highways in New Gloucester, 2,564 cu.yd. bituminous macadam, 7,249 cu.yd. earth excav.; State Highway K spur, in Houlton, 1,483 cu.yd. bituminous macadam, 3,895 cu.yd. earth excav., 3,141 cu.yd. rock excav.; State Highway F in Turner, 3,850 cu.yd. bituminous macadam, 18,900 cu.yd. earth excav.; State Highway B in Bridgton, 1,300 cu.yd. bituminous macadam, 2,550 cu.yd. earth excav.; State Highway J-K, in Orneville and LaGrange, 7,500 cu.yd. gravel surfacing, 9,000 cu.yd. earth and 500 cu.yd. rock excav. P. D. Sargent, ch. engr.

N. Y., Amsterdam—Fulton Co. plans graveling 22 mi. roads, 12 ft., $50,140.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., rejected bids grading, curbing and laying sidewalks on Merritt St., Lewis and 55th Aves. Will readvertise. Noted Apr. 3.

N. J., Alpine—Bergen Co. (Hackensack) plans concrete paving 1 mi. road, here. R. P. McClave, Hackensack, engr.

N. J., New Brunswick—Plans paving Richardson, Ray, Courtlandt, Prosper, Baldwin, Ward, Howard, Talmadge and Wirt Sts. $153,000. A. Atkinson, New Brunswick, engr.

N. J., Newton—Sussex Co. plans improving Sussex-Port Jervis Rd. $800,000. State aid. H. Snook, Newton, co. engr.

W. Va., Elkins—City Comrs. had plans prepared paving Central St., concrete. $31,334. P. B. Bloomfield, Elkins, engr.

W. Va., Summersville—Nicholas Co., Wilderness Dist. voted $90,000 bonds for highway improvements. Noted Mar. 6.

Ga., Carmilla—Mitchell Co. sold $100,000 bonds for roads.

Fla., Panama City—Bay Co. selling $140,000 bonds for roads.

Fla., Tavares—Having plans prepared paving various streets, 26 and 30 ft., asphalt. $200,000. A. Cobb, Tavares, engr.

Tenn., Maryville—Blount Co. plans election $300,000 bonds, macadamizing 95 mi. roads.

Tenn., Nashville—Bd. Pub. Wks. soon takes bids paving 10 streets, asphalt, bituminous concrete or granite block. $295,000. W. W. Southgate, city engr.

O., Barberton—Plans paving 7th St., brick, $30,000; improving Norton Ave., $28,000, also ½ mi. 4th St., 30 ft., $30,000.

O., Canton—Stark Co. plans improving 4.5 mi. Suffield Rd., 18 ft., brick. $125,000. A. Wise, Court House, engr.

O., Cincinnati—Plans rebuilding 1,500 ft. Reid Ave., 24 ft., 3,000 lin.ft. concrete curb and concrete sidewalks, 4,000 sq.yd. concrete, 1,410 ft. 12 and 18 in. sewer pipe. $25,400. F. Krug, City Hall, engr.

O., Cincinnati—Hamilton Co. plans rebuilding 14,690 ft. Eight Mile Rd., 25,000 cu.yd. grading, 70,000 gal. Grade 1 tar, 9,300 cu.yd. stone, etc. $68,640. E. A. Gast, Court House, engr.

O., Columbus—Making plans grading, laying necessary water services, sewer connections and paving 1,606 ft. Ann St. and Longman Ave., 24 ft., brick $25,199, asphalt $20,067; 2,092 ft. 1st Ave., 34 ft., asphalt $19,951; 619 ft. alley west of Pennsylvania Ave., 20 ft., brick $4,877, concrete $4,315. R. H. Simpson, city engr.

O., Dayton—Plans paving Harvard Blvd. wood block or asphalt on concrete, $24,375, Grand Ave., asphalt or concrete, $7,125. J. F. Hale, city engr.

O., Dayton—Montgomery Co. plans paving 8,000 sq.yd. East 3rd St., macadam or Kentucky rock asphalt on bituminous macadam. $25,000. W. O. Pease, co. surv.

O., East Liverpool—Bd. Control takes bids in about 30 days resurfacing 0.7 mi. East 2nd and West 8th Sts., 30 ft., $70,000; paving ½ mi. Orchard Grove Ave., 30 ft., $35,000, ¾ mi. Monroe St. and McKinnon Ave., 30 ft., both brick, $60,000; resurfacing or relaying brick on ¼ mi. Bway., 40 ft., $30,000; repaving ¼ mi. Jefferson St., 30 ft., asphalt and brick, $25,000-$30,000. J. A. George, East Liverpool, engr.

O., Garfield Heights (Cleveland P. O.)—Takes bids in July paving 18 or 20 streets, brick or asphalt, to exceed $100,000. R. F. Munz, Town Hall, engr.

O., Piqua—Plans repaving 2,400 ft. Main St., 40 ft., brick or asphalt on present concrete. $50,000. A. Schroeder, city engr.

O., St. Clairsville—Plans resurfacing ½ mi. Main St., 40 ft., asphalt. $50,000. B. Nikolaus, clk.

O., Youngstown—Mahoning Co. plans reconstructing 2.1 mi. Bell-Wick Rd., present waterbound road to be widened to 16 ft., incl. additional base and 3 in. penetrated bituminous top. $40,000.

Ind., Anderson—Madison Co. having plans prepared hard surfacing R. W. Webb Rd., 14,436 sq.yd. concrete. $39,531. A. H. Doyle, Anderson, engr.

Ind., Evansville—Comrs. Vanderburg Co. had plans prepared and soon takes bids 9 mi. Outer Cynthiana Rd. to Posey Co. line, concrete, 18 ft. $30,000. R. W. Meisenger, co. engr.

Ind., Evansville—Comrs. Vanderburg Co. will resurface 10 mi. roads, oil penetration. Work will probably be done by day labor. M. W. Foster, co. rd. supt.

Ind., Rushville—Rushville Co. plans paving 17,342 sq.yd. James Shannahan Rd., 18 ft., bituminous macadam. $27,761. F. L. Catt, Rushville, engr.

Ind., Terre Haute—Vigo Co. plans paving Fromme Rd., 22,440 sq.yd. concrete on concrete, $60,483; White Rd., 24,456 sq.yd. concrete, $67,364; Bickel Rd., 10,560 sq. yd. concrete, $27,219. R. E. Givens, Terre Haute, engr.

Mich., Ann Arbor—Having plans prepared 40,562 lin.ft. concrete curb and gutter, and 17,944 sq.yd. pavements, in Dist. 56 and Dists. 62 to 70 inclusive, 3 in. sheet asphalt, vitr. brick, plain or rein.-con., or vibrolithic concrete on concrete. F. J. Rentschler, pres. Bd. Pub. Wks.

Mich., Detroit—Plans prepared grading and paving with 3½ in. sheet asphalt on 8 in. concrete, 5,200 sq.yd. Stoepel Ave. $31,270, 2,520 sq.yd. Lawton Ave. $15,120, 2,700 sq.yd. Cortland St. $16,010, 11,700 sq.yd. Tuller St. $70,200, 5,990 sq.yd. Turner St. $35,930, 6,700 sq.yd. Livernois Ave. Sect. 1, $40,030, 15,400 sq.yd. Livernois Ave. Sect. 2, $92,750, 4,040 sq.yd. Colton Ave. $24,270. G. Jerome, city engr.

Wis., Ladysmith—Making plans rein.-con. paving 8,512 sq.yd. various streets. $30,000. H. E. French, City Hall, Baraboo, engr.

Ia., Storm Lake—Rejected bids 16,500 yd. paving and 13,600 lin.ft. curbing. Will

Streets and Roads (Continued)

take new bids later. R. A. Whalen, clk. Noted Mar. 27.

Kan., Independence — Montgomery Co. soon takes bids grading and surfacing 2.029 mi. Federal Aid Project 121 Sect. H, 18 ft., bituminous macadam. H. K. Hibbard, co. engr.

Kan., Kansas City—Wyandotte Co. soon takes new bids fine grading and surfacing 0.873 mi. Federal Aid Project 102, 9,219 sq.yd. 1 course concrete, 1,310 cu.yd. excav. O. K. Williams, co. engr. Noted Feb. 28.

Kan., Marion—Marion Co. plans grading, etc., 4.269 mi. Federal Aid Project 216, Sect. A, 28 ft. R. K. Walters, co. engr.

Kan., Minneapolis — Ottawa Co. soon takes bids grading 7.02 mi. Federal Aid Project 185, Sect. A, 28 ft. L. R. Miller, co. engr.

Kan., Olathe—Johnson Co. had plans prepared improving 2.866 mi. highway, Federal Aid Project 238, Sect. A, 18 ft., brick, concrete, bituminous concrete or bituminous macadam. E. C. L. Wagner, 608 Kemper Bldg., Kansas City, Mo., engr.

Kan., Wichita—Sedgwick Co. had plans prepared grading and surfacing 1.261 mi., Federal Aid Project 130, Sect. C, 18 ft. M. Roseberry, co. engr.

Neb., Broken Bow — Custer Co. plans grading 6 mi. Federal Aid Project 127 A, 96,600 cu.yd. excav., two 24 ft. and one 22 ft. I beam bridges. $150,000.

Neb., Lincoln—Lancaster Co. plans grading and gravel surfacing 4.358 mi. Federal Aid Project 225, from here to Woodlawn, 29,000 cu.yd. excav., 54,000 sq.yd. 3 in. gravel. $37,000.

Neb., Omaha—Douglas Co. plans paving 20 mi. road from Milford to Elk Horn River, brick or concrete. $800,000 or less. L. E. Adams, Court House, engr.

Neb., Rushville — Sheridan Co. plans grading 14.01 mi. Federal Aid Project 223, Sheridan Co., 110,500 cu.yd. excav., and one 16 ft. I beam bridge. $75,000.

South Dakota—State Hy. Dept., Pierre, plans 14 mi. Federal Aid Project 184 A, Spink Co., and 14.1 mi. Federal Aid Project 183 Beadle-Spink Counties. Letting probably in May. F. D. Hudgins, ch. engr

Missouri — State Hy. Dept., Jefferson City, plans paving 1.25 mi. road from Washington east, 18 ft., Franklin Co., rock asphalt or concrete. B. H. Piepmeier, state highway engr.

Missouri — State Hy. Dept., Jefferson City, plans concrete paving 97,977 sq.yd. roads in Callaway Co., also 2.374 mi. Fenton-Festus Rd., 18 ft., St. Louis Co.; graveling 9.056 mi. roads, 12 ft., in Cedar, Phelps and Cape Girardeau Counties, and 3.622 mi. roads, 16 ft., in St. Genevieve and New Madrid Counties; grading 34.163 mi. roads in Callaway, Texas, Ripley, Barton, Webster and St. Louis Counties. B. H. Piepmeier, state highway engr.

Mo., Centralia—Making surveys paving business district, around city square and extending paving well into residence districts. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, consult. engrs.

Mo., Hannibal—Soon takes bids grading, concrete curbing, guttering and 7 in. concrete surfacing 7,510 ft. Mark Twain and Paris Sts. $75,546. W. R. Gettler, City Hall, engr. Noted July 12.

Mo., Moberly—Plans resurfacing, repairing and widening approximately 40 blocks. Benham Eng. Co., 512 Gumbel Bldg., Kansas City, consult. engrs. Noted Nov. 22.

Ark., Siloam Springs—Making preliminary plans grading, surfacing with rein.-con., asphaltic concrete or sheet asphalt on concrete, concrete curbs and gutters on 42 blocks, 26 and 28 ft.

Tex., Batesville — Zavalla Co. election May 17, $125,000 bonds, highway in Precinct 1 from Frio Co. line to La Pryor via Batesville. Address N. P. Hunt, co. judge.

Tex., Colorado — Mitchell Co. election May 27, $325,000 bonds, hard surfacing State Highway 1. Will be supplemented by $625,000 State and Federal aid if election carries. F. F. Du Bose, co. engr. Noted Apr. 27.

Tex., Dallas—Making plans correction street alignment, paving, wrecking, etc., Akard St. from Commerce to Young Sts., 60 ft. minimum width planned. $500,000. E. A. Kingsley, city engr.

Tex., Kountze—Election soon $500,000 bonds, hard surfacing 28 mi. highways, 18 ft. G. C. Brown, Kountze, engr.

Okla., Chandler — Lincoln Co. election June 10, $990,000 bonds, grading and paving 50 mi. Ozark Trail, etc., 600,000 sq.yd. concrete, 275,000 cu.yd. earth excav. J. M. Page, Capitol Bldg., Oklahoma City, engr.

Okla., Cleveland—Having plans prepared grading and paving 9 blocks North Main St., 12,600 sq.yd. concrete, 5,400 lin. ft. curbing, 4,000 cu.yd. earth excav. $43,000. Wood & Fellows, Stillwater, engrs.

Okla., Enid—Garfield Co. election May 20, $1,000,000 bonds, grading and paving highways, 600,000 sq.yd. concrete. State Highway Dept., Oklahoma City, engrs.

Okla., Okmulgee—Okmulgee Co. election May 19, $400,000 bonds, 22 mi. concrete and 8½ mi. gravel roads. H. C. King, Okmulgee, engr.

Ore., Albany—Linn Co. making plans 15 market roads, total length 48 to 50 mi. C. H. Leonard, Albany, engr.

California—State Highway Comn., Sacramento, having plans prepared 8 mi. heavy grading near Colfax, Placer Co.; 4 mi. grading near Summit, Nevada and Placer Counties. R. M. Morton, state highway engr.

Calif., Oakland—Had plans prepared improving portion East 12th St., 285,411 sq. ft. grading, 7,831 ft. concrete curb, 8,400 sq.ft. concrete gutter, 212,482 sq.ft. 6 in. concrete with 2 in. Warrenite-bitulithic surface. W. W. Harmon, city engr.

Calif., Salinas—Had plans prepared improving San Luis St., 82,558 sq.ft. grading, 82,558 sq.ft. 5 in. concrete, 3,667 lin.ft. concrete curbs, culverts, etc. H. Cozzens, city engr.

Calif., San Bernardino—San Bernardino Co. had plans prepared improving 10,689 ft. Riverside Dr., 16 ft., grading, 6 in. crushed rock with rock screenings and asphaltic oil surface, earth shoulders and embankments, 2 ft. on each side. E. T. Ham, co. surv.

Calif., San Diego — Plans improving Columbia and Maple Sts., 72,028 sq.ft. 3 in. bituminous with 2 in. asphaltic concrete top, 184,308 sq.ft. 2½ in. bituminous and 1½ in. asphaltic concrete top, 11,949 sq.ft. concrete sidewalk, 2,710 lin.ft. concrete curb, etc. F. A. Rhodes, city engr.

Calif., Santa Ana—Had plans prepared improving 17th St., 152,569 sq.ft. 7 in. concrete, etc. W. G. Knox, city engr.

Calif., South Pasadena (Branch of Pasadena)—Plans paving El Centro St. between Pasadena and Brent Sts., etc. To exceed $55,000. R. V. Orbison, city mgr.

Ont., Guelph—Soon takes bids 24,000 sq. yd. concrete pavements on various streets. $80,000. H. S. Nicklin, city engr.

Ont., Leamington—Takes bids early in May, concrete pavements on Setterington Ave. and Mill St. Prices wanted on materials. $36,000. R. M. Selkirk, City Hall, engr.

Ont., Riverside—Having plans prepared 16,000 sq.yd. asphalt pavement on concrete, 11,000 lin.ft. concrete curb and gutter. $80,000. A. Smith city engr.

Ont., Toronto — Having plans prepared 75,000 sq.yd. asphalt pavements on concrete, on following: Fleet St. $263,715, Gloucester St. $24,918, and Wabash Ave. $31,696. R. C. Harris, city engr.

BIDS DESIRED

Vermont—Dept. Highways, Montpelier, receiving bids and opens same about May 8, improving 1.26 mi. Crystal Lake Rd., Sutton, Caledonia Co., Federal Aid Project 55 A, 2,940 cu.yd. gravel surfacing, 12,300 cu.yd. earth and 1,000 cu.yd. rock excav. T. W. Dix, ch. engr. Noted Feb. 21.

Vermont—May 8, at office of T. W. Dix, ch. engr. Dept. Highways, Montpelier, constructing 2.7 mi. highway South Burlington; 1.26 mi. gravel road, Sutton; 160 ft. steel span bridge, North Pownal; 80 ft. steel span bridge and approaches at Middlebury; 7 mi. concrete road, Berlin; adv. E. N.-R. May 1. Noted Apr. 24 under Bridges.

Vt., Barre — May 8, by City Council, paving 1 mi. Barre-Montpelier Rd., 18 ft., 2,200 cu.yd. rein.-con., 6,000 cu.yd. earth excav. S. L. Ruggles, city engr. Project will be let in conjunction with Federal Aid Project 56 A.

N. Y., Auburn—May 13, by J. P. Jaeckel, city mgr., City Hall, improving Aurelius, Clark, Franklin, Lewis, Pulsifier and Westlake Aves. M. F. Dullea, city engr.; adv. E. N.-R. May 1.

N. Y., Brooklyn—May 7, by E. Riegelman, boro pres., Boro Hall, asphalt paving Lott Ave., 48th, 64th and 81st St.; grading, curbing and flagging New York and 16th Aves., 71st, 72nd, 46th and 64th Sts., Rockaway Ave. from Glenwood to Farragut Rds., Rockaway Ave. from Conklin to Flatlands Aves.; grading, curbing, flagging and paving (2nd hand granite) Rockaway Ave. from Farragut Rd. to Flatlands Ave.

N. Y., Long Island City—May 5, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., grading, curbing, laying sidewalks, etc., on Merritt St., Lewis, 55th (Lewis), and 89th (Ridgewood) Aves.; grading sidewalks space and laying sidewalks, etc., on 101st St.; sheet asphalt paving Hancock St.; grading 4th Ave.; grading and curbing 4th Ave.; grading sidewalk and gutter spaces, curbing, laying sidewalks, etc., on easterly side of 59th St. (Holmes Ave.); grading for width of 40 ft. from southerly house line, curbing, laying sidewalks and sheet asphalt paving on concrete, Edgemere Ave. (Rockaway Beach Blvd.), etc.

N. Y., New York—May 6, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., grading, curbing, laying sidewalks, crosswalks, asphalt paving etc., East 176th and Herschell Sts., Matthews, Andrews, Faraday, Story and Popham Aves.; sheet asphalt paving West 195th St. from Sedgwick to University Aves.; bituminous concrete paving, etc., West 197th and East 169th Sts., University, Claflin and Anderson Aves., West 195th St. from University to Reservoir Aves.; grading for width of 40 ft. centrally located, etc., Watson Ave.

N. J., Freehold—May 21, by Bd. Freeholders Monmouth Co., reconstructing 2.153 mi. Sect. 2, Freehold-Smithburg Rd. 24, concrete. G. F. Randolph, 60 Broad St., Red Bank, civil engr.; adv. E. N.-R. May 1.

N. J., Roselle Park (Roselle, P. O.)—May 9, by Mayor and Boro Council, rein.-con. paving and bluestone curbing Lehigh Pl., Webster and Sherman Aves. J. W. Higgins, 595 Chestnut St., boro engr.; adv. E. N.-R. May 1.

Pennsylvania—May 12, by State Hy. Dept., Harrisburg, 33 mi. road in 12 projects and May 13, for 41 mi. road in 12 projects; adv. E. N.-R. May 1.

Pennsylvania—May 19, by State Hy. Dept., Harrisburg, 59 mi. road in 13 projects in 11 counties; adv. E. N.-R. May 1.

Pa., Martinsburg — May 16, by Boro Council, concrete paving 3,219 lin.ft. Allegheny and Market Sts., 26 and 36 ft. F. M. Hunter, 201 Logan Ave., Llyswen, engr.

Pa., Southmont—May 12, by Boro Council, grading and paving with one course rein-con., also sanitary and storm sewers in 4,000 ft. Gardner, Leila and Orchard Sts. $40,000. S. E. Dickey & Co., 809 Johnstown Trust Bldg., Johnstown, engrs.

Pa., Warren—May 5, by Street Com. of Town Council, paving and curbing 1,590 ft. Crescent Park; adv. E. N.-R. May 1.

Maryland—May 13, by State Rds. Comn., Baltimore, 7 sections highway in Allegany, Prince George, Baltimore, Harford, Caroline and Wicomico Co., Contrs. A-26, P-50, P-45, B-62, H-37, Co-34 and Wi-25. J. N. Mackall, chn.; adv. E. N.-R. May 1.

Md., Baltimore—May 7, by Bd. Awards, grading, curbing and paving with sheet asphalt on concrete 22,200 sq.yd. Contr. 256-OANA. R. K. Compton, 214 East Lexington St., chn. paving comn.

Virginia—May 13, at offices State Hy. Comn., Richmond, surfacing with bituminous macadam 3 mi. Project F-148-G, Bedford Co., 3.6 mi. Project F-265-B, Buchanan Co., 5 mi. Project F-294-B; surfacing with sheet asphalt on concrete, alternate on 8 in.-6 in.-8 in. concrete and 4 in. gravel sub-base, 4 in. asphaltic concrete base and 1½ in. sheet asphalt top, 2.3 mi. Project F-260-B, and 1.4 mi. Project F-358-A, both Hanover Co.; graveling 3.1 mi. Project F-310-B, Brunswick Co., 8.2 mi. Project F-333, Nansemond Co.; top soil surfacing 6.6 mi. Project S-323-B, Charlotte Co.; 1½ in. binder 1½ in. sheet asphalt topping 2.2 mi. Project F-368. No special design bridges. C. S. Mullen, ch. engr.; adv. E. N.-R. May 1.

W. Va., Clarksburg—May 5, by Harrison Co., grading 1.5 mi. Ten Mile Creek-Marshville Rd., Ten Mile Dist., 1 mi. Clarksburg-Weston Pike, Grant Dist.; 1.5 mi. road from Arthos Rhodes residence up Kincheloe Creek, Union Dist.; bridge over Ten Mile Creek. C. N. Parrish, clk. Noted Mar. 27.

W. Va., Fairmont—May 14, by Marion Co., improving following roads in Paw Paw Dist.: 1.18 mi. Rivesville-Parker Run Rd., 2 mi. Rivesville-Baxter Rd., 2.5 mi. Baxter-Hoodsville Rd., 2.5 mi. Hoodsville-Shumans Run Rd., 2.5 mi. Baxter-Frant Town Rd., 1 mi. Wheeling-Fairmont Turnpike up Robinsons Run, 1.13 mi. Fairview-Bennefield Fork Rd. and 1.3 mi. Fairmont-Wheeling Turnpike. L. N. Satterfield, clk. Noted Mar. 20.

Streets and Roads (Continued)

W. Va., Fairmont—May 20, by Marion Co. grading, draining and paving 11 highway, Lincoln Dist. B. H. Palmer, county rd. engr.; adv. E. N.-R. May 1.

W. Va., Fairmont—May 22, by Marion Co., 26 mi. grading, draining and paving, Mannington Dist. B. H. Palmer, co. engr.

S. C., Saluda—May 6, at office Saluda Co. Hy. Comn., 13.223 mi. State Route 392, 68,014 cu.yd. common excav., 41,403 top soiling, etc.

Fla., Bradentown — May 5, by Comrs. Manatee Co., surfacing and repairing 8½ mi. in Palmetto Special Rd. and Bridge Dist., and 13 mi. in Gulf Shore Special Rd. and Bridge Dist., asphaltic oil and slag. R. H. Roesch, clk.

Fla., Haines City—May 6, by Mayor and Council, improving various streets, 43,700 yd. paving. Separate bids will be received on curbs, gutters, etc. E. V. Camp & associates, Hill Bldg., Jacksonville, engrs.

Fla., Starke—May 6, by Bradford Co., constructing 7.6 mi. highway, Rd. 14 to New River, $30,000; 6.7 mi. Rds. 19 and 20, $26,000; 7.4 mi. Rds. 9, 18 and 21, $30,000; 9.6 mi. Rds. 14, 16, 17 and 22, $38,000. E. R. Neff, Starke, engr.

Fla., Tampa—See "Unclassified,"

Mississippi—May 6, by Carroll Co. Bd. Supervs., grading and gravel surfacing 20 mi. Greenwood Money-Tallahatchie Co. Rd., 18 ft. $200,000. Abbott Eng. Co., Greenwood, engrs.

Miss., Greenwood — May 6, by Bd. Supervs., La Flore Co., Court House, grading and gravel surfacing 14.5 mi. Greenwood-Money-Tallahatchie Highway, 18 ft. Abbott Eng. Co., Greenwood, engrs.

Miss., Port Gibson — May 5, by Bd. Supervs., Claiborne, grading and graveling 2.14 mi. Ruston Colon Rd., 24 ft. H. C. Dietzer, c/o State Hy. Dept., Jackson, engr.

Louisiana—May 13, by State Hy. Dept., Baton Rouge, 9.4 mi. State Project 346, Sect. C 2, New Orleans-Fort Jackson Highway, Plaquemine Parish. J. M. Fourmy, ch. engr.

Louisiana—May 15, by State Hy. Dept., Baton Rouge, 4.69 mi. State Project 149, DeRiffer-Texas Highway, Beauregard Parish, also furnishing gravel for project. J. M. Fourmy, ch. engr.

Tennessee—May 9, by State Dept. Hys. & Pub. Wks., Nashville, grading and surfacing with bituminous macadam 5.35 mi. Hartsville-Sumner Co. Rd., 14 ft. State Aid Project 166, Trousdale Co., 5.35 mi. Cookeville-Overton Co. Rd., 16 ft., State Aid Project 123, Putman Co.; with macadam penetration or 2 in. bituminous concrete, 8-in. macadam base 12.62 mi. McMinnville-Rock Island Rd., 18 ft., Federal Aid Project 202, Warren Co.; grading 5.75 mi. Bells-Madison Co. Rd., 16 ft., State Aid Project 165, Crockett Co., 5.23 mi. Lenoir-Knox Co. Rd., 18 ft., Federal Aid Project 207, Loudon Co., 9.52 mi. Davidson Co. line-Dickson Co. line Rd., 18 ft., Federal Aid Project 205, Cheatham Co., 4.74 mi. Haywood Co. line-Fayette Co. line Rd., 18 ft., Federal Aid Project 204, Tipton Co.; gravel surfacing 9.8 mi. Newport-North Carolina State line Rd., 16 ft., State and Federal Aid Project 23, Cocke Co.; concrete surfacing 5 mi. Manchester-Beech Grove Rd., 16 ft., State Aid Project 151, Coffee Co. J. G. Creveling, highway comr. Noted Apr. 17.

Kentucky—May 20, by State Hy. Dept., Frankfort, shaping and surfacing with waterbound macadam 13.2 mi. London-Corbin Rd., 12 ft., State Project 5, Sect. O, Laurel Co., 15,000 cu.yd. earth, and 3,000 cu.yd. rock excav.; 7.05 mi. Mount Vernon-Roundstone Rd., 12 ft., State Project 5, Sect. L, Rockcastle Co. J. S. Boggs, state highway comr.

Ohio—May 13 (extended date), by Dept. Highways & Pub. Wks., Columbus, grading, bridging and paving 8.339 mi. roads in Trumbull, Union and Franklin Counties, also concrete widening 1.05 mi. road in Franklin Co. A. V. Donaheys, dir. highways. Noted Apr. 24.

O., Canton—May 7, by Stark Co. concrete curbing and brick paving 4.25 mi. South Canton-Massillon Rd., 16 ft., $125,000; brick paving ¾ mi. Canal Fulton Rd., 20 ft., $30,000, 1 mi. Dueber Ave., 16 ft., $40,000, and 1 mi. Shepler Rd., 20 ft., $35,000. A. M. Wise, co. engr. Noted Mar. 20.

O., Cleveland—May 7, by Cuyahoga Co. paving Minor Rd. 2. $61,992. F. Lander, Court House, engr.

Indiana — May 6, by State Highway Comn., Indianapolis, bituminous surface treating 5.1 mi. Rd. 12, Sect. M, 18 ft., and surface treating 7.3 mi. Rd. 1, Sect. L, Marion Co. C. Gray, state highway engr.

Ind., Greencastle — May 5, by Comrs. Putnam Co., paving with crushed stone, 15,337 ft. C. H. Crosby Rd., 24 ft. $54,156. W. P. Koehler, Greencastle, engr.

Ind., Rockville—May 6, by Comrs Parke Co., concrete paving 16,232 sq.yd. Rosedale Rd. $47,584. L. Mitchell, Rockville, engr.

Ind., Wabash — May 6, by Comrs. Wabash Co., concrete paving 36,156 sq.yd. Lee Carr Rd., $94,005; 19,002 sq.yd. Albert Bechtold Rd., $49,412; 39,720 sq.yd. W. D. Huffman Rd., $103,379; 32,520 sq.yd. Thomas Bechtold Rd., $74,557. H. Hartmen, Wabash, engr.

Michigan—May 8, by State Hy. Dept. at office Comrs. Genesee Co., Flint, grading and surfacing 5.97 mi. Federal Aid Rd. 115, Sect. B, Genesee Co., 28,896 cu.yd. excav., 70,133 sq.yd. asphalt, concrete or bituminous concrete, also 6.357 mi. Federal Aid Rd. 115, Sect. A, Genesee Co., 53,342 cu.yd. excav., 75,182 sq.yd. asphalt or concrete. G. C. Dillman, ch. engr.

Michigan—May 9, by State Hy. Dept., at office Comrs. Delta Co., Escanaba, grading and surfacing 5.721 mi. State Trunk Line Rd. 35-3, Delta Co., 42,640 sq.yd. bituminous macadam. G. C. Dillman, ch. engr.

Michigan—May 9, by State Hy. Dept. at office Comrs. Muskegon, Muskegon, grading and surfacing 2.35 mi. State Trunk Line Rd. 24-26, Muskegon Co., 7,980 cu. yd. excav., 24,811 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, ch. engr.

Michigan—May 12, by State Hy. Dept. at office Comrs. Buren Co., Paw Paw, grading and surfacing 3.295 mi. State Trunk Line Rd. 40-1, Sect. A, Van Buren Co., 21,027 cu.yd. excav., 34,800 sq.yd. asphalt or concrete. G. C. Dillman, ch. engr.

Michigan—May 13, by State Highway Dept. at office Comrs. Houghton Co., Hancock, grading and surfacing 6.767 mi. State Trunk Line Rd. 28-8, Sect. C, Houghton Co., 52,079 cu.yd. excav., 18,484 tons stamp sand, 10,200 cu.yd. clay, or 63,516 sq.yd. gravel; 3.63 mi. State Trunk Line Rd. 28-8, Sect. B, Houghton Co., 46,542 cu.yd. excav., 9,918 tons stamp sand or 34,082 sq.yd. gravel. G. C. Dillman, ch. engr.

Wis., Fond du Lac — May 6, by J. F. Hohensee, city clk., paving 4th, Bank, Oak, Morris, Bannister, South Bell, Everett, Fond du Lac, Marr and Linden Sts., rein.-con., asphaltic concrete, vibrolithic or sheet asphalt. G. H. Stanchfield, City Hall, engr.

Minn., Minneapolis—May 6, by J. A. Ridgway, secy. Bd. Park Comrs., City Hall, colored concrete curbs on 32,000 lin. ft. Lake Nakomis, 36,000 lin.ft. Lake Dist., 25,000 lin.ft. on Minnehaha Parkway; 7,300 sq.yd. colored walks in Lake Dist., 3,000 sq.yd. concrete tennis courts, Nicollet Field, 3,000 lin.ft. colored curb and gutter, 2,800 sq.yd. concrete tile walks, 5,000 sq. yd. colored concrete tennis courts in Powderhorn Lake Park.

Kan., Olathe—May 23, by Clerk, Johnson Co., grading and surfacing 2.866 mi. Federal Aid Project 238, Sect. A, 30,118 sq.yd. vitr. brick, concrete, bituminous concrete or bituminous macadam, 1,755 lin.ft. cobble gutter, 9,330 cu.yd. earth excav., 4,320 cu.yd. borrow, 27,307 lb. reinforcing. E. J. Terrill, co. engr.

Kan., Wellington — May 7, by A. E. Alexander, clk. Sumner Co., improving 2.335 mi. Belle Plaine Rd., Federal Aid Project 235, Sect. 9, 18 ft., concrete or brick.

S. D., Onida—May 6, by Comrs. Sully Co., grading 6 mi. Farmington Twp. Rd. and 7 mi. Rich Valley and Fairview Rds. A. Glessner, co. aud.

N. D., Fargo—May 8, by Cass Co., grading 13 mi. Federal Aid Project 213, 78,995 cu.yd. excav., 4,446 lin.ft. 12-30 in. corrugated metal or concrete pipe culverts, etc. $30,000. F. F. Doherty, co. aud.

N. D., Mandan—May 6, by L. Nichols, aud. Morton Co., 0.56 mi. Project 1000, 7,260 sq.yd. paving, etc. $25,000.

N. D., Williston—May 7, by F. A. Hoare, aud. Williams Co., grading 11.5 mi. road between Tioga (Williams Co.) and White Earth (Mountrail Co.), $35,000.

Mo., Clayton—May 7, by St. Louis Co., grading and surfacing approximately 4 mi. Missouri Bottom, Aubuchon and Mehl Ave. Rds., 18 ft., telford macadam. $25,000. R. Jablonsky, Court House, engr. Noted Apr. 10.

Mo., Independence—May 6, by L. F. Koehler, engr., Independence, repairing Grandview Rd., 37,178 lin.ft. ditching and shoulder work, 37,178 sq.yd. macadam, concrete or raw hide; also Hickman Mills-Lee Summit Rd., 43,570 lin.ft. ditching and shoulder work, 53,142 sq.yd. macadam, rock asphalt or raw hide, for Jackson Co.

Ark., Springdale—May 17, by secy. Bd. Comrs., improvements in Paving Dist. 1, 5,300 lin.ft. concrete guttering, 3,000 lin.ft. concrete curb, 13,000 sq.yd. 5 in. concrete base, 13,000 sq.yd. asphaltic concrete, alternate 6 in. plain and rein.-con., 4,000 cu. yd. excav. $40,000-$48,000. Ratliff & Bird, Fayetteville, engrs.

Tex., Crowell—May 9, by J. E. Kinsey, city treasurer, 2,500 ft. curbs and gutters and 11,000 sq.yd. paving, brick, sheet asphalt, plain concrete or asphaltic concrete. F. E. Devlin, 614 Bitting Bldg., Wichita, Kan., engr. Noted Apr. 10.

Tex., Jacksboro—May 23, by J. D. McComb, judge Jack Co., grading, etc., 16.94 mi. State Highway 24, Federal Aid Project 437, 25 ft. $109,043. G. R. Johnston, co. engr.

Okla., Muskogee—Taking bids 9,700 yds. of 6 in. plain concrete paving. $40,000. J. R. March, Muskogee, engr.

Colorado—May 9, by State Hy. Dept., Denver, cement concrete paving 26,950 sq. yd. Federal Aid Project 283-A, Larimer Co., alternate on bituminous, $87,930; gravel surfacing 28,450 sq.yd. Federal Aid Project 266-A, La Plata Co., $26,992. L. D. Blauvelt, State Office Bldg., Denver, highway engr.

Ariz., Prescott—May 7, by W. C. Lefebvre, state engr., c/o Bd. Supervs. Yavapai Co., Sect. A, White Spar-Congress Junction Highway, Federal Aid Project 72-A, 33,000 cu.yd. roadway excav., 110,000 cu.yd. borrow, 28,000 cu.yd. surfacing, 1,480 cu.yd. concrete, 106,000 lb. reinforcing, etc.

Wash., Tacoma — May 7, by Comrs. Pierce Co., grading and concrete paving Milton-Edgwood Highway, Veterans Dr. and Summer-Buckley Highway. $100,000. C. H. Votaw, Tacoma, engr.

California—May 19, by State Highway Comn., Sacramento, grading 5.2 mi. highway between South San Francisco and Bway. Sta., San Mateo Co.; surfacing 6.9 mi. highway 2 mi. east of Parkfield Junction and Coalings, Fresno Co., crushed gravel or stone. R. M. Morton, state highway engr.

Quebec — May 12, by J. L. Boulanger, deputy minister Dept. Rds., Quebec, graveling 21,070 ft. Joliette-St. Jacques Highway, Joliette Co.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, from Cranford Co., 52 9th St., asphalt paving Bay 37th St. $6,387, Quentin Rd. $5,141, 56th St. $8,472, 78th St. $10,131, 81st St. $6,716; from Interstate Paving Co., grading, curbing and flagging East 7th St. $5,005; Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., asphalt paving East 7th St. $10,896, Ave. M $3,225, curbing and asphalt paving East 9th St. $7,035, recurbing and asphalt paving East 35th St. $13,682; from Cleveland Trinidad Paving Co., Flushing, asphalt paving Elderts Lane $9,311, Hubbard Pl. $6,864; from F. C. Cohart, grading Shepherd Lane $8,797; from Grimm Contg. Co., 170 McKinley St., grading, curbing and flagging Shepherd Ave. $6,150; from Galco Contg. Co., grading, curbing and flagging 81st St., $3,072. Noted Apr. 17.

Pa., Phila.—G. H. Biles, dir. Pub. Wks., City Hall, paving and curbing Delaware Ave. between Porter St. and Oregon Ave., granite blocks, from Acchine & Canuso, 804 South 12th St., $166,431. Noted Apr. 3.

Pa., Phila. — Bureau Highways, Dept. Pub. Wks., City Hall, paving, etc., from Eastern Paving Co., 401 Colonial Trust Bldg., asphalt repaving Almond, Livingston, Mercer, Salmon and Tilton Sts., $10,747, redressed granite block repaving on Callowhill St. $31,611; from Barber Asphalt Paving Co., 239 North 30th St., asphalt repaving Marlborough St. $7,926, Victoria and 23rd Sts. $16,430; from J. F. Nolen Sons, 64 Church Lane, redressed granite blocks on Baynton St. $15,517, Glenwood Ave. $11,041; from Mazzola & Marano, 414 North Gross St., Cherry, Hicks and Spring Sts. $14,800; from Dunlap & Williams, Ridge and Girard Sts., Walnut and 2nd Sts. $17,156, 12th St. $33,606; from M. J. McCrudden, Real Estate Trust Bldg., 58th St. $28,654; from United Paving Co., Real Estate Trust Bldg., curb and footway work in 1st Dist. $15,499; J. J. McHugh, 1617 Race St., curb and footway work in 2nd Dist. $7,544; from Union Paving Co., 30th and Locust Sts., furnishing asphalt paving mixtures $49,740; from Atlantic Refining Co., 260 South Broad St., furnishing and

Streets and Roads (Continued)

applying bituminous material $31,576; from Birdsboro Stone Co., 1004 Land Title Bldg., furnishing crushed stone $49,436; from J. Meehan & Sons, 916 West Dakota Ave., furnishing crushed slag, $13,938; from Sun Oil Co., Finance Bldg., furnishing oil $1,875.

Md., Baltimore — Bd. Awards streets listed in Contr. 254-OANA, 22,085 sq.yd. cement concrete, from Aiello Constr. Co., Gough and 4th Sts., $58,615; Contr. 255-OCNA, 18,240 sq.yd. cement concrete, from Arundel Constr. Co., Knickerbocker Bldg., $48,052. Noted Apr. 17.

W. Va., Clarksburg—Paving Bway., vitr. brick, from T. Pietro, Clarksburg, $25,313. Noted Apr. 17.

O., Cleveland — Improving (1) Gifford Ave. (2) West 20th St. (3) Wentworth Ave. (4) Forest Ave. (5) West 4th St. (6) Clairdoan Ave., from Baldwin Bros., 4500 Euclid Ave., (1) $17,203 (4) $25,636; Roehl Bros., 7002 Lorain Ave., (2) $6,230 (3) $14,587; Cleveland Trinidad Paving Co., The Arcade, (5) $5,310; Gould & Maybach, 15613 Saranec Rd., (6) $7,141. Work involves 10,140 lin.ft. stone curb, 7,250 lin.ft. 4 in. drain gutter, 5,750 cu.yd. earth excav., 11,905 sq.yd. vitr. brick and asphalt. Noted Apr. 10.

O., Cleveland—Cuyahoga Co. improving Kinsman Rd. 6, 28,560 lin.ft. 4 in. drain gutter, 58,400 cu.yd. earth excav., 4,200 sq.yd. (a) vitr. brick (b) concrete, from Lake City Constr. Co., Hickox Bldg., (a) $245,189 (b) $199,593. Noted Apr. 10.

Ind., Indianapolis — Marion Co., hard-surfacing 16,774 ft. East 10th St., 18 ft., from McCoun Constr. Co., Cumberland, $81,491. Engrs. est. $87,226. Noted Apr. 17.

Ind., Indianapolis — Marion Co., hard surfacing 3 mi. West Morris St. Rd., 24 ft., from O. J. Larkin, Greencastle, $78,400.

Ind., Newcastle—City, paving 1.17 mi. Spring St., 30 ft., 2 course concrete, from C. Minick, Newcastle, $2.46 per sq.yd.; 0.91 mi. South 17th St., and 1.1 mi. South 19th St., 30 ft., 2 course concrete, from M. McGrath, Newcastle, $2.53 per sq.yd. and $2.47 per sq.yd. respectively. Engrs. ests. $36,385, $31,005 and $34,760 respectively.

Ind., Sullivan—Sullivan Co., grading and gravel surfacing 11,195 ft. J. I. Adams Rd., 18 ft., from G. Unger, Carlisle, $26,194. Engrs. est. $32,382.

Ind., Winchester—Randolph Co., paving 14,080 ft. Marion Hill Rd., 18 ft., from J. L. Teegarden, Union City, $74,450. Engrs. est. $82,100.

Michigan—State Hy. Dept., at dist. office Marshall, grading and surfacing 0.893 mi. State Trunk Line Rd. 29-4, Calhoun Co., from Dovey, Kloosterman & Co., Batavia, $24,215. Noted Mar. 27.

Michigan — State Hy. Dept., at office Comrs. Clare Co., Harrison, grading and concrete surfacing 11,622 sq.yd. State Trunk Line Rd. 14-37, Clare Co., from Hudson & Coons, East Lansing, $31,625, 12,140 sq.yd. concrete on State Trunk Line Rd. 24-25, Sects. A and B Isabella Co., from Holmes, Crane & Bartling, Alma, $27,634. Noted Apr. 3.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete, from Detroit Asphalt Paving Co., 20 McGraw Bldg., Hendrie Ave. $10,504, Lewis Ave. $9,084, Springwells Ave. $6,335, Walton Ave. $21,183; from M. R. Hanna Co., 1636 Dime Bank Bldg., Byron Ave. $14,547, Grand Ave. $118,252, 14th Ave. $5,584, Griggs Ave. $14,961, Log Cabin Ave. $53,926, Princeton Ave. $38,995, Wilson Ave. $7,006; from Cooke Asphalt Paving Co., 1260 Penobscot Bldg., Dequindre St. $46,530.

Ill., Dwight—Grading, surfacing, etc., North, Seminole, Franklin, Washington, James, Waupansis, Mazon, Delaware and South Sts., rein.-concrete and brick on concrete, from Hartman-Clark Bros., Dwight, $118,825.

Ill., Waukegan—For 59,200 sq.yd. concrete, from Western Impvt. Co., 840 9th St., Racine, Wis., $2.68 and $2.75; 13,800 sq.yd. brick, from J. Cape & Son, 468 Water St., Racine, Wis., $1.71.

Wis., Marshfield—Concrete paving, etc., various streets, from Schaefer-Thompson Constr. Co., Marshfield, $108,973.

Wis., Two Rivers — Paving various streets, from E. J. Streu, Two Rivers, one course concrete $40,188, one course vibrolithic concrete $38,613, two course concrete $38,900.

Mo., Richmond Heights (St. Louis P. O.) —For 114,000 sq.ft. concrete paving, curbs, gutters, etc., on Bredell and Park Aves., from E. Watson, Victoria Bldg., St. Louis, $29,711 and $34,760. Engrs. est. $64,800.

Tex., Bay City—Matagorda Co. grading and shell surfacing 8.25 mi. State Highway 60, Federal Aid Project, 18,503 cu.yd. roadway, 9,733 cu.yd. borrow, 195 cu.yd. concrete, 20,219 cu.yd. shell, 17,502 lb. reinforcing, from P. G. Burns, San Bernardo, $61,911; drainage structures only on above, from L. C. Watson, Matagorda, $4,746. Noted Mar. 27.

Tex., Decatur—Wise Co. grading, surfacing with crushed stone and bridging 11.09 mi. State Highway 39, State Aid Project 471, 1,013 cu.yd. concrete, 20,191 cu.yd. crushed stone, 94,500 lb. structural and 93,703 lb. reinforcing steel, from E. K. Everhart, Chico, $89,907. Noted Mar. 27.

California—State Highway Comn., Sacramento, surfacing 9.7 mi. highway, Janesville and 4 mi. west of Milford, Lassen Co., crushed gravel or stone, from Warren Constr. Co., Bacon Bldg., Oakland, $47,921. Noted Apr. 10.

Calif., Daly City (Branch San Francisco) —Improving Templeton, Roosevelt Sts., etc., 640,000 ft. 4 in. concrete with 1½ in. asphaltic concrete surface, 40,000 cu.yd. grading, 290,000 sq.ft. cement walks, etc., from Pacific States Constr. Co., Call Bldg., San Francisco, $282,580. Noted Apr. 10.

Calif., San Anselmo—Improving Woodland, Ross, Tunstead Aves., etc., 302,292 ft. surfacing grading, 1,618 cu.yd. excav., 385,625 ft. asphaltic concrete surface, 4,162 tons asphaltic concrete base, gutters, curbs, etc., from Pacific States Constr. Co., Call Bldg., San Francisco, $132,250. Noted Apr. 10.

Calif., Los Angeles—Los Angeles Co. improving Pomona Blvd. east of Town of El Monte, shaping 16,000 sq.yd. roadway, removing 2,133 cu.yd. old macadam, replacing 16,000 sq.yd. sub-base, 16,000 sq.yd. concrete, shaping 4,800 lin.ft. shoulders (county will furnish 5,000 bbl. cement), from E. Johnson & Sons, Whittier, $26,108; Pomona Blvd. between Ellis Lane and Arden Dr., 3,080 tons asphaltic concrete, shaping 5,622 sq.yd. shoulders, 4 mi. haul, from Griffith Co., Railway Bldg., $25,050; Long Beach Blvd. between Lemon St., Compton, and boundary of Long Beach, 10,027 cu.yd. excav., removing 2,800 cu.yd. old macadam, shaping 18,004 sq.yd. roadway, 18,004 sq.yd. cement concrete, 18,004 sq.yd. sub-base, shaping 10,802 lin.ft. shoulders (county will furnish 5,500 bbl. cement), from Kuhn Bros., 429 Camino Real, Manhattan, $34,152; Western Ave., between Narbonne and Western Ave., Tract 6881, 95,900 cu.yd. excav., shaping 64,600 sq.yd. roadway, 1,550 lin.ft. corrugated iron pipe, various diameters, from C. E. Crowley, Pacific Electric Bldg., $45,600. Noted Apr. 3.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, plans 20 mi. macadam highway from Lindsay to Peterboro. $350,000. G. Hogarth, ch. engr.

CONTRACTS AWARDED

Maine—State Hy. Comn., Augusta, to Boone & Brewer, Presque Isle, graveling State Highway K Spur in following towns: Easton, $50,759, Lincoln, $50,074, Smyrna, $33,294; to M. Hughes, Bangor, State Highway D in Edgecomb $88,281; to McCabe & Giobannini, Boston, Mass., State Highway N in Edmunds, $65,585; to A. D. Bridges Sons, Inc., Hazardville, Conn., bituminous macadam paving in Raymond $78,269; Arborio Rd. Constr. Co., Hartford, Conn., State Highway B in Brighton, $104,086. Noted Apr. 3.

N. Y., Gloversville — Common Council curbing and paving various streets, 15,600 sq.yd. rein.-con., to M. Vrooman, 10 North Main St., $65,673. Noted Apr. 3.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., regrading, curbing, laying sidewalks, etc. on Beach Channel Dr., to E. A. Ferguson, $18,975; grading, curbing and laying sidewalks on Buckley St., to Welsh Bros. Contg. Co., 32 Queens St., Astoria, $5,720; grading, curbing, laying sidewalks, etc., on 89th Ave., to E. Block, $8,088. Noted Apr. 3.

N. Y., New York—H. Bruckner, pres. Bronx Boro., curbing, laying sidewalks, etc., on East 132nd St., to J. Meehan & Son, 74 Cortlandt St., $69,082, engrs. est. $32,000; paving Spencer Ave., bituminous concrete, and West 236th St., sheet asphalt, to Asphalt Constr. Co., 208 Bway., $14,445 and $27,951 respectively; curb and sidewalks on Erickson Pl., to P. J. Donovan, 30 Church St., $38,198; grading width 60 ft. in Laconia Ave., to I. F. Çavaluzzo, 1538 Walton Ave., $42,857; grade width 30 ft., etc., in West 232nd St., to Fordham Contg. Co., $29,975; setting curb and laying sidewalks, etc., in Gleason Ave., to Spedero & Turiana, 3185 East Tremont Ave., $3,836. Noted Apr. 24.

N. Y., New York—Park Bd., Municipal Bldg., repaving roadway of Spuyten Duyvil Parkway, to J. E. Gaffney, 428 East 91st St., $152,481. Noted Apr. 24.

N. Y., Poughkeepsie—Bd. Pub. Wks., Eastman Park Mansion, grading, curbing, paving, etc., 17,400 sq.yd. Reservoir Sq., Fountain Pl., Lexington and Manitou Aves., Montgomery, Cannon, South Clinton and Church Sts., to Spoor-Lasher Co., Inc., 54 Market St., $103,055. Noted Apr. 3.

N. J., Clifton—State Hy. Dept., Trenton, will pave Main St., here, by day labor. G. Fergusson, 315 East 34th St., Paterson, engr.

N. J., Salem—Salem Co., reconstructing Sect. 2, Pennsgrove-Pedricktown Rd., Sect. 1, Pedricktown-Woodstown Rd., and Sect. 1, Salem-Hancocks Bridge Rd., 27,330 sq.yd. bituminous macadam, 5,000 tons slag, 54,660 gal. bituminous binder, 570 lin.ft. 12- to 24-in. c.i. pipe, etc., to B. Foster Co., 20th and Venango Sts., Phila., $57,262; 208,000 gal. slow curing asphaltic oil applied to various roads, to Asphalt Serv. Co., 84 Bayard St., New Brunswick, $16,848; 13,342 gal. light hot asphaltic oil on Sect. 5, Pennsgrove-Salem Rd., to Headley Good Roads Co., Franklin Trust Bldg., Phila., $1,461. Noted Mar. 27.

N. J., Hopatcong—Sussex Co. (Newton) concrete paving Lakeside Blvd., here, to C. T. Kavanagh, Inc., 32nd St., Bayonne, $49,934. Noted Apr. 3.

Pa., Connellsville—City Council, brick paving on stone, Snyder and Jefferson Sts., to I. A. DePolo, Connellsville, $29,187.

Pa., Waynesburg—Comrs. Greene Co., 2,050 ft. concrete pavement on north side of Branthill, Franklin Twp., to Reed & Moore, Waynesburg, $39,930.

Md., Towson — Baltimore Co., concrete paving 1 mi. Ridge Rd. from end of concrete east, 14th Dist., and 0.5 mi. Windsor Mill Rd., 2nd Dist. from Hebbville, west, to Ward & O'Connell, New Amsterdam Bldg., Baltimore, $26,545 and $15,332 respectively; 1 mi. Bellona Ave., etc., to P. Reddington & Sons, 2 East Lexington St., $51,323.

Md., Towson—Baltimore Co., furnishing and applying 145,000 gal. tar or oil, Proposal 1, also furnishing 117,000 gal. patch material, f.o.b. plant, Proposal 2, to Standard Oil Co., Standard Oil Bldg., Baltimore, $0.135 per gal. Noted Mar. 20.

W. Va., Charleston — Grading and concrete paving 1 mi. Kanawha Two Mile Rd., 14 ft., Kanawha Co., to Greybill & Bruce, Charleston, $23,707. Noted Mar. 27.

W. Va., Madison—Boone Co., grading 4 mi. Van-Bald Knob Rd., 16 ft., to J. M. Cain & Co., Huntington, $38,160; 4 mi. Van-Browns Creek Rd., 18 ft., to McArthur & Hood, c/o H. J. Spelman, Robson-Prichard Bldg., Huntington, $52,998.

W. Va., Pineville—Wyoming Co., grading 4½ mi. Justice-Iaeger Rd., to S. T. Waller & Co., Williamson, $79,915.

N. C., Benson — Hard surfacing, etc., 65,000 sq.yd. various streets, to Hedrick Constr. Co., Lexington, $173,000. Noted Mar. 13.

N. C., Morganton—Hard surfacing Green and Avery Sts., etc., to Dixon Contg. Co., Savannah, Ga., $170,000. Noted Feb. 28.

S. C., Edgefield—Graveling section Dixie Highway, to C. T. Teague, Augusta, Ga., $29,759. Noted Apr. 3.

Fla., Winter Park — To Southern Clay Mfg. Co., Winter Park, asphalt paving portion Mizel, Phelps, Palmer, Rollins, Kentucky, French and Lakeview Sts., $35,518; vitr. brick paving portion Palmer and New England Sts., 16, 18 and 24 ft., $39,750, portion Indiana, New England, Henkle, etc., 16 and 20 ft., $25,083, Palmer St., 20 ft., $25,972, Alabama Dr., Lyman and West Park Sts., 16 to 20 ft., $25,432, Fairbanks, Comstock, Park and Lyman Sts., $28,222, Chase Ave. from Kentucky St. to Ola St., Kentucky, Chapman, Comstock, etc., $26,864.

Alabama—State Hy. Comn., Montgomery, concrete surfacing 17.455 mi. Federal Aid Project 100, Chilton Co., to Speed Parker, Norton Bldg., Louisville, Ky., $412,532; grading, to W. A. Taylor, Sylacauga, $119,021; bridges, to W. T. Weaver, $22,392. Noted Apr. 3.

Miss., Ecru — Paving 4 mi. sidewalks, single course 1-2-4 mix concrete, 5-6 ft., to Shannon Constr. Co., Pontotoc. Noted Apr. 10.

Miss., Port Gibson—Claiborne Co., grading and gravel surfacing 6.681 mi. Federal Aid Project 153-B and 168, to W. C. Stowell, Hazelhurst, 448.32 cu.yd. concrete $22, 47,298 cu.yd. gravel 1 mi. haul $0.90, ½ mi. overhaul $0.17, 82,981 cu.yd. excav., $0.27, etc. Noted Apr. 3.

Streets and Roads (Continued)

La., Bastrop—Morehouse Parish, 4 mi. concrete sidewalks to J. H. Hall, Bastrop, $25,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 3.065 mi. Sect. "A-2" Bellefontaine-Wapakoneta Rd., Auglaize Co., waterbound macadam, to Davis & Davenport Co., Spencerville, $16,547; 2.38 mi. Sect. "Nashville," plain and rein.-con., 2.38 mi. Sect. "J" and 1.678 mi. Sect. "L-2" both plain concrete, Mansfield-Millersburg Rd., Holmes Co., to Griggs & Anderson Co., Millersburg, $48,525, $17,506 and $31,350 respectively; 2.9 mi. Sect. "B-2" Newark-Mt. Vernon Rd., Knox Co., brick, to H. Strodbeck, Ashland, $101,444; 6.549 mi. Sect. "C and D" Euclid-Chardon Rd., Lake Co., rein.-con., to Ohio Contg. Co., Newman Stern Bldg., $226,981; 1.55 mi. Sect. "G" Bucyrus-Tiffin Rd., Seneca Co., bituminous macadam, asphalt, to W. H. and H. A. Souder, Fostoria, $36,961; 3.05 mi. Sect. "K" Tiffin-Bellevue Rd., Seneca Co., bituminous macadam, asphalt, to J. H. Blausey, Woodville, $57,991. Noted Apr. 24.

O., Cleveland—Improving Corsica Ave., to Gould & Maybach, 16311 Saranec Rd., $14,999; West 44th St., to Roehl Bros., 7002 Lorain Ave., $4,410; Cornado Ave., to Rieley Bros., The Arcade, $14,184; Hydraulic Ave., to Baldwin Bros., 4500 Euclid Ave., $5,516; East 37th St., to Cleveland Trinidad Paving Co., The Arcade, $20,106; West 59th St., to Garland Bros., Pavers Exch., $18,524. Work involves 7,973 lin.ft. stone curb and 4 in. drain tile gutter, 7,750 cu.yd. earth excav., 13,446 sq.yd. vitr. brick or asphalt on concrete.

O., Columbus—W. H. Duffy, dir. Pub. Serv., asphalt paving and widening 1,908 ft. Grant Ave., from 32 to 44 ft., to Cleveland Trinidad Paving Co., Grand Theatre Bldg., $31,712. Noted Apr. 17.

O., St. Clairsville — Belmont Co., improving 4.5 mi. Baileys Mills-Temperanceville Rd., 20 ft., to Miller & Wilson, Barnesville, $79,283. Engrs. est. $85,000. Noted Apr. 17.

O., Shaker Heights (Cleveland P. O.)—Grading and laying 182,000 lin.ft. stone sidewalks on 13 streets, to Ohio Quarries Co., Union Trust Bldg., Cleveland, $102,395.

Mich., Detroit—Grading and paving following alleys with one course 6 in. concrete, to Otis Cement Constr. Co., 806 Hammond Bldg., alley 1879 $2,283, 1883 $2,403, 1884 $7,373, 1890 $3,058, 1891 $2,082, 1892 $777, 1893 $2,363, 1896 $2,426, 1899 $1,944, 1906 $2,331, 1914 $3,079, 1915 $1,861, 1918 $2,008, 1919 $3,373; to T. E. Currie, 20 McGraw Bldg., 1880 $1,328, 1901 $5,385, 1905 $4,656, 1913 $4,768; to F. Porath, Jr., 305 Free Press Bldg., 1902 $2,905, 1903 $4,507, 1912 $3,550; to Bishop & Weir, 1305 Lafayette Bldg., 1881 $4,480, 1887 $4,485, 1888 $2,099, 1898 $1,892; to R. J. Powelson & Co., 6415 Iroquois Ave., 1882 $5,132, 1886 $6,535, 1889 $11,033, 1895 $1,950, 1907 $2,428, 1900 $2,940; to C. L. Lincoln, 8074 East Canfield St., 1885 $3,344, 1894 $4,650, 1897 $3,292, 1904 $2,532, 1910, $3,438, 1916 $5,267; to J. Porath, 903 Free Press Bldg., 1911 $3,585, 1917 $2,096; to Building Maintenance Corp., 1620 West Lafayette Ave., 1900 $2,766.

Ill., La Grange—Improving streets northwestern portion of village, 14,000 sq.yd. concrete, 14,000 lin.ft. curb and gutters, to J. Mackler Co., Chicago Heights, $83,128. Noted Apr. 3.

Wis., Janesville—Concrete paving various streets, to R. Birdsall Constr. Co., 1025 12th St., Racine, $374,296; portions between street railroad tracks and steam railroad tracks $9,426. Noted Apr. 24.

Wis., Madison—Paving, curbs and gutters on Woodrow, St. Paul and Vista Rds., one course concrete, 30 ft., to J. R. Cullinane, 618 West Doty St., $26,646. Noted Apr. 10.

Wis., Madison—Rein.-con. paving, curbs and gutters on McKinley and Waubesa Sts., Terry Pl., West Washington Ave., to J. F. Icke, Washington Bldg., $71,990; Kendall Ave. and Milwaukee St., to J. R. Cullinane, 618 West Doty St., $59,750; Rogers, Schurz, 7th, Vanhise, Welch and Whitier Sts., to O'Dea & Schafer, Oregon Rd., $32,080.

Wis., Milwaukee—Curbing and guttering Lapham, Burnham and Maple Sts., to W. T. Vanderboom, 97 32nd St., $4,204; concrete paving Locust St., to J. C. Bluhm & Son, 1298 Achilles Pl., $12,256, Montana St., to R. Cumz, 831 13th Ave., $9,499; grading, etc. 51st St., Meinecke and Prospect Aves., to Badger Constr. Co., 97 Wisconsin St., 1,938 cu.yd. grading $0.90, 1,858 sq.yd. light traffic asphalt $2.83, 1,973 lin.ft. curb and gutter $0.95, 8,621 sq.ft. cement walks $0.24, 5,439 sq.yd. old pavement removed $0.33, 5,439 sq.yd. new asphalt resurface $1.95.

Wis., Milwaukee — Paving with vibrolithic concrete, American Ave. and Clinton St., to Kroening Constr. Co., 39th Ave. and Mitchell St., $31,190, 14th, Harrison and Logan Aves., Montana and Martin Sts., to R. H. Gumz, 831 13th Ave., $76,533, Locust St. and Washington Pl., to A. Retzloff, 868 Island Ave., $15,070, 23rd Ave. and Rogers St., to Milwaukee General Constr. Co., 427 Mitchell St., $12,196, 21st St. to J. Bluhm & Son, 1298 Achilles Pl., $2,035; light traffic asphalt 50th St., to Badger Constr. Co., 97 Wisconsin St., $11,264.

Ia., Cedar Falls—Paving 11,360 sq.yd. with 8-in. vibrolithic concrete, to Dearborn Constr. Co., Waterloo, $2.58 per sq.yd., etc., total $36,010.

Ia., Centerville—Concrete paving 14,093 sq.yd. main streets, to Union Constr. Co., Des Moines, $39,744.

Ia., Davenport—Concrete paving 28 alleys, to W. D. Phelan, 313 Hazelwood Ave., $1.68 per sq.yd.; 10 alleys to Iowa Constr. Co., 419 Harrison St., $1.72 per sq.yd.; sheet asphalt paving 12 streets to Central Eng. Co., 809 Putnam Bldg., $2.58 per sq. yd.; bitulithic on 10 streets, to McCarthy Impvt. Co., Davenport, $2.69 per sq.yd. Noted Apr. 10.

Ia., Des Moines—Paving various streets, to Wright Constr. Co., 211 Flynn Bldg., 17,043 yd. 6-in. vibrolithic concrete $2.35, 5,374 sq.yd. 7-in. plain concrete $2.36; to Hawkeye Constr. Co., 402 Securities Bldg., 3,280 sq.yd. 6-in. vibrolithic concrete $2.51.

Ia., Manchester—Delaware Co., gravel surfacing 21.05 mi. road from Manchester west and north, 26 ft., 32,845 cu.yd. gravel, 1 mi. haul, 66,500 cu.yd. gravel ½ mi. haul, 8,000 cu.yd. stripping gravel pit, to Werneke Bros. & Jones, Oelwein, $25,322.

Minn., St. James—Wataonwan Co., will build Job 2401, State Rd. 15, 27,000 cu.yd. excav., 78,000 cu.yd. overhaul, two concrete bridges, each 30 ft. span, pipe culverts, by day labor; Job 2402 State Rd. 16, 56,000 cu.yd. excav., 165,000 cu.yd. overhaul, to O. Wenstrom, St. James, $0.26 per cu.yd. Noted Mar. 27.

N. D., Cando — A. T. Mooney, aud. Towner Co., grading 13.3 mi. Federal Aid Project 179, 104,804 cu.yd. excav., etc., to H. F. McCoy, Cando, $45,000. Noted Mar. 27.

N. D., Ashley—J. Billigmeier, aud. McIntosh Co., grading 12 mi. Federal Aid Project 216, 82,662 cu.yd. excav., to J. Herr, Jr., Ashley, $32,856, 534 lin.ft. 24 in., 274 ft. 30 in. and 2,034 ft. 18 in. portable culverts, to J. J. Rue & Sons, Baldwin, $5,536.

Mont., Polson—Lake Co. gravel surfacing Federal Aid Project 192 A and B, Arles-Ravelli Rd., to A. L. Markhus & Co., Missoula, $25,606, one 90 ft. steel pony truss bridge, Federal Aid Project 192 C, to D. Graham, Missoula, $12,370. Noted Apr. 10.

Missouri — State Hy. Dept., Jefferson City, paving 8,931 sq.yd. Hannibal-St. Louis Rd., Marion Co., concrete, to Cameron, Joyce & Co., Keokuk, Ia., $29,562; 4.308 mi. Albany-Stanberry Rd., 16 ft., Gentry Co., macadam, to E. C. Johnson, Carrollton, $48,027. Noted Mar. 6 and Apr. 3.

Mo., Richmond Heights (St. Louis P. O.)—Grading, concrete curbing, guttering and surfacing Park and Bredell Aves., to E. Watson, Victoria Bldg., St. Louis, $34,760 and $29,711 respectively.

Mo., St. Joseph—Concrete paving streets, to O. H. Schmidt, Bartlett Bldg., $31,130.

Mo., St. Louis — See "Buildings under Proposed Work."

Mo., St. Louis—Improving streets in Westmore Subdivision, 10,000 lin.ft. concrete curb and gutters, 40,000 sq.ft. concrete sidewalks, to Stolle Contg. Co., 5243 Delmar Blvd., $20,000, 13,000 lin.ft. curb and gutter, 50,000 sq.ft. pavement, to J. Graham, Victoria Bldg., $25,000.

Mo., Trenton—Grading and 6 in. rein.-con. surfacing 20 blocks, to Harrison Constr. Co., Des Moines, Ia., $61,497.

Ark., Walnut Ridge — Graveling and grading 56,899 sq.yd., also paving 9,760 sq.yd. with 2 in. asphaltic concrete on 6 in. base in Dist. 2, to C. Hager, Walnut Ridge, $85,000. Noted Feb. 7.

Tex., Crosbyton—For 31,000 sq.yd. brick paving and 7,300 ft. curb and gutter to Valient & Toomey, F & M Bank Bldg., Ft. Worth, $110,000.

Tex., Denison—Resurfacing Gandy St. from Houston to Perry Sts., rock asphalt, to Kaw Paving Co., 616 N. E. Bldg., Topeka, Kan. $65,000; paving Houston St. from Main to Chestnut Sts., 3 in. brick, to J. C. Fields, Denison, $3.15. Noted Mar. 27.

Tex., Italy—Paving various streets, 191,000 sq.yd. brick on 5 in. concrete, 10,600 ft. curb and gutter, 9,500 cu.yd. excav., to H. W. Greenway, 212 Hemphill St., Ft. Worth, $75,000. Noted Mar. 27.

Tex., Tyler—Smith Co. rein.-con. paving 1.75 mi. State Highway 31, Chandler Rd., 18 ft., to Tibbetts Constr. Co., Mineral Wells, $40,000.

Okla., Clinton — Grading and paving South 6th and East Choctaw Sts., Willite on concrete, concrete curb and gutter, to Western Paving Co., Trades Natl. Bank Bldg., Oklahoma City, $59,237.

Okla., Oklahoma City—Resurfacing with asphalt 12,000 sq.yd. Classen Blvd., to Western Paving Co., Tradesmens Bldg., $39,373. Noted Dec. 20.

Calif., Colusa — Colusa Co., improving Maxwell Sites Rd., 11,000 cu.yd. excav., 11,250 tons broken stone, 325 tons asphaltic oil Grade E, to J. E. Johnston, Savings & Loan Bldg., Stockton, $49,830.

Calif., Hawthorne — Paving Acacia and Birch Aves., Willite, to G. H. Oswald, 366 East 58th St., Los Angeles, $236,600.

Calif., Los Angeles—Improving St. Andrews Pl. between Sunset and Santa Monica Blvds., to G. R. Curtis, 2440 East 26th St., grading $6,000, 99,259 sq.ft. Warrenite-bitulithic $0.2625, 3,360 sq.ft. 2 in. bituminous base $0.12, 6,075 sq.ft. walks $0.22, 5,788 sq.ft. concrete gutter $0.39, sanitary sewer $4,900, etc., total $42,115; El Nido St. between Sherman Way and Saugus Ave., to G. H. Oswald, 366 East 58th St., grading $3,400, 104,156 sq.ft. asphaltic concrete $0.21, total $25,39[illegible]. Noted Apr. 10.

Calif., San Diego — Improving Girard Ave. and Coast Blvd., 118,601 sq.ft. 5 in. cement concrete, to D. H. Ryan, 1615 Fern St., $30,795. Noted Apr. 24.

Industrial Works

PROPOSED WORK

Mass., Boston—Service and Repair Shop—Y. D. Service Garage, Inc., 341 Newbury St., plans rein.-con., 18-20 Deerfield St. $200,000. Private plans.

Mass., Canton—Factory—Norfolk Japanneries, Inc., had plans prepared by J. O. DeWolfe, archt. and engr., 45 Bromfield St., Boston, four 1 story, 60 x 150 ft. factory units and 1 story, 30 x 40 ft. power house, brick and steel. $60,000.

Mass., Westfield—Factory—Amer. Abrasive Co., Union St., having plans prepared by M. B. Harding, 97 Elm St., 3 story, 40 x 90 ft., 1 story, 50 x 185 ft. and 2 story, 50 x 62 ft. factory units, brick and steel, also 35 x 125 ft. warehouse.

N. Y., Alplaus—Plant—Wassell-Mathieson Corp., Schenectady, plans brick plant, here. $75,000. Private plans.

N. Y., Brooklyn—Plant—E. R. Squibb & Sons, 36 Doughty St., soon lets contract rein.-con., brick and steel addition, plain foundation, Vine and Doughty Sts. $500,000. R. G. Cory, 30 Church St., New York City, archt. and engr.

N. J., Ridgefield—Mill—Lowe Paper Co., River St., soon lets contract 1 story, 40 x 250 ft., rein.-con., brick and steel, plain foundation. Frederick L. Smith, 21 East 40th St., New York City, archt. and engr.

Pa., Phila.—Generator Station—See "Unclassified" under Contracts Awarded.

W. Va., West Moreland—Plant—Huntington Sash and Cabinet Co., 19th St. and 2nd Ave., Huntington, plans 1 story plant, here. $50,000.

Va., Grundy — Machine Shop, etc.—Mountain Industrial Institute having plans prepared by Manhood & Van Dusen, Bluefield, W. Va., machine shop and central heating plant. $100,000.

Ga., Middlesboro — Plant — Compressed Coal Co., Savannah, plans plant, here. $40,000.

Miss., Shuqualak—Plant—City having preliminary plans prepared by H. A. Mentz, engr., Magnolia, electric light plant, equipment, distribution lines, etc. $40,000.

Tenn., Columbia—Plant—Southern Cities Power Co. plans 100 hp. addition to hydroelectric plant on Duck River, near here. To exceed $40,000.

Ky., Louisville—Plant—Louisville Gas & Electric Co., 311 West Chestnut St., plans addition to gas plant at Riverside station, near here, incl. steel and concrete smokestack, 197 ft. high, 14 ft. diam. at base. $175,000. F. Strong, c/o owner, ch. engr.

Ohio — Substations — Steubenville, East Liverpool & Beaver Valley Traction Co., East Liverpool, plans new substations at Steubenville, Costonia, Yellow Creek, Kountz Corner, East Liverpool, Industry and near Pennsylvania-Ohio state line.

Industrial Works (Continued)

for conversion of 22,000 volt alternating current to 625 volt dc. $175,000. C. A. Smith, genl. mgr.

O., Bedford—Factory, etc.—B. L. Marble Chair Co., c/o C. H. Parker, secy. and treas., had plans prepared by H. K. Ferguson Co., 4900 Euclid Ave., Cleveland, 4 story, 80 x 208 ft., factory, and 4 story, 30 x 72 ft., office, brick and steel. $250,000.

O., Zanesville — Factory — Lockwood, Greene & Co., archts., Hanna Bldg., Cleveland, soon take bids 3 story and basement, brick and rein.-con., here, for Mosaic Tile Co. $125,000. Noted Apr. 10.

Ind., Crown Point — Plant — Cummings Vote Register Co., Knox, plans plant, here. $40,000.

Ind., Muncie — Plant — Amer. Lawn Mower Co., 18th and Monroe Sts., plans 50 x 180 ft., concrete and steel addition.

Ind., Noblesville — Plant — Ball Bros., Muncie, plan additions and improvements to plant recently acquired here. $100,000.

Mich., French Landing (mail Romulus) —See "Dams."

Minn., Fosston — Creamery — Fosstons Farmers Co-operative Co. plans 2 story, brick and concrete. $40,000. J. Glade, secy. Engineer and architect not announced.

Tex., Austin—Mill—Planters & Manufacturers Cotton Mills Co., New Braunfels, having plans prepared by Lockwood Greene & Co., engrs., New Braunfels, cotton mill, 100,000 spindles and 300 looms, here. $1,000,000. S. M. Ransopher, genl. mgr.

Tex., Ft. Worth—Mill—Trinity Portland Cement Co., Commonwealth Bldg., Dallas, having revised plans prepared 4 kiln plant, 4,800 bbl. daily capacity, here. $2,000,000. Private plans.

Kan., Ft. Scott—Shops—Missouri-Pacific R.R. Co., Railway Exch. Bldg., St. Louis, Mo., plans to rebuild shops recently destroyed by fire, 1 and 2 story, brick and concrete. $200,000. E. A. Hedley, ch. engr.

Tex., New Braunfels—Power Plant—San Antonio Pub. Serv. Co., 201 North St. Marys St., San Antonio, plans steam turbine power plant on Guadalupe River, near here, power developed will be brought to San Antonio on transmission lines. $500,000. Private plans.

Tex., San Antonio — Mill — Planters & Manufacturers Cotton Mills, New Braunfels, having plans prepared by Lockwood Greene & Co., engrs., New Braunfels, cotton mill, 10,000 spindles and 300 looms, here. $1,000,000. S. M. Ransopher, genl. mgr.

Tex., San Marcos — Mill — Planters & Manufacturers Cotton Mills Co., New Braunfels, having plans prepared by Lockwood Greene & Co., engrs., New Braunfels, cotton mill, here. $1,000,000. S. M. Ransopher, genl. mgr.

Calif., Los Angeles—Plant—Willys-Overland Pacific Co., 1058 South Hope St., plans automobile testing and assembling plant, to contain 100,000 sq.ft. of floor space.

Calif., San Francisco—Factory—Amer. Steel & Wire Co., 16th and Folsom Sts., had plans prepared 2 story, frame addition to factory. $40,000. Private plans.

Calif., San Francisco—Automobile Repair Shop—H. E. Holmes, 774 Folsom St., having plans prepared by P. Righetti, 12 Geary St., 1 story, brick, 7th St. $45,000.

Ont., Guelph — Factory — Malt Products Ltd., Waterloo Ave., plans to rebuild factory recently destroyed by fire. Loss $140,000.

Que., Three Rivers—Station—Canadian Pacific Ry., Windsor St., Montreal, plans 2 story, 80 x 235 ft., granite stone, passenger station, Champflour St. between St. Martin and St. Maurice Sts. $1,000,000.

Ont., Leamington—Factory—H. J. Heinz Co., 1062 Progress St., Pittsburgh, Pa., plans addition to plant, here. $100,000.

BIDS DESIRED

N. Y., Brooklyn—Repair Shop—May 9, by Transit Comn., 49 Lafayette St., New York, furnishing and erecting structural steel for electrical repair shop at Coney Island Yard, here. G. McAneny, chn.

Ky., Louisville—Warehouse—R. J. Reynolds Tobacco Co., Swan and Kentucky Sts. taking bids and opens same about May 5, brick warehouse, 920 East Kentucky St. $88,000. Noted Jan. 10.

Wis., Madison — Laundry — Bd. Health, H. C. Buser, city clk., taking bids 2 story and basement, 36 x 70 ft., laundry and boiler house, brick, rein.-con. and steel, plain foundation. Claude & Stark, Badger Annex, archts. Noted Apr. 3.

Wis., Menomonie—Creamery—New Hudson Road Creamery, C. Oberle, secy., taking bids 2 story, 70 x 80 ft., brick and timber, plain foundation. $40,000. Private plans.

Ia., Cedar Rapids—Plant—May 19 (extended date), 2 story and basement, 60 x 140 ft., rein.-con., brick, tile and stone, 3rd Ave. and 5th St. E. $90,000. B. Rugh, 119½ 2nd Ave., archt. Noted Apr. 17.

Tex., Houston—Cotton Mill—J. A. Baker, Chamber of Commerce Bldg., taking bids 1 story, 40 x 133 ft., brick and steel, East Montgomery Rd. $500,000. J. E. Sirrine & Co., Greenville, S. C., engrs.

BIDS RECEIVED

Ky., Louisville — Workshop — Kentucky School for Adult Blind, Frankfort Ave., 2 story, 35 x 108 ft., from J. F. Russell, M. E. Taylor Bldg., about $75,000.

CONTRACTS AWARDED

Mass., Cambridge (Boston P. O.)—Plant —General Radio Co., 11 Windsor St., 3 story and basement, 50 x 95 ft., rein.-con., to W. H. Whitcomb Constr. Co., 6 Beacon St., Boston. Noted Mar. 20.

N. Y., Brooklyn—Bakery—General Baking Co., 342 Madison Ave., New York, 2 story, 212 x 255 ft., rein.-con., brick and steel, plain foundation, Washington Ave. near Lefferts Ave., here, to Turner Constr. Co., 244 Madison Ave. Archts. est. $300,000. Noted Jan. 24.

N. J., Newark — Tannery — Lasker & Bernstein, Inc., 481 New Jersey Railroad Ave., 4 story, rein.-con., brick and steel addition, to Reinstein & Haas, 128 East 101st St., New York City. Archts. est. $150,000.

Pa., Chester—Substation—J. T. Windrin, archt., Commonwealth Bldg., 1 story and basement, 60 x 136 ft. brick and steel, plain foundation, 6th St. below Welsh and Crosby Sts., to Irwin & Leighton, 126 North 12th St., Phila., for Delaware Co. Electric Co., c/o Phila. Electric Co., 10th and Chestnut Sts., Phila. Noted Apr. 3.

Pa., St. Clair — Shop — Pennsylvania & Reading R.R. Co., Reading Terminal, Phila., 1 story, 53 x 61 ft. brick and steel, plain foundation, to C. Ginrod, 10 South 18th St., Phila.

Pa., South Greensburg (Greensburg P. O.)—Plant—Railway & Industrial Eng. Co., will build 2 story, 68 x 220 ft. brick, steel and tile, by day labor. Private plans.

W. Va., Huntington — Plant — International Nickel Co., 67 Wall St., New York City, 1 story, 90 x 100 ft. plant, general contract to McClintic Marshall Co., Oliver Bldg., Pittsburgh, Pa.

N. C., Raleigh—Power Plant—State College of Engineering and Agriculture, auxiliary power plant, to J. A. Harvey, Charlotte, $107,600.

N. C., Spencer—Roundhouse, etc.—Southern R.R. Co., Southern Bldg., Wash., D. C., 37 stall roundhouse and flue shop, 51 x 155 ft., to L. W. Hancock, Constr. Co., Louisville Trust Bldg., Louisville, Ky., $260,000. Noted Apr. 3.

Miss., McComb — Cotton Mill — Landau Bros., will build 1 and 2 story, brick and concrete, by day labor. $150,000. Private plans.

O., Cleveland—Factory—Cleveland Chain & Mfg. Co., c/o L. B. Round, pres., Stop 3 A. B. C. Line, 1 story, 170 x 210 ft., brick and steel, to Forschner Co., East 10th St. and St. Clair Ave. Archts. est. $100,000.

O., Cleveland—Factory—Ohio Machine & Boiler Co., 1501 University Rd., 1 story, 64 x 100 ft., brick and steel, 1503 University Rd., to Skeel Constr. Co., 3719 Cypress Rd. Archts. est. $40,000.

Ill., Chicago — Factory — Graff Motor Coach Co., c/o Oman & Lilienthal, archts., 64 West Randolph St., 3 story, 74 x 144 ft., fireproof, Michigan and 37th Sts., to Federal Constr. Co., 64 West Randolph St. Archts. est. $150,000.

Ill., Chicago—Factory—Williamson Candy Co., 4701 Armitage Ave., 3 story, 174 x 221 ft., fireproof, 4701-17 Armitage Ave., to H. Ericsson Co., 139 North Clark St. Archts. est. $250,000.

Wis., Madison—Factory—Burgess Battery Co., Main and Brearly Sts., 2 story, 60 x 150 ft., brick, rein.-con. and steel, addition, plain foundation, Main St., to A. D. and J. V. Frederickson, 702 East Main St. Est. $75,000.

Wis., Milwaukee — Factory — Eagle Chemical Co., 243 Grove St., 2 story, 40 x 100 ft., brick and timber, plain foundation, Hanover St., to W. G. Williams, 352 Jackson St. $40,000.

Wis., North Milwakuee—Factory, etc.—O. H. Kindt Mfg. Co., 986 47th St., Milwaukee, 2 story, 62 x 150 ft., brick and timber, plain foundation, also 1 story, 60 x 92 ft. warehouse, and 32 x 40 ft. boiler house-dry kiln, Cedarburg Rd., to R. Zils, 294 Grand Ave., Wauwatosa. $75,000.

Wis., Sturgeon Bay—Factory—Pleck Ice Cream & Dairy Co., 2 story, 52 x 75 ft., brick and timber, to E. Olson, Sturgeon Bay, $40,000.

Ia., Des Moines—Power Plant—See "Unclassified."

Ia., Ft. Dodge—Plant—American Cement Plaster Co., 2 story and basement, to W. J. Zitterell, Webster City. Est. cost $65,000.

Kan., West Wichita—Factory—Bushong Candy Co., 1018 West Douglas St., Wichita, 2 story and basement, rein.-con. and brick, plain foundation, Oak and Douglas Sts., to Underhill Constr. Co., 131 North Emporia St., Wichita. Est. cost $50,000. Noted Oct. 18.

Calif., San Francisco — Shop — Kleiber Motor Truck Co., 11th and Folsom St., 2 story, concrete, 10th and Folsom Sts., to Austin Co. of Calfornia, Sante Fe Bldg., $165,000. Noted Feb. 28.

Buildings

PROPOSED WORK

Me., Portland—Exchange—New England Telephone and Telegraph Co., 50 Oliver St., Boston, plans exchange, brick and steel, here. $150,000-$185,000.

Conn., Manchester—Theatre—S. Campner and D. Pouzzner, 129 Church St., New Haven, having plans prepared by J. A. Tuck, Boston, and J. Weinstein, associated archt., Metropolitan Bldg., New Haven, theatre, Main St., here. $200,000.

N. Y., Binghamton—Hospital—Bd. Mgrs. Binghamton City Hospital had plans prepared by W. H. Whitlock, S. M. Bldg., addition. To exceed $150,000.

N. Y., Binghamton—School—Bd. Educ. plans school, Fayette, Hawley and Stuyvesant Sts. $500,000.

N. Y., Binghamton — School — Common Council plans Christopher Columbus School in 7th Ward. $400,000. Engineer and architect not selected.

N. Y., Buffalo—Church—Building Com. United Presbyterian Church plans gray brick and Indiana limestone, McKinley Parkway. $150,000. G. M. McKnight, 410 South Park Ave., pastor.

N. Y., Buffalo—Dance Hall—Buffalo & Crystal Beach Corp. plans dance hall. $150,000. G. C. Hall, 113 Newman Pl., chn. executive com.

N. Y., Buffalo—Office—Buffalo General Electric Co., Genesee and Washington Sts., plans 4 story, 100 x 200 ft., rein.-con. and brick, Genesee St. $200,000.

N. Y., Buffalo—Office, etc.—Huyler Candy Co., 350 Main St., had plans prepared by J. Horton, Prudential Bldg., 3 story, 150 x 190 ft., rein.-con., brick and steel, office and factory, Delaware Bldg. To exceed $150,000.

N. J., Camden — Lodge — B. P. O. E., Federal St. and Bway., plans lodge on 80 x 160 ft. lot, 7th and Cooper Sts. $400,000. A. Austermuhl, 1519 Wildwood St., secy.

N. Y., Flushing—School—Bd. Educ., 500 Park Ave., New York, withdrew bids (Apr. 22), P. S. 32, 35th Ave. from 171st to 172nd Sts., here. Will readvertise. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr. Noted Apr. 3.

N. Y., Geneva—Clubhouse—Bd. Dirs. Knights of Columbus, 68 Castle St., plans clubhouse. $185,000. Address J. P. Rice, member building com. Engineer and architect not selected.

N. Y., Hudson Falls — Garage — J. B. White Motor Co., Inc., plans brick, concrete and steel garage. $150,000. J. B. White, pres.

N. Y., Ilion — Temple — Ilion Lodge of Masons plans addition. $150,000-$200,000. Address A. T. Pilson, Ilion, master.

N. Y., Ithaca—Hotel—C. Taylor, Cayuga Heights, having preliminary plans prepared by H. J. Hardenburgh, archt. and engr., 47 West 34th St., New York City, brick, steel and stone, plain foundation. $600,000.

N. Y., Jamestown—Bank and Office—Natl. Chautauqua Co. Bank plans 3 story and basement, brick, steel, concrete and Ohio stone addition, Main and 2nd Sts. To exceed $150,000.

N. Y., Elmira—Theatre, Office and Store —Gibson & Van Demark plan theatre, office and store, State St. $150,000.

Buildings (Continued)

N. Y., New York — Apartment — One Forty-Five East 73rd St. Corp., c/o J. E. R. Carpenter, archt. and engr., 598 Madison Ave., had plans prepared 14 story, brick, steel and stone, plain foundation, East 73rd St. $500,000.

N. Y., New York — Garage — Alumor Realty Co., c/o C. N. Whinston & Bro., archts. and engrs., 2 Columbus Circle, having plans prepared 7 story, 75 x 100 ft., rein.-con., plain foundation, 195 Washington St. $200,000.

N. Y., New York — High School — St. Patricks Cathedral c/o R. J. Relley, archt. and engr., 50 East 41st St., having plans prepared 7 story, 100 x 180 ft., brick, steel and stone, plain foundation, Lexington Ave. and 50th St.

N. Y., New York—Loft and Office—Eisendrath & Horwitz, archts. and engrs., 18 East 41st St., preparing plans 14 story, brick, steel and stone, plain foundation, 54 West 39th St. $500,000. Owners name withheld.

N. Y., New York — Office — New York Life Insurance Co., 346 Bway., having plans prepared by Cass Gilbert, archt. and engr., 244 Madison Ave., brick, steel and stone, plain foundation, Madison Ave. and 26th St. $200,000.

N. Y., New York—Office—Cova Realty Co., c/o C. N. Whinston & Bro., archts. and engrs., 2 Columbus Circle, having plans prepared 10 story, 58 x 125 ft., brick, steel and stone, plain foundation, Bway. and 60th St. $250,000.

N. Y., New York—Synagogue—Congregation Sheareth Israel, c/o C. N. Whinston, archt. and engr., 2 Columbus Circle, having plans prepared brick, steel and stone, plain foundation, Intervale Ave. and Southern Blvd. $150,000.

N. Y., Ogdensburg—School—Bishop Conroy, Catholic Diocese, plans brick, concrete and steel. $200,000. D. D. Kieff, Flower Bldg., Watertown, archt.

N. Y., Rochester — Hospital — Building Com. Highland Hospital, south Ave. and Bellevue Dr., had plans prepared by Arnold & Stern, 154 East Ave., 4 story, 52 x 108 ft., brick, concrete and steel addition. $150,000. Noted Nov. 1.

N. Y., Rochester—Parish House—Building Com. of Vestry of Christ Episcopal Church had plans prepared by Foote & Carpenter, 154 East Ave., 2½ story and basement, brick, concrete and steel. To exceed $150,000.

N. Y., Rome—High School—Election May 6, $400,000 bonds, new high school, Linden and Turin Sts. F. W. Marks, pres. Bd. Educ. Noted Apr. 10.

N. Y., Syracuse—Store and Office—White & Dennison Estates had plans prepared by M. L. King, Snow Bldg., 4 story, 221 East Fay St. $200,000.

N. Y., Troy—Office and Bank—Natl. City Bank plans 3 story and basement, State and 3rd Sts. $200,000-$225,000.

N. J., Bridgeton—Hospital—Stearns & Woodnutt, archts., Stephen Girard Bldg., Phila., rejected bids Apr. 14, brick and steel, plain foundation, Irving and Magnolia Sts., here, for Bridgeton Hospital Assn. Plans will be revised. Noted Apr. 10.

N. J., Hoboken—Theatre—C. N. Whinston & Bro., archts. and engr., 2 Columbus Circle, New York City, having plans prepared 82 x 110 ft., brick, steel and stone, plain foundation, here. $260,000. Owner's name withheld.

N. J., Rutherford—School—Bd. Educ. plans new school. $350,000. Address H. N. Morse, 901 Berkely Ave., Trenton, bus. mgr. State Bd. Educ.

Pa., Bethlehem—Community—Bethlehem Jewish Community Centre Assn., c/o A. Patruch, Wyandotte Hotel, having plans prepared by D. Levy, 949 Hamilton St., Allentown, 3 story and basement, 100 x 130 ft. brick and steel, plain foundation, South Side, $150,000.

Pa., Johnstown—Church and School—St. Rochus Catholic Church, E. Kajic, rector, plans 3 story and basement, rein.-con., brick and steel, on 130 x 205 ft. site, Garfield St. $200,000.

Pa., Neversink (Reading P. O.)—Sanitarium — Comrs. Berks Co., Courthouse, Reading, having plans prepared by A. F. Smith & Son, Berks Co. Trust Bldg., Reading, 3 story and basement, rein.-con. and stone, $300,000.

Pa., Phila.—Church—Second Church of Christ Scientist, c/o Day & Klauder, archts., Franklin Bank Bldg., having plans prepared 1 story, 75 x 110 ft. rein.-con. and brick, plain foundation, Greene Ave. and School Lane. $175,000.

Pa., Phila.—Institute—Seamans Church Institute, Walnut and Dock Sts., having revised plans prepared by Ballinger Co., 12th and Chestnut Sts., 3 story and basement, Walnut and Dock Sts. Former bids rejected. Noted Jan. 31.

Pa., Phila.—Service and Loft—Breyer Ice Cream Co., 8th and Comberland Sts., having plans prepared by W. F. Koelle, 26th and Oxford Sts., 6 story and basement, 80 x 90 ft. rein.-con. and brick, plain foundation, 45th St. below Woodland St. $200,000.

Pa., Phila.—Store—Frank & Sedar, 11th and Market Sts., having plans prepared by Ballinger Co., 12th and Chestnut Sts., 12 story and basement, 78 x 108 ft. steel and tile addition, plain foundation.

Pa., Phila. — Theatre — Stanley Co. of America, 1214 Market, 1214 Market St., having plans prepared by Hoffman-Henon Co., Finance Bldg., theatre, Overington and Frankford Aves., and one at 54th and Wynnewood Aves.

Pa., Reading—High School—School Bd. having plans prepared by Ritcher & Eiler, 147 North 5th St., 3 story and basement, brick, Oley St. $300,000.

Del., Wilmington — Club House — Wilmington City Club, N. H. Fenn, Jr., chn. building comn., Du Pont Bldg., having plans prepared by E. W. Martin, 2301 Spruce Pl., clubhouse. $200,000.

Md., Baltimore—Professional—Physicians and Surgeons Bldg., Inc., c/o A. F. Olsen, Physicians Exch., 3935 Cedar Ave., plans 8 story, stone, brick and steel, Cathedral and Richmond Sts. $1,000,000. Parker, Thomas & Rice, Union Trust Bldg., archts.

D. C., Wash.—Apartment—Kaleb Apartment Co. having plans prepared by Stern & Tomilson, Continental Trust Bldg., 14th and H Sts. N. W., apartment house, 11th and K Sts. $200,000.

W. Va., Charleston—Church Addition—First Presbyterian Church having plans prepared by C. C. and E. A. Weber, Ingalls Bldg., Cincinnati, O., 3 story addition. $150,000.

W. Va., Huntington — Garage — Motor Car & Truck Co. plans 3 story garage, service and repair station. About $150,000.

W. Va., Huntington — Hotel — F. C. Prichard having plans prepared by H. Z. Deitz, Indianapolis, Ind., 13 story, rein.-con. and steel, 6th Ave. and 9th St. $2,500,000.

W. Va., Mannington—School—Election May 15, $200,000 bonds for school. Noted Mar. 27.

W. Va., Morgantown—High School—Bd. Educ. having plans prepared by E. B. Lee, Chamber Commerce Bldg., Pittsburgh, Pa., high school, here. $600,000.

W. Va., Parkersburg — Hotel — E. A. Brast Co., plans 6 story, 44 x 171 ft., rein.-con. addition. $150,000. Pennington & Lewis, 477 5th Ave., New York City, archts.

W. Va., Wheeling — Bank and Office — Union Trust Co. having plans prepared by C. W. Bates, 77 12th St., 10 story and basement, 68 x 120 ft., rein.-con. and brick. $600,000.

N. C., Salisburg—Schools—Election June 3, $300,000 bonds, new school buildings.

Miss., Starkville — Hotel — Starkville Hotel, R. Goodman, pres., having plans prepared by N. W. Overstreet & Co., Jackson, 3 story, Main and Jackson Sts. $150,000.

Tenn., Chattanooga—Hotel—Chamber of Commerce having preliminary plans prepared by J. B. Pound, archt., c/o owner, modern fireproof hotel on Look Out Mountain, near here. $200,000. S. R. Read, Flat Iron Bldg., pres.

Tenn., Jackson—Court House—Madison Co. plans court house on Public Sq. $500,000.

Tenn., Knoxville — Hospital — Tennessee State Baptist Convention, Nashville, plans hospital, here. Committee appointed to formulate plans. $500,000.

Tenn., Knoxville—Y. W. C. A., Clinch and Walnut Sts., plans dormitories, club rooms, etc. $200,000. Engineer and architect not selected.

Tenn., Memphis—Apartment—A. Thomas and R. Cohen, had plans prepared by E. W. Mann, Madison Ave. Bldg., 2 story, incl. laundry, garage, etc., veneer brick, tile and stone, Madison and Florence Sts. $150,000.

Tenn., Memphis—School—University of Tennessee having plans prepared by Jones & Furbringer, Porter Bldg., 1 story addition, rein.-con. and brick, Madison and Union Sts. $150,000.

Tenn., Nashville — Bank and Office — Nashville Trust Co., 233 3rd Ave. N., plans 12 story, 3rd and Union Sts. $800,000.

Ky., Ashland—School—Bd. Educ. plans election $200,000 bonds for schools.

Ky., Louisville—Apartments—W. J. Murphy, 1148 Bardstown Rd., plans 6 small apartments in Cherokee Village, suburb of Louisville. $160,000.

Ky., Louisville—High School—Bd. Educ. having plans prepared by A. G. Tafel, Coleman Bldg., 2 story and basement, manual training high school, Burnett St. and Pindell Ave. To exceed $150,000.

Ky., Lyndon — Institution — Kentucky Childrens Home Society having plans prepared by Nevin, Wischmeyer & Morgan, Starks Bldg., Louisville, 2 story and basement, 75 x 95 and 35 x 39 ft. $150,000.

Ky., Owensboro—Church—St. Stephens Catholic Church having plans prepared by F. Erhart, Norton Bldg., Louisville, church, Locust and White Aves. $150,000.

Ky., Wilmore—College—Asbury College plans to rebuild 2 dormitories recently destroyed by fire. $150,000.

O., Bedford — Office — See "Industrial Works."

O., Cincinnati — Apartment — Belvidere Building Co., Burnet and McMillan Sts., plans 11 story, rein.-con. and stone, Reading Rd. $2,000,000. C. H. Ferber, 102 Dixie Terminal Blgd., archt.

O., Cincinnati—Store and Loft—J. C. Avery Estate, 211 East 4th St., plans rein.-con., Race St. $300,000. H. Hake, Telephone Bldg., archt.

O., Cleveland—Apartment—M. Goodman, 201 Ulmer Bldg., having sketches made by M. Altschuld, 5116 Woodland Ave., 3 story, 42 x 127 ft., brick, East 143rd St. and Lake Shore Blvd. $150,000.

O., Cleveland—Apartment—A. Permut, 11405 Saywell Ave., having plans prepared by A. F. Janowitz, 811 Prospect Ave., 3 story and basement, 36 x 146 ft., brick, Hampshire and Coventry Rds. $150,000.

O., Cleveland — Apartments — L. Witt, 1635 Belmar Rd., had plans prepared two 2 story and basement, 43 x 95 ft., brick and timber, 1362 West Blvd. $150,000. Private plans.

O., Cleveland—Church—W. C. Jansen, archt., Electric Bldg., soon takes bids 1 story and basement, 72 x 127 ft., brick and steel, East 81st St., for St. Lawrence Catholic Church, 3547 East 80th St. $150,000. Taking bids now for foundation. Noted Feb. 21.

O., Cleveland—Commercial—J. J. Klein, Engineers Bldg., having plans prepared by F. W. Bail, Hanna Bldg., 4 story and basement, 83 x 130 ft., brick, steel and concrete, West 3rd and Front Sts. $250,000.

O., Cleveland—Commercial and Apartment—Syndicate, c/o A. W. Haiman, Society for Savings Bldg., plans commercial building and apartment, each 3 story, brick, Carnegie Ave. and East 86th St. $200,000. Morris & Weinberg, 3608 Euclid Ave., archts.

O., Cleveland—Hospital—Mt. Sinai Hospital, 1800 East 105th St., having sketches made by C. R. Greco, 11 Beacon St., Boston, Mass., addition. $1,000,000.

O., Cleveland—Hotel—Hotel Hollenden Co., c/o H. Mack, pres. East 6th St. and Superior Ave., had plans prepared by Watson Co., 4614 Prospect Ave., remodeling brick and stone, East 6th St. and Superior Ave. Noted Jan. 11, 1923.

O., Cleveland—Store—G. S. Rider & Co., archts., Century Bldg., soon takes bids 3 story and basement, 67 x 96 ft. and 35 x 85 ft., brick and steel addition, West 25th St., for J. Meckes & Sons Co., 1920 West 25th St. $150,000.

O., Cleveland Heights (Warrensville P. O.)—Apartment—S. Newman, 10710 Drexel Ave., Cleveland, plans 3 story and basement, brick and timber, Overlook Rd., here. $150,000. A. F. Janowitz, 811 Prospect Ave., Cleveland, archt.

O., Columbus—Store—M. Rieser having plans prepared by J. Q. Adams, Southern Hotel, 3 story and basement, 84 x 97 ft. brick and terra cotta, Main and 3rd Sts. $300,000.

O., Steubenville—Theatre—Biggio Bros. Co. soon takes bids new theatre. $250,000.

Mich., Detroit—Apartment—J. I. Weinberg, archt., 401 Congress Bldg., preparing plans 3 story and basement, 72 x 133 ft. brick and steel, plain foundation, Helen Ave. $150,000. Owners name withheld.

Mich., Muskegon — High School — Bd. Educ. having plans prepared by H. H. Turner, 923 Michigan Trust Bldg., Grand Rapids, 3 story and basement, 230 x 265 ft. rein.-con., brick and steel, plain foundation. $750,000.

Mich., Detroit — Mercantile — Crowley Milner Co., Gratiot Ave. and Farmer St.

SEWERS—CHICAGO, ILL.

Following are lowest three bids opened Mar. 13, by Sanitary Dist. of Chicago, for Elmwood Park Outfall, (A) American Sewer & Drain Constr. Co., Kenilworth St. and Central Park Ave.; (B) Mid-City Eng. Corp.; (C) Carmine Roberts. The unit bids were as follows:

	A	B	C
1,030 lin.ft. sewer 8 ft. interal width	$42.[illegible]	$51.00	$50.00
3,970 lin.ft. sewer 6 ft. interal width	31.01	37.00	30.00
4,950 lin.ft. 24 in. tile pipe sewer	19.22	14.33	20.00
100 lin.ft. 18 in. tile pipe sewer	5.87	10.23	6.00
450 lin.ft. 15 in. tile pipe sewer	5.07	8.90	5.00
Junction chamber at Harlem Ave. (lump sum)	1,322.67	2,200.00	1,500.00
Junction chamber at 78th Ave. (lump sum)	1,301.33	1,500.00	1,000.00
Outfall (lump sum)	2,153.88	2,500.00	7,000.00
Pumping station (lump sum)	23,803.63	15,950.00	22,000.00
Railroad crossing (lump sum)	1,339.33	2,600.00	1,000.00
220 lin.ft. manholes on concrete sewers	8.24	15.00	10.00
220 lin.ft. manholes on tile pipe sewers	9.76	16.00	10.00
138,000 lb. reinforcing steel	08	.05½	06
20,000 lb. iron castings and miscellaneous metals	10	10	15
2 cu.yd. brickwork	50.00	50.00	20.00
5 cu.yd. rock excavation	5.00	5.00	5.00
50 cu.yd. additional excavation	3.00	13.00	3.00
10 cu.yd. additional concrete class A	16.00	16.00	16.00
20 cu.yd. additional concrete class B	14.00	14.00	14.00
20 cu.yd. additional concrete class C	13.00	13.00	13.00
50 M. ft. b.m. additional sheeting and bracing	40.00	40.00	40.00
Extended totals	$314,755	$319,517	$323,545

WATER-WORKS—KANSAS CITY, MO.

Following are lowest three bids opened Mar. 11, by M. H. Raming, city purch. agt., for additional water supply, (1) Missouri Valley Tunnel, Contr. No. 1, (A) Tibbets & Pleasant, 229 North Nogales St., Tulsa, Okla., (awarded contract); (B) Morrow & Son and Phelan-Shirley Co., Omaha, Neb.; (C) B. Hayes, Inc., Detroit, Mich.; (2) East Bottoms and Turkey Creek Tunnels, Contr. No. 2, (A) Byrne Bros. Constr. Co., 358 East 115th St., Chicago, (awarded contract); (B) Booth & Flinn, Ltd., Pittsburgh; (C) T. Kelley & Sons, Inc., Kansas City, Mo. The unit bids were as follows:

Contract No. 1	A	B	C
15,000 cu.yd. earth excavation in open cut	$1.48	$6.00	$4.00
100 cu.yd. rock excavation in open cut	1.64	10.00	20.00
20 lin.ft. sinking shafts in earth	63.00	60.00	250.00
610 lin.ft. sinking shafts in rock	98.00	80.00	250.00
46,000 cu.yd. excavation in tunnel	15.96	14.00	18.00
100 cu.yd. enlargement of shaft and tunnel in rock	25.61	14.00	20.00
100 M.ft. b.m. permanent timbering in tunnel	87.00	160.00	80.00
Handling water in shafts and tunnel during construction (lump sum)	44,000.00	40,000.00	20,000.00
1,200 cu.yd. concrete masonry in shafts	27.50	18.00	30.00
19,000 cu.yd. concrete masonry in tunnel	17.10	17.50	7.00
1,300 cu.yd. concrete masonry in open cut	12.85	18.00	30.00
100 cu.yd. excess concrete masonry in shafts and tunnel	5.00	5.00	5.00
100 cu.yd. dry packing in tunnel	6.56	8.00	10.00
400 lin.ft. drilling holes in rock or masonry	.82	4.00	2.50
5,000 lin.ft. steel pipe for grouting	.82	1.00	1.00
Making connections for grouting (1,000)	3.28	3.00	1.00
800 ton sand for grout	3.67	6.00	2.50
2,000 cu.yd. mixing and placing grout	9.10	12.00	20.00
40,000 bbl. portland cement	2.60	3.40	2.50
100,000 lb. steel for reinforcing concrete	.05	.05	.10
300 lin.ft. 12-in. vitrified pipe	5.74	3.00	3.33⅓
50,000 lb. caring for and setting metal work furnished by city	.019	.06	.28
Locker houses (lump sum)	2,460.00	2,800.00	7,500.00
Hydrostatic test (lump sum)	3,850.00	5,000.00	20,000.00
Extended totals	$1,395,412	$1,412,300	$1,484,500

Contract No. 2	A	B	C
600 cu.yd. earth excavation in open cut	$2.75	$3.90	$2.00
206 lin.ft. sinking waterway shafts in earth	350.00	247.00	278.00
504 lin.ft. sinking waterway shafts in rock	350.00	187.00	275.00
290 lin.ft. sinking construction shafts in earth	150.00	237.50	350.00
420 lin.ft. sinking construction shafts in rock	150.00	187.00	316.00
50,000 cu.yd. excavation in tunnel	18.15	20.00	19.25
100 cu.yd. enlargement of shaft and tunnel in rock	10.95	10.00	25.00
100 M.ft. b.m. permanent timbering in tunnel	100.00	100.00	150.00
Handling water in shafts and tunnel during construction (lump sum)	4,000.00	100.00	0,000.00
1,000 cu.yd. concrete masonry in shafts	30.00	20.00	22.25
22,000 cu.yd. concrete masonry in tunnel	16.00	15.00	20.00
300 cu.yd. concrete masonry in open cut	20.00	15.00	20.00
100 cu.yd. excess concrete masonry in shafts and tunnel	5.00	5.00	5.00
100 cu.yd. dry packing in tunnel	5.00	5.00	10.00
400 lin.ft. drilling holes in rock or masonry	1.00	.50	2.00
6,000 lin.ft. steel pipe for grouting	.50	.65	.50
Making connections for grouting (2,000)	1.50	.50	1.50
1,000 ton sand for grout	3.75	4.00	2.10
3,000 cu.yd. mixing and placing grout	4.10	16.00	10.00
50,000 bbl. portland cement	3.00	2.75	3.50
90,000 lb. steel for reinforcing concrete	.07	.06	.07
500 lin.ft. 12-in. vitrified pipe	2.00	2.00	1.00
90,000 lb. caring for and setting metal work furnished by city	.07	.03	.03
Locker houses (lump sum)	15,000.00	15,000.00	20,000.00
Hydrostatic test (lump sum)	4,000.00	10,000.00	5,000.00
Extended totals	$1,873,295	$1,890,185	$2,199,438

Buildings (Continued)

having preliminary plans prepared by Smith, Hinchman & Grylls, 800 Marquette Bldg., 10 story and basement, about 80 x 100 ft. rein.-con., brick and steel, plain foundation, Library Ave.

Mich., Detroit—Office and Warehouse—General Electric Co., 1501 Dime Bank Bldg., having plans prepared 5 story and basement, 75 x 200 ft. rein.-con. and brick, plain foundation, 3rd and Antoinette Sts. $175,000. Private plans.

Mich., Highland Park (Detroit, P. O.)—Hospital—Highland Park General Hospital having plans prepared by G. W. Graves, 41 John R St., Detroit, 3 and 4 story, rein.-con. and brick, plain foundation. $200,000.

Ill, Chicago—Apartment—T. R. Bishop, archt., 35 South Dearborn St., plans 3 story and basement, fireproof, 6446 Kenwood St. $375,000.

Ill., Chicago — Club House — Edgewater Athletic Club, c/o H. Lincoln Co., 161 West Harrison St., plans 8 story and basement, fireproof, North Side. $1,500,000.

Ill., Chicago—Convent—Owner, c/o J. W. McCarthy, archt., 139 North Clark St., plans 2 story and basement, 25 x 165 ft., fireproof, 6337 Wentworth St. $250,000.

Ill., Chicago — Hospital — Presbyterian Hospital, 1755 West Congress St., having plans prepared by Berlin & Severn, 19 South La Salle St., 8 story and basement, 35 x 45 ft., fireproof addition, Congress and Wood Sts. $250,000.

Ill., Granite City — Lodge and Office — Knights of Pythias, c/o P. S. Pender, 2319 D St., soon takes bids 5 story and basement, brick, stone and concrete. K. M. Viththum & Co., Inc., 605 North Michigan St., archt.

Wis., Antigo—Hotel—S. J. McMahon, 425 East Water St., Milwaukee, and F. Cremer, 392 61st St., Milwaukee, plan 3 story and basement, brick and concrete addition to Hotel Butterfield, plain foundation. $150,000. Engineer and architect not selected.

Wis., Jefferson—High and Grade School—School Bd., R. K. Henry, clk., having plans prepared by Van Ryn & De Gelleke, archt., 114 Grand Ave., Milwaukee, and J. E. Heimerl, associated archt., 220 34th St., Milwaukee, 3 story, brick and tile, plain foundation. Noted Apr. 10.

Wis., Kenosha—High School—School Bd. E. F. Powers, secy., had plans prepared by J. D. Chubb, 109 North Dearborn St., Chicago, 3 story and basement, brick, tile and concrete, plain foundation. $1,000,000. Noted Apr. 10.

Wis., Madison — Hospital — St. Marys Hospital Assn., W. F. Lorenz, pres., Brooks St., making plans and takes bids in May, 4 story, 250 x 300 ft., brick, rein.-con. and steel, plain foundation. $750,000. Private plans.

Wis., Madison—Laboratory—Natl. Chemical Research Council, c/o J. H. Mathews, Chemistry Bldg., plans 4 story, 100 x 125 ft., brick, rein.-con. and steel, plain foundation. $750,000. Engineer and architect not selected.

Wis., Milwaukee—Apartment—Biltmore Grande Realty Co., c/o S. Loftus, 3220 Grand Ave., having preliminary plans prepared by Rosman & Wierdsma, 490 Bway., 5 or 7 story, brick and concrete, plain foundation, Grand Ave. $500,000.

Wis., Shawano—Grade School—School Bd., R. W. Davies, supt., having plans prepared by Parkinson & Dockendorff, Linker Bldg., La Crosse, 2 story and basement, brick, tile and concrete, plain foundation. $175,000.

Wis., Wausau — Hotel — Hotel Wausau Co., c/o W. Schroeder, 86 Michigan St., Milwaukee, having plans prepared by Holabird & Roche, 104 South Michigan Ave., Chicago, 8 story and basement, brick and concrete, plain foundation, Scott St. $1,000,000. Noted Dec. 27.

Wis., West Allis—Exhibition—State Fair Assn. had plans prepared by E. G. Schroeder Co., engrs., 405 Bway., Milwaukee, 1 story, 250 x 300 ft., brick and steel, plain foundation. $150,000.

Wis., West Bend—School—Holy Angels Congregation, J. E. Heyde, pastor, having plans prepared by O'Meara, Hills & Krajewski, Merchants Natl. Bank Bldg., St. Paul, Minn., 2 story and basement, brick and tile, plain foundation. $150,000. Noted Jan. 17.

Minn., Appleton—High School—Bd. Educ. plans 2 story and basement, 75 x 140 ft., brick and steel. $150,000. A. L. Smith, clk. Engineer and architect not selected.

Minn., Minneapolis — Home — General Womens Auxiliary, Twin City Shriners Hospital, M. Iverson, chn., 3805 Aldrich Ave. S., having preliminary sketches made by Bertrand & Chamberlin, 616 Northwestern Bank Bldg., 2 story and basement, rein.-con., brick and tile, 20th Ave. and East River Blvd. $150,000.

Minn., Minneapolis—Home—Volunteers of America, 708 Globe Bldg., plans 2 story and basement, rein.-con., brick and tile, 40th St. and Thomas Ave., $150,000. G. R. Smith, chn. advisory com.

Minn., St. Paul—Apartment—Hamline-Snelling Holding Corp. having plans prepared by Baucher & Orth, 500 Shubert Bldg., 3 story and basement, 120 x 132 ft., wood joist, rein.-con., brick and tile, Snelling Ave. and Blair St. $150,000.

Minn., St. Paul—School—Dept. Educ. rejected bids opened Apr. 8, 3 story and basement, rein.-con., brick and tile, York St. and Walsh Ave. Noted Apr. 17.

Kan., Great Bend—High School—Bd. Educ. voted $212,000 bonds for school. T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, archts. Noted Apr. 10.

Kan., Kansas City—Dormitory—Western University, 27th St. and Parkway, having plans prepared by Rose & Peterson, 434 Brotherhood Bldg., 4 story and basement, 152 x 156 ft., brick and stone. $200,000.

Neb., Omaha—Medical Arts—Madison-Kedzie State Bank, had plans prepared by W. S. Crosby, 17 North LaSalle St., Chicago, and takes bids about May 1, com-

Buildings (Continued)

pleting 13 story, 66 x 132 ft., 17th and Dodge Sts. $400,000. Steel frame erected.

Neb., Omaha—Schools—Election in May to vote on $2,700,000 bonds, grade and high schools.

Wyo., Casper — High School — Garbutt, Weidner & Sweeney, archts., Consolidated Royalty Bldg., takes bids about June 1, Junior High School, 4 story, 272 x 312 ft., rein.-con. and brick, South Elm St. $700,000. Noted Oct. 11.

Mo., Columbia—Church—Northern Presbyterian Conference, c/o First Presbyterian Church, plans 2 story and basement, rein.-con. and local stone. $300,000. Engineer and architect not named.

Mo., Hannibal—Schools—Bd. Educ. takes new bids within 2 weeks remodeling and additions to Douglass and South Grade Schools. $150,000. Former bids rejected. Beuttler & Arnold, 405 Grain Exch., Sioux City, Ia., archts. Noted Apr. 10.

Mo., St. Louis—Hospital—Hoener, Baum & Froese, archts., 3605 Laclede Ave., takes bids about June 1, 4 story, 65 x 160 ft., rein.-con., brick and stone, Carter and Newstead Aves., for Christian Hospital, 3540 Grand Blvd. $275,000. Grading contract awarded to Fruin-Colnon Contg. Co., Merchants Laclede Bldg. Noted Apr. 24.

Mo., St. Louis—Hotel—Hotel Jefferson Co., 12th and Locust Sts,, soon takes bids 13 story and basement, 220 x 275 ft., rein.-con., brick, stone, terra cotta and steel addition, Locust and 13th Sts. $3,000,000. T. P. Barnett & Co., Arcade Bldg., archts.

Ark., Hot Springs — Hospital — Mosaic Templers of America having preliminary plans prepared by J. P. Almand, Boyle Bldg., Little Rock, 6 story and basement, rein.-con., brick and stone, Malvern Ave. $300,000.

Ark., Little Rock—Warehouse—Terminal Warehouse Co., 812 East 2nd St., soon takes bids 4 story and basement, 100 x 305 ft., rein.-con. and brick. $200,000. W. Dill, 605 Boyle Bldg., archt.

Ark., Paragould—High School—Bd. Educ. having preliminary plans prepared 2 story and basement, rein.-con., brick and stone. $160,000. Engineer and architect not selected.

Ark., Texarkana — City Hall — Voted $200,000 bonds for city hall, Walnut and 3rd Sts. Noted Mar. 27.

Ark., Texarkana — Municipal — Voted $200,000 bonds municipal building, 3rd and Walnut Sts. $200,000. Engineer and architect not selected.

Ark., Texarkana—School—Voted $200,000 bonds, school improvements. C. H. Page & Bros., Austin Natl. Bank Bldg., Austin, Tex., archts.

Tex., Amarillo — College — Northwest Texas Conference Methodist Church, c/o G. W. Shearer, plans new college. $1,000,000. Engineer and architect not selected.

Tex., Breckenridge—Courthouse—Stephens Co., E. F. Ritchey, co. judge plans 4 story and basement, brick and concrete, court house and jail. $300,000. Engineer and architect not selected.

Tex., Ft. Worth—Store—J. I. Burgess, Forest Park Blvd., having plans prepared by R. O. Jameson, engr., Southwestern Life Bldg., Dallas, and W. G. Clarkson & Co., archts., First Natl. Bank Bldg., 6 story and basement, concrete and brick, Houston St. $325,000.

Tex., Houston—Art Museum—Houston Museum of Fine Arts, J. T. Scott, secy., plans 2 wing additions, brick and stone. $200,000. Engineer and architect not announced.

Tex., Houston — Warehouse — K. H. Easter, Second Natl. Bank plans concrete and brick warehouse. $150,000.

Tex., Mineral Wells — School — Election May 8, $250,000 bonds, brick school. Address J. F. Wright, secy. Bd. Trustees.

Tex., San Antonio—Hotel—G. W. Hahn, 405 Meerscholdt St., having preliminary sketches made by Seutter & Simons, Moore Bldg., rein.-con., brick and stone, plain foundation, about 10 story and basement, Star, Bonham and Bowie Sts. $500,000.

Okla., Gutherie—High School—Bd. Educ. rejected bids 2 story and basement, Harrison St. Will revise plans and readvertise. $178,000. Noted Apr. 3.

Okla., Stillwater—Dormitory—State Bd. Agriculture, Oklahoma City, making preliminary plans 3 story and basement, rein.-con., brick and stone, here. $150,000.

Okla., Tulsa — Hospital — Forest Park Hospital Assn., having preliminary plans prepared by W. E. Moore, engr., 511 Mayo Bldg., and A. C. Fabry, archt., 213 Commercial Bldg., 5 story and basement, 80 x 110 ft., rein.-con., brick, steel and stone. $350,000.

Colo., Denver—High School—School Dist., Canon City, having plans prepared by E. Groves, Foster Bldg., 3 story, brick and concrete. $200,000.

Colo., Denver—Shrine Temple—El Jebel Shrine, 1770 Sherman St., plans 3 story, East 16th Ave. and Grant St. $600,000. Engineer and architect not selected.

Calif., Anaheim—High School—Anaheim Union High School Dist. plans to vote on $200,000 bonds for high school.

Calif., Bell — High School — Huntington Park Union High School Dist. having preliminary plans prepared by Train & Williams, Western Mutual Life Bldg., Los Angeles, branch high school, concrete and brick, here. $200,000 or more.

Calif., Berkeley — Auditorium and High School—City plans to vote on $1,000,000 bonds, auditorium and high school. E. M. Hann, city clk.

Calif., Carmel — Hotel — E. A. Shipley plans fireproof, Ocean and San Antonio Aves. $200,000.

Calif., Crescent City — Hotel — H. W. Webber, representing interests, plans fireproof. To exceed $150,000. Engineer and architect not selected.

Calif., Los Angeles—Exchange—Southern California Telephone Co., 740 South Olive St., having plans prepared by J. and D. Parkinson, Title Insurance Bldg., 3 story (ultimately 7 story) and basement, 75 x 100 ft., brick and steel, Meredian St.

Calif., Los Angeles—Office—H. Siskin, c/o J. M. Cooper, archt., Marsh-Strong Bldg., having palns prepared 13 story and basement, 80 x 175 ft., rein.-con., Main St. near 7th St. To exceed $400,000.

Calif., Los Angeles—Store and Office—E. Fesser, et al., 1232 West 5th St., having preliminary plans prepared by C. F. Skilling, Bradbury Bldg., 12 to 14 story, 125 x 175 ft., fireproof, probably steel and concrete, 6th St.

Calif., Los Angeles — Store, Office and Garage—Rampart Blvd. Co., c/o F. Dorn, archt., Marsh-Strong Bldg., having plans prepared 2 story, 150 x 207 ft., brick, 6th St.

Calif., Los Angeles—Store and Office—Stanton, Reed & Hibbard, archts., Metropolitan Bldg., preparing plans 2 story and basement, 125 x 160 ft., brick, Westmoreland and 7th Sts. $150,000. Owner's name withheld.

Calif., Los Angeles—Theatre and Store—Gable & Wyant, archts., 634 South Western Ave., preparing plans 2 story, 95 x 145 ft., brick or rein.-con., 118th Ave. and Main St. Owner's name withheld.

Calif., Los Angeles—Theatre, Store and Office—West Coast Theatres, Inc., et al., Knickerbocker Bldg., plans 6 story, fireproof, East Colorado St. $500,000 or more.

Calif., Monterey—Theatre and Store—Golden State Theatre & Realty Co., c/o M. Jorgenson, 110 Sutter St., San Francisco, having plans prepared, fireproof, here. $150,000.

Calif., Monrovia—Theatre and Store—F. R. Alexander, c/o Colonial Theatre, plans fireproof, West White Oak Ave. $150,000. Engineer and architect not selected.

Calif., Oakland—Church—First Congregational Church of Oakland, c/o J. G. Howard, archt., 1st Natl. Bank Bldg., having working plans prepared, Class A, probably rein.-con., Harrison and 26th Sts. $250,000.

Calif., Pomona—Apartment Hotel—Pomona Community Hotel Co., having plans prepared by S. C. Lee, Douglas Bldg., Los Angeles, 3 story, 145 x 235 ft., brick, Holt and Towne Aves. $250,000. Noted Jan. 3.

Calif., Redondo Beach—Schools—Redondo Beach School Dist. plans to vote on $275,000 bonds for schools.

Calif., Sacramento—Hotel—J. A. Clecak, 807 J St., representing eastern interests, plans 4 story or more, fireproof, 11th and I Sts. $150,000 or more. Engineer and architect not selected.

Calif., Sacramento — Office, Store and Theatre—M. T. Jorgensen, archt., 110 Sutter St., preparing plans brick, theatre will seat 1,500, Oak Park Dist. $150,000. Owner's name withheld.

Calif., San Francisco—Theatre—Crescent Theatres, Inc., 644 Bway., having plans prepared by A. Schroepfer, 68 Post St., 1 story rein.-con., Jackson St. $150,000.

Calif., San Francisco — Theatre, Office and Store—Golden State Theatre & Realty Corp., c/o M. T. Jorgensen, 110 Sutter St., having plans prepared Class A, probably rein.-con., Irving St. near 15th Ave. $150,000.

Calif., San Gabriel—Mausoleum—Western Mausoleum Co., c/o Starrett & Payne, archts., Western Mutual Life Bldg., Los Angeles, having plans prepared 1 story, rein.-con., granite and stone, here. $155,000.

Calif., San Jose—Store and Office—Saint Claire Realty Co., c/o Weeks & Day, archts., 315 Montgomery St., San Francisco, having plans prepared 5 story and basement, rein.-con., 1st and San Carlos Sts. $400,000.

Calif., San Leandro (Branch of Oakland) — Theatre — J. Hoorwitz, c/o Hayward Theatre, Hayward, plans fireproof, Ward St., here. $150,000. Engineer and architect not selected.

Que., Montreal—Exchange—Bell Telephone Co. of Canada, Notre Dame St. W., plans 3 story, 80 x 90 ft. rein.-con. and brick, Papineau Ave. $150,000.

Que., Westmount—School—Comrs. plan 2 story, 110 x 200 ft. addition to Roslyn School, rein.-con., brick and stone, Western Ave. $150,000. Ross & McDonald, Belmont St., Montreal, archts.

Ont., Toronto — Bank — Royal Bank of Canada, Royal Bank Bldg., plans 3 story and basement, rein.-con., brick and steel, plain foundation, Danforth Ave. $150,000. Engineer and architect not selected.

Ont., Ottawa—Archives—Dominion Government, Dept. Pub. Wks., Parliament Bldg., plans about 5 story and basement, rein.-con., brick and steel addition, plain foundation, $275,000. R. C. Wright, Parliament Bldg., archts.

BIDS DESIRED

Mass., Revere — School — May 6, by School Com., 2 story, 113 x 170 ft., brick and timber, Ward 2. $150,000. E. J. Wilson, 109 State St., Boston, archt.

N. Y., Industry—Hospital—May 14, by W. Whitney, pres. Bd. Mgrs. State Agricultural & Industrial School, rebuilding hospital. S. W. Jones, Albany, state archt.; adv. E. N.-R. May 1.

Pa., Bethlehem—Station—May 5, by K. M. Marchison, archt., 101 Park Ave., New York City, 1 story, 40 ft. high, 105 x 136 ft. brick limestone and tile, plain foundation, for Lehigh Valley R.R., 228 South 3rd St., Phila., G. T. Hand, ch. engr., and Phila. & Reading R.R., Terminal, Phila. S. F Wagner, ch. engr.

Pa., Canonsburg—High School—G. W. Brugger, archt., Canonsburg, taking bids 1 story and basement, 62 x 216 ft. brick and steel for Bd. Educ. $150,000.

Pa., Phila.—Apartment—See "Contracts Awarded."

D. C., Wash.—Church and Community—May 6, by Hamline Methodist Episcopal Church, 1500 9th St., church and community house, stone, 16th and Allison Sts. $300,000. C. W. Bolton & Son, Schaff Bldg., Phila., archts. Noted Jan. 31.

Fla., Tampa—Office—May 15 (change of date), by V. M. Antuono, 1316 Spring St., and F. O. Adams, Jr., Grand Theatre, 16 story, brick and steel, Lafayette and Tampa Sts. Hentz, Reid & Adler, 92½ North Forsyth St., Atlanta, Ga., archts. Noted Apr. 17.

La., Monroe—Court House—May 14, by Quachite Parish Police Jury, 3 story, rein.-con., brick and stone. $400,000. J. W. Smith, Monroe, archt.

La., New Orleans—Hotel—May 15, by Favrot & Livaudais, archts., Hibernia Bank Bldg., constructing new Roosevelt Hotel, 17 story, 170 rooms, Baronne St., for Guarantee Development Co., Roosevelt Hotel. $2,000,000.

La., New Orleans — Office — Union Indemnity Co., Union St., taking bids 15 story, brick and limestone, Baronne and Gravier Sts., $1,750,000 to $2,000,000. M. Goldstein and Favrot & Livaudais, Hibernia Bank Bldg., archts.

O., Cleveland—Apartment—W. S. Ferguson Co., 1900 Euclid Ave., taking bids and opens same about May 10, 4 story and basement, brick, steel and concrete, East 90th St. and Euclid Ave., for 90th Euclid Co., c/o architects. $250,000. Noted Mar. 20.

O., Cleveland—Church, Gymnasium and Sunday School—First Evangelical Church, 841 Thornhill Dr., taking bids 1 story, brick, stone, steel and concrete, Thornhill Dr. $150,000. Corbusier & Lenske, B. F. Keith Bldg., archts. Noted Feb. 28.

Buildings (Continued)

O., Cleveland — Theatre and Garage — Seventy-Ninth Hough Co., c/o L. Abrams, Engineers Bldg., taking bids 1 story, 60 x 116 ft. and 116 x 240 ft., brick and steel, East 79th St. and Lexington Ave. $150,000. Steffens & Steffens, Fidelity Mortgage Bldg., archts.

O., Columbus—Office—May 26, by N. L. Packard, Cook & H. H. Heistand, archts., Eaton, 4 story and basement, 62 x 187 ft., rein.-con. and brick, South 3rd St., for Dispatch Printing Co. $400,000.

O., Independence—School—May 9, by Independence Village School Dist., 2 story and basement, 98 x 143 ft., brick, steel and concrete addition. $150,000. Fulton & Taylor, 8120 Euclid Ave., Cleveland, archts.

O., St. Clairsville—Hospital—May 12, by Belmont Co., tuberculosis sanatorium, National Rd., approximately 4½ mi. west of here. C. W. Bates, 77 12th St., Wheeling, W. Va., archt. Noted Feb. 14.

Ind., Gary—Lodge—Masonic Lodge taking bids 4 story and basement, 83 x 103 ft., rein.-con., brick and steel, 6th St. $150,000. J. T. Hutton & Son, Hammond Bldg., Hammond, archts.

Ind., Michigan City — Business — F. W. Warren, 719 Franklin St., taking bids 5 story and basement, 83 x 165 ft., rein.-con., brick and steel, Franklin St. $300,000. Ahlgrim & Boonstra, Michigan City, archts.

Mich., Detroit — Amusement — Crane & Kiehler, archts., 542 Griswold St., taking bids and opens same about May 15, 1 and 2 story, 200 x 300 ft. rein.-con., brick and steel, plain foundation, Jefferson Ave., for Jefferson & Belle Isle Realty Co., 1254 Griswold St.

Mich., Detroit — Office — R. H. Marr, archt., McKerchey Bldg., taking bids and opens same about May 8, 7 story and basement, 50 x 80 ft. rein.-con. and brick, plain foundation, Brainard St. $150,000. Owners name withheld.

Mich., Ironwood—Store and Office—N. A. Nelson, archts., Glassner Bldg., taking bids and opens same about May 5, 2 story and basement, 84 x 120 ft. concrete and brick, plain foundation, for Seaman Building Corp., 113 South Suffolk St. $150,000.

Mich., Pontiac—High School—May 9, by Bd. Educ., R. Hazelton, business mgr., 3 story and basement, 93 x 229 ft. and 78 x 129 ft. rein.-con., brick, steel and stone, plain foundation, Sanford St. $500,000. Malcomson & Higginbotham, 1217 Grswold St., Detroit, archts.

Ill., Chicago — Apartment — B. Harris, 3130 Palmer Sq., taking bids 3 story and basement, 90 x 160 ft., fireproof, Central Park, near Sunnyside. $150,000. E. Steinborn, 111 North Dearborn St., archt.

Ill., Chicago—Apartment—H. K. Holsman, archt., 37 South Wabash St., taking bids 4 story and basement, fireproof, 56th and University Sts. $150,000. Owners name withheld.

Ill., Chicago — Store and Office — A. S. Alschuler, archt., 28 East Jackson St., taking bids 3 story, 142 x 145 ft., fireproof, Roosevelt and St. Louis Sts., for D. Schetnitz, c/o architect. $300,000. Noted Apr. 3.

Ill., River Forest (Oak Park P. O.)—Church, etc.—May 6, by Holmes & Flinn, 8 South Dearborn St., Chicago, 1 and 2 story, 61 x 112 ft. and 85 x 95 ft., brick, stone and concrete, church and parish house, etc., for First Presbyterian Church, here. $200,000. Former bids rejected. Noted Apr. 3.

Wis., Shorewood (Milwaukee P. O.) — High School—May 9, by School Dist. 4, H. Kuechenmeister, clk., 3 story and basement, 97 x 180 ft. (1st unit) brick, tile and concrete, plain foundation, Oakland Ave. $285,000. Herbst & Kuenzli, 114 Grand Ave., Milwaukee, archts. Noted Dec. 27.

Wis., White Fish Bay—Grade School—May 10 (extended date), by School Dist. 1, W. A. Klatte, clk., 2 story and basement, 92 x 116 ft., brick, concrete and tile, plain foundation. $150,000. M. Tullgren & Sons, 425 East Water St., Milwaukee, archts. Noted Apr. 24.

Ia., Tipton—School—May 12, by C. Miller, secy. Bd. Educ., 2 story and basement, rein.-con., brick and stone, plain foundation. $265,000. Thomas, McLenan & Thomas, 527 West 27th St., Des Moines, archts. Noted Mar. 31.

Minn., Duluth—Hotel—May 10 (extended date) by M. Tullgren & Sons, archts., 425 East Water St., Milwaukee, Wis., 13 story and basement, brick and concrete, plain foundation, for Hotel Duluth Co., c/o W. Schroeder, 86 Michigan St., Milwaukee. $1,250,000. Noted Apr. 24.

Kan., Lawrence—Hotel—May 12, by W. E. Hulse & Co., archts., Hutchinson, 6 story and basement, 100 x 117 ft., brick and stone, for Stamey Hotel Co., here. $180,000.

S. D., Platte—School—May 7, by Bd. Educ., 2 story and basement, 63 x 149 ft. rein.-con., brick, stone and tile. $150,000. Perkins & McWayne, Sioux Falls, archts.

Ark., El Dorado—Church—W. B. Boone, archt. Eldorado, and R. H. Hunt & Co., associated archts., James Bldg., Chattanooga, Tenn., taking bids and opens same about May 7, 2 story and balcony, brick and stone. $200,000. Noted Mar. 6.

Calif., Marysville — Hotel — E. Glass, archt., Underwood Bldg., San Francisco, taking bids and opens same about May 19, 5 story and basement, to contain 140 rooms, rein.-con., here, for Marysville Hotel Co., c/o architect. Noted Apr. 3.

BIDS RECEIVED

O., Akron—City Hall—Bd. Control, Apr. 21, 8 story, brick and steel, South High St., from Moran Constr. Co., Terminal Bldg., $659,386. Noted Apr. 17.

Colo., Denver — High School — School Dist., 4 story, 280 x 417 ft., general contract, from Arvid Olson, Denham Bldg., $1,058,314; heating, from McCarty-Johnson Heating and Eng. Co., 1440 Curtis St., $149,948; plumbing, from Johnson & Davis, 427 15th St., $43,889; electric wiring, from J. Fisher, 213 15th St., $38,492. Noted Mar. 27.

Calif., Los Angeles — Club — Womens Athletic Club, c/o Allison & Allison, archts., Hibernian Bldg., 7 story and basement, 150 x 156 ft., rein.-con., general contract from Macdonald & Driver, Douglas Bldg., $486,500 (not including stone and sheet metal work, marble, etc.). Noted Mar. 20.

Calif., Santa Monica — High School — Santa Monica Junior High School Dist., brick and frame, junior high school, general contract from A. Johnson, 1007 South Grand Ave., Los Angeles, $145,970. Noted Apr. 3.

CONTRACTS AWARDED

Mass., Orange—School—Bd. Educ., brick, steel and stone, plain foundation, to Hoyt Constr. Co., Holyoke. Archts. est. $150,000.

N. Y., Haverstraw — Club — Tooker & Marsh, archts. and engrs., 101 Park Ave., New York City, 2 story, brick, steel and stone, plain foundation, here, to Dykens & Seaton, Haverstraw, for B. P. O. E. Archts. est. $150,000. Noted Apr. 3.

N. Y., Jamaica—School—Bd. Educ., 500 Park Ave., New York, P. S. 95, 90th Ave., here, to H. H. Harris, $424,880. Noted Apr. 3.

N. Y., Lockport — Schools — Bd. Educ., schools on High and Clinton Sts., to Laur & Mack Constr. Co., 1400 College Ave., Niagara Falls, $312,000. Noted Feb. 21.

N. Y., New York—Apartment—Lexington Ave. Building Corp., 111 Bway., 15 story, brick, steel and stone, plain foundation, 151 East 79th St., to George A. Fuller, 175 5th Ave. Archts. est. $500,000.

Pa., Ardmore — Bank — Ardmore Natl. Bank, 1 story and basement, 32 ft. high, 40 x 93 ft. and 24 x 53 x 60 ft. brick and steel, plain foundation, to F. G. Stewart, 1520 Locust St., Phila. Archts. est. $150,000. Noted Apr. 3.

Pa., Camp Hill—Clubhouse—Seeburger & Rabenold, archts., Weightman Bldg., Phila., 2½ story and basement, here, to A. R. Raff, 1635 West Thompson St., Phila., for Manufacturers Club, Broad and Walnut Sts., Phila. Archts. est. $150,000. Noted Apr. 10.

Pa., McKees Rocks—School—Bd. Educ., 2 story and basement, brick and steel, to J. G. Fullman Co., E. E. Trust Bldg., Pittsburgh. Archts. est. $150,000.

Pa., Merion (Phila., P. O.)—Apartment—Merion Apartment Co., 217 South Broad St., Phila., 4 story and basement, 40 x 290 ft., 40 x 100 ft., and 40 x 75 ft., Idris Rd., here, to C. C. Pace, Cynwyd. Archts. est. $500,000.

Pa., Phila. — Apartment — Rose Constr. Co., North American Bldg., will build 15 story and basement, 63 x 173 ft. brick and steel, 21st and Walnut Sts., by day labor. $2,500,000. Ballinger Co., archts., 12th and Chestnut Sts., taking sub bids. Noted Apr. 10.

Pa., Phila.—Exchange—Bell Telephone Co., 17th St. and Parkway, 3 story and basement, 119 x 127 ft. brick, steel and tile, plain foundation, 16th and Jefferson Sts., to J. N. Gill Constr. Co., City Centre Bldg. Archts. est. $600,000. Noted Mar. 27.

Pa., Phila. — Nurses Home — Mt. Sinai Hospital, 5th and Reed Sts., 6 story and basement, 38 x 125 ft. rein.-con. and terra cotta, plain foundation, to W. Lukens Co., 735 Cherry St., $231,000.

Pa., Washington—School—Bd. Educ., 2 story and basement, 85 x 152 ft., to C. Shimp, Martins Ferry, O. Archts. est. $150,000.

Md., Baltimore — Apartment — Parker, Thomas & Rice, archts., Union Trust Bldg., 4 story, 69 x 112 ft., brick, plain foundation, Charles St. and Wyndhurst Rd., to L. L. Chambers, 36th St. and Roland Ave., $150,000, for S. Oliver, Standard Oil Bldg. Noted Apr. 17.

D. C., Wash.—Office—Natl. Geographic Society, 16th and M Sts., N. W., office building, 3rd and R Sts., N. E., to Skinker & Garrett, 1416 F St. N. W., $300,000.

D. C., Wash. — School — St. Martins Church, parochial school, T St. to Lipscomb Building Corp., 1406 G St. N. W., $169,500. Noted Apr. 24.

W. Va., Fairmont — Apartment and Garage—Owens Bottle Co., 2 story, 26 x 153 ft., and 4 story, 75 x 102 ft. apartments and 1 story, 18 x 152 ft. garage, to Z. L. Bergeron, Fairmont. Est. cost $150,000.

W. Va., Wheeling—Exhibition—West Virginia Fair Grounds Assn., 1 story, 100 x 300 ft., concrete and steel, on Fair Ground, to R. R. Kitchen & Co., Bae Mar Pl. Archts. est. $160,000.

N. C., Greensboro—College—North Carolina College for Women, music building, steel, concrete and limestone, to J. A. Jones Constr. Co., Realty Bldg., Charlotte, $185,123. Noted Mar. 13.

N. C., Greensboro—Music—North Carolina College for Women, 3 story, 88 x 110 ft., brick, on campus, to S. A. Jones Constr. Co., Charlotte, $185,123.

N. C., Wilson—Court House—Wilson Co., 4 story and basement, court house and jail, to W. P. Rose, Goldsboro, $305,000. Noted Mar. 13.

N. C., Winston-Salem — Market — City, new market house, to Southeastern Constr. Co., Trust Bldg., Charlotte, $152,500.

Fla., Miami—Hotel—A. O. Yearian, 3 story, 85 x 146 ft., rein.-con. and steel, North West 8th and Miami Sts., to J. T. Teller, Miami. Archts. est. cost plus basis $185,000.

Fla., Tampa — Office — W. F. Stovall, Tampa, 12 story, 55 x 105 ft., Tampa and Twigg Sts., to G. A. Miller, 28 Petteway Bldg., $750,000.

Miss., Biloxi—School—Bd. Educ., East End Intermediate School, to O. E. Thompson, Biloxi; Fourth Ward School, to Collins Bros., Biloxi. Archts. est. $210,000. Noted Feb. 28.

Tenn., Nashville — Hotel — C. Lorigan Hotel Co., Atlanta, Ga., 12 and basement, 80 x 175 ft., cut stone, concrete, brick and steel, 6th and Deaderick Sts., here, to Sou Ferro Concrete Constr. Co., 50 East Ellis St., Atlanta, Ga., approximately $1,500,000. Noted Apr. 24.

Ky., Ashland—Store and Warehouse—B. Williamson & Co., 5 story and basement, 80 x 142 ft., 16th and Greenup Sts., to H. W. Cox, Ashland, cost plus basis. Est. $150,000.

O., Ashtabula—Store—Carlisle Co., c/o L. T. Carlisle, pres., 161 Main St., 4 story and basement, 60 x 130 ft., brick, to Johnson & Erickson, Ashtabula. Archts. est. $150,000. Noted Feb. 14.

O., Silverton (mail Pleasant Ridge, branch Cincinnati P. O.) — St. Thersa Home, 2021 Auburn Ave., Cincinnati, 3 story, rein.-con. and brick, here, to M. Penker & Sons, 123 Valencia St., Cincinnati, $350,000. Noted Mar. 6.

O., Toledo—Garage—Director Pub. Serv., 3 story, 100 x 141 ft., rein.-con. and brick, concrete pile foundation, St. Clair St., general contract to Watts Suhrbier Co., Miami St., $109,940. Noted Feb. 21.

Ind., Indianapolis—Lodge—I. O. O. F. Lodge 465, 3 story and basement, rein.-con., brick and steel, Shelby St., to Service Constr. Co., 301 Castle Hall Bldg., $150,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 78 x 132 ft. rein.-con., brick and steel addition, plain foundation, West End Ave., to A. W. Kutsche, 333 State St., $178,300. Noted Apr. 3.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 83 x 163 ft. rein.-con., brick and steel, plain foundation, Garden Ave., to Culbertson & Kelly, 872 West Milwaukee Ave., $207,237. Noted Apr. 10.

Buildings (Continued)

Mich., Flint—School—Bd. Educ., Union School Dist., 4 story, 65 x 150 ft., 71 x 160 ft. and 104 x 110 ft. rein.-con., brick and steel, plain foundation, Crapo Ave., Oak Grove, to Spence Bros., Saginaw. Archts. est. $750,000. Noted Jan. 24.

Mich., Lincoln Park—School—J. G. Kastler & Co., archts., 523 Detroit Savings Bank Bldg., Detroit, 2 story and basement. 65 x 120 ft., rein.-con., brick and steel, plain foundation, to E. E. DeLange, 7040 Farnsworth Ave., Detroit.

Mich., Royal Oak—School—Royal Oak Dist. 3, 2 story and part basement, 16 room, rein.-con., brick and steel, plain foundation, Lincoln and Washington Aves., to W. W. DeLange, 7040 Farnsworth St., Detroit, $200,000.

Ill., Aurora—High School—Bd. Educ., 3 story and basement, general contract to R. Iben, Anheuser-Neil Bldg., Peoria, $112,840; plumbing, heating, etc., to Ruddy Bros., 61 South La Salle St., Aurora, $48,150.

Ill., Chicago—Apartment—S. L. Cohen, 231 North Wells St., 3 story, 100 x 120 ft., fireproof, 1643-51 Chase St., to J. Gaunn, 133 West Washington St., $175,000.

Ill., Chicago—Apartment—Lund & Gammage, 77 West Washington St., 4 story, 95 x 126 ft., fireproof, 4600-08 Beacon St., to A. Lindstrom, 77 West Washington St. $175,000.

Ill., Chicago — Apartment — S. Monson, 7922 South Laflin St., will build 3 story, 100 x 100 ft. fireproof, 7241-47 Constance St., by day labor. $150,000.

Ill., Chicago—Church—St. Ita Catholic Church, Magnolia and Catalpa Sts., 1 story, 77 x 185 ft., fireproof, 5500-6 Bway., to Duval, Herrling & Co., 140 South Dearborn St. $400,000.

Ill., Chicago—Hotel—Bartelstein & Gold, c/o Dubin & Eisenberg, archts., 14 West Washington St., 4 story and basement, 91 x 126 ft., fireproof, 52nd Ave. and 54th St., to Kadeshewitz & Buchel, 1342 Independence Blvd. Archts. est. $300,000.

Wis., Kimberly—High and Grade School—School Dist. 3, M. Kettenhofen, dir., 2 story and basement, 70 x 145 ft., brick, tile and concrete plain foundation, to H. J. Selmer Co., McCartney Natl. Bank Bldg., Green Bay. $150,000. Noted Mar. 20.

Wis., Madison—Hospital—Bd. Health, 2 story, 45 x 150 ft., brick, rein.-con. and steel, to J. H. Findorff Co., 601 West Wilson St. $150,000. Noted Apr. 3.

Wis., Marshfield — Church — First Presbyterian Congregation O. L. Black, pastor, 2 story, 50 x 120 ft. and 35 x 47 ft., brick and stone, plain foundation, to Schafer & Olson, 222 Bay St., Chippewa Falls. $150,000. Noted Jan. 10.

Wis., North Milwaukee—High School—Joint Dist. 17, E. Neumann, clk., 2 story and basement, brick and tile, plain foundation, to D. B. Danielson, 874 Layton Blvd., Milwaukee. $150,000. Noted Apr. 24.

Minn., Minneapolis — Administration — State Bd. Control, St. Paul, 4 story and basement, rein.-con., brick, tile and stone, State University, general contract to J. and W. A. Elliott, 906 Lumber Exch. here, $400,000. Noted Apr. 17.

Mo., Canton—Dormitory—Culver-Stockton College, 3 story, 39 x 195 ft., rein.-con. and brick, to W. R. Oder, Canton. Archts. est. $150,000. Noted Jan. 24.

Mo., Columbia — Dormitory — Stephens College, rein.-con., brick and stone, to Murch Bros. Contg. Co., Ry. Exch. Bldg. St. Louis. Archts. est. $150,000. Noted Sept. 27.

Mo., St. Louis—Church—St. Peters Evangelical Lutheran Church, Swan and Newstead Aves., 2 story and basement, brick, stone and terra cotta, Kingshighway Blvd., to T. Steinmeyer, International Life Bldg. $150,000.

Tex., Ft. Worth—Library—Texas Christian University, 2 story and basement, 80 x 110 ft., brick, concrete and stone, to J. T. Taylor & Co., Burkburnett Bldg., $150,000. Noted Mar. 13.

Okla., Bristow — School — Bd. Educ. 2 story and basement, 76 x 145 ft., rein.-con. and brick, to Manhattan Constr. Co. Bristow, $105,000. Noted Mar. 20.

Calif., Los Angeles—Exchange—Southern California Telephone Co., 740 South Olive St., 4 story and basement, rein.-con., Washington St. and Grand Ave., to Macdonald & Kahn, Spring-Arcade Bldg., $165,000. Noted Jan. 10.

Calif., Los Angeles—Hotel—S. Cole, 1156 El Centro St., 3 story and basement, 115 x 150 ft., brick, Vine St., to L. T. Mayo, Black Bldg., $150,000.

Calif., Oakland—Office and Store—F. W. Ray, c/o W. C. Lowe, archt., Monadnock Bldg., San Francisco, 10 story and basement, rein.-con., 19th St. and Bway., here, to Palmer & Clinton, Monadnock Bldg., San Francsco, $450,000.

Calif., San Francisco—Apartment—J. J. Kingwell, Butler Bldg., will build 6 story and basement, rein.-con., Hyde and Ellis Sts., by day labor. $150,000.

Ont., Oshawa — Collegiate — Bd. Educ., Dominion Bank Chambers, 3 story and basement, 15 room, rein.-con., brick and steel, plain foundation, to J. W. Bowser, Confederation Life Bldg., Toronto. Noted Jan. 10.

Ont., Toronto—Apartment—W. J. Lescombe, 2 Kingston Rd., 5 story and basement, rein.-con., brick and steel, plain foundation, Kingston Rd., general contract to H. T. Green, 223 Greenwood Ave.; masonry to W. Kritzer, 32 Swanich Ave.; plumbing to G. T. Herriott, 1263 Greenwood Ave. Archt. est. $150,000.

Ont., Toronto—Church—Eglington Ave. Methodist Church, Eglington Ave., 1 story, 60 x 100 ft. rein.-con., brick and steel, plain foundation, Sheldrake Blvd., general contract to Witchall & Son, 156 St. Helens Ave.; carpentry to J. D. Young & Son, 835 College St.; plumbing and heating to Purdy-Mansell Ltd., 63 Albert St. Total est. $150,000.

Federal Government Work

PROPOSED WORK

N. Y., New York—Dredging—U. S. Engineers 2nd Dist., 616 Army Bldg., rejected bids dredging in Shoal Harbor, Compton Creek and Keyport Harbor. Noted Mar. 27.

Fla., Jacksonville—Dredging—U. S. Engineer Office, plans dredging in St. Johns River, here.

Ky., Louisville—Pumps—U. S. Engineer P. O. Box 72, soon takes bids three 15 in. pumps for pump boat, capacity 6,500 g.p.m. against 37 ft. head.

Ky., Owensboro—Rip-Rap Stone—U. S. Engineer, P. O. Box 72, Louisville, plans to purchase 2,500 tons rip-rap stone for Dam 46. Ohio River.

BIDS DESIRED

Del., Wilmington—Bridges—June 25, by U. S. Engineer Office, Wilmington, 3 highway bridges over inland waterway from Delaware River to Chesapeake Bay, Delaware and Maryland; adv. E. N.-R. May 1.

Fla., Jacksonville—Bulkhead and Pier—May 19, by U. S. Engineer Office, War Dept., Wash., D. C., 214 lin.ft. bulkhead and 300 ft. pier. Noted Mar. 27.

Fla., Jacksonville—Dredging—May 17, by U. S. Engineer Office, dredging in St. Johns River, and depositing dredged material in foundation of Wards Bank Training Wall; adv. E. N.-R. May 1.

Ill., Canton—Boiler, etc.—May 22, by Treas. Dept., Supervising Architect, Office, Wash., D. C., furnishing and installing 1 horizontal smokeless fire box boiler at U. S. Post Office, here; adv. E. N.-R. May 1.

Neb., Fremont—Boiler, etc.—May 20, by Treas. Dept., Supervising Architect Office, Wash., D. C., removing present boiler and furnishing and installing new horizontal smokeless fire box heating boiler, etc. at Post Office, here; adv. E. N.-R. May 1.

Ore., Portland—Tenders—May 28, by U. S. Engineer Office, 216 New Post Office Bldg., Portland, two 65 ft. diesel powered tenders; adv. E. N.-R. May 1.

BIDS RECEIVED

Miss., Water Valley—Post Office—Treas. Dept., Office Supervising Architect, Wash., D. C., 2 story post office, here, from Virginia Eng. Co., 330 28th St., Newport News, Va., $39,443. Noted Mar. 27.

Ky., Owensboro—Clam Shell Buckets—U. S. Engineer, P. O. Box 72, Louisville, furnishing six 1½ yd. and two 2 yd. clam shell buckets, from Pidgeon Thomas Iron Co., 94 North 2nd St., Memphis, Tenn., $6,110. Noted Apr. 24.

Ill., Chicago — Quarters — Treas. Dept., Supervising Architect Office, Wash., D. C., constructing quarters at U. S. Marine Hospital, from McLaughlin-Slattery Co., Chicago, Ill., $70,250. Noted Apr. 3.

New Mexico — Roads — E. S. Wheeler, dist. engr. Bureau Pub. Rds., U. S. Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., 11.448 mi. Canoncito-Peces Highway in Sante Fe Natl. Forest, Sante Fe and San Miguel Counties, from Lee Moor Contg. Co., Two Republics Bldg., El Paso, Tex., 28,110 cu.yd. crushed rock surfacing Condition A $2.90, finishing shoulders and subgrade $100 per mi., etc., total $82,664. Noted Mar. 6.

California—Road—C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., Main St., San Francisco, surfacing Mineral Sect. of Red Bluff-Susanville Highway, Tehama Co., from Englehart Paving Co., Eureka, Calif., $70,891. Noted Apr. 10.

CONTRACTS AWARDED

R. I., Providence—Dredging—U. S. Engineer, dredging in Providence River and harbor, 280,000 cu.yd. excav., to J. S. Packard Dredging Co., 1004 Turks Head Bldg., $58,520. Noted Mar. 13.

N. Y., New York—Ash Handling System—Bureau Yards & Docks, Navy Dept., Wash., D. C., pneumatic ash handling system for power plant at Navy Yard, to Guarantee Constr. Co., 140 Cedar St., $30,775 (120 days). Noted Mar. 6.

D. C., Wash.—Reservoirs—U. S. Engineer, 250 Old Land Office Bldg., 1st high reservoir to Parsons & Hyman, Equitable Bldg., $268,490; 2nd high reservoir to M. I. O'Connor, Northampton, Mass., $262,813. Noted Mar. 27.

Ky., Louisville—Cement—U. S. Engineer, P. O. Box 72, cement, Lot 3, to Atlas Portland Cement Co., 134 South LaSalle St., Chicago, Ill., $95,900. Noted Apr. 17.

Unclassified

PROPOSED WORK

Peace Tower—Wash., D. C.—Natl. Carrilon Assn., H. K. Bush-Brown, pres., 1729 G St., N. W., had sketches made for tower, 360 ft. stone, base 60 ft., 54 bell chimes, $3,000,000. P. P. Cret, Otis Bldg., Phila., Pa., archt.

Golf Course, etc.—Louisville, Ky.—Bd. Park Comrs., City Hall, plans golf course and other improvements in Shawnee Park. $50,000.

Subway—Sterling, Ill.—City and Chicago & Northwestern R.R., West Jackson Blvd. and Franklin St., Chicago, plans rein.-con. subway, here. City to vote on $90,000 bonds: $60,000 for subway and $30,000 for changes in gas and water mains, electric lines, etc. Railroad to pay $440,000. Total cost $530,000. A. G. Hubliard, city engr. W. J. Towne, ch. engr.

Stadium—Omaha, Neb.—Creighton University, 25th and California Sts., c/o J. McCormick, plans stadium. $175,000. J. Latenser & Sons, 732 Peters Trust Bldg., archts.

Pipeline—Texas—Pan-Tex Pipe Line Co., Amarillo, plans 6 in. pipe line from Potter Co. oil fields to Amarillo, also improvements to Allen refinery. $300,000. Private plans.

Transmission Lines — New Braunfels, Tex.—See "Industrial Works."

Gas Mains—Montreal, Que.—Montreal Light, Heat & Power Co., Craig St. W., plans 22,331 ft. 4 and 6 in. c.i. gas mains in 21 streets and avenues, $48,627.

Breakwater — Collingwood, Ont. — Dept. Pub. Wks., Parliament Bldg., Ottawa, takes bids in summer breakwater, wood and pile construction, here. $25,000. K. M. Cameron, ch. engr.

BIDS DESIRED

Heating and Ventilating Apparatus — Brooklyn, N. Y.—May 12, by W. H. Gompert, supt. School Buildings, Flatbush Ave. extension and Concord St., heating and ventilating apparatus in addition to Erasmus Hall High School, Bedford Ave., for Bd. Educ., 500 Park Ave., New York.

Fire Alarm System, etc. — Kings Park, N. Y.—May 21, by State Hospital Comn., Albany, fire alarm system, etc., in Kings Park State Hospital, here. S. W. Jones, state archt.; adv. E. N.-R. May 1.

Waterfront Improvements—Daytona, Fla.—May 20, by city, waterfront improvements, Contrs. 1, 2 and 3. Harrington, Howard & Ash, Kansas City, Mo., consult. engrs.; adv. E. N.-R. May 1.

Sea Wall, etc.—Tampa, Fla.—June 6, by Comrs. Hillsborough Co., 2½ mi. concrete sea wall, hydraulic fill, sidewalk, curb, etc.; adv. E. N.-R. May 1.

Foundation—Cleveland, O.—See "Buildings under Proposed Work."

Signal System, etc.—Minneapolis, Minn.—May 6, by F. S. Gram, city purch. agt., electric signal system, standard specifications, 42,292 lin.ft. cable, for Fire Dept., two 7-ton gas locomotives for Water Dept. N. W. Elsberg, city engr.

Unclassified (Continued)

Stadium—Austin, Tex.—May 7, by University of Texas, 118 x 435 ft., concrete stadium. $500,000. H. M. Greene Co., North Texas Bldg., Dallas, archts. Noted Apr. 24.

BIDS RECEIVED

Plumbing, etc.—Albany, N. Y.—Plumbing, etc. in Public Schools, 1 to 24 inclusive, from A. J. Eckert Co., 103 North Lake St., $119,939. Engrs. est. $125,000.

Column Foundations—New York N. Y.—Transit Comn., 49 Lafayette St., Apr. 25, column foundations, retaining walls and embankment for Westchester Ave. Yard, Routes 19 and 20, from P. T. Cox Contg. Co., 154 Nassau St., $204,040. Noted Apr. 17.

Ramps — New York, N. Y. — Transit Comn., 49 Lafayette St., Apr. 24, permanent ramps at Times Sq. station, Routes 4 and 36, Sect. 3, Agreement "CT," from Fox Reynolds Co., 81 East 125th St., $9,600. Noted Apr. 17.

Subway — New York, N. Y. — Transit Comn., 49 Lafayette St., Apr. 25, Sect. 2 of Route 70, a part of Rapid Transit Railroad, from Oakdale Constr. Co., 93 Amity St., Flushing, $3,950,000. Noted Apr. 10.

Electric Light System, etc.—Phila., Pa.—G. H. Biles, dir. Pub. Wks., and Bd. Trustees Free Library, Room 216 City Hall, electric light, power and signal systems in Free Library, 20th, Wood and 19th Sts., from W. V. Pangborne & Co., 1927 West Montgomery St., $188,600. Noted Mar. 27.

Transit Sheds—Los Angeles, Calif.—Los Angeles City Harbor Comn., 2 story, steel, from Lynch-Cannon Co., 1027 Chapman Bldg., $852,400. Noted Mar. 13.

CONTRACTS AWARDED

Subway Entrance—New York, N. Y.—Transit Comn., 49 Lafayette St., additional entrance to Canal St. Sta. (Loop Line) of Bway.-4th Ave. Rapid Transit R.R., to Gustin Morris Contg. Co., Anabel Pl. and Creek St., Long Island City, $39,000. Noted Apr. 24.

Grand Stand — Norristown, Pa. — J. B. Long, engr., Boyer Arcade, 61 x 92 ft. rein.-con. grand stand, Roosevelt Field, Markley and James Sts., to Anthracite Bridge Co., 300 Genot St., Scranton, $51,200, for Bd. Educ. Noted Apr. 3.

Foundation—Phila., Pa.—Phila. Electric Co., 10th and Chestnut Sts., excavation and building foundation for first of 3 units of new generator station, 290 x 300 ft., along Delaware River foot of Wheatsheaf Lane, to Stone & Webster, 147 Milk St., Boston, Mass. J. T. Windrim, archt., Commonwealth Bldg., preparing plans for superstructure. Will mature next year.

Pits, etc.—Arvilla, W. Va.—Norfolk and Western R.R. Co., Norfolk, Va., 2 concrete engine pits and 1 concrete inspection pit, here, to H. A. Lucas, Bluefield, W. Va., $50,000.

Stadium — Morgantown, W. Va. — West Virginia University Stadium Corp., 102 x 360 ft. and 82 x 360 ft., to Foundation Co., 120 Liberty St., New York City. Noted Apr. 10.

Park Improvements, etc.—Evansville, Ind.—City, park improvements, club house, locker and assembly rooms, Helfrich Field, to Scarborough-Davies Constr. Co., Old St., $25,000. Noted Mar. 6.

Street Lighting System—Cuba City, Wis.—Ornamental street lighting system, to Donovan Constr. Co., Cuba City, $25,000.

Foundation—Des Moines, Ia.—Des Moines Electric Co., 802 Locust St., substructure foundation work for 1st unit of 3 unit power plant, rein.-con., plain and wood pile foundation, South Des Moines, to A. H. Neumann Co., 519 Hubbell Bldg. $150,000.

Street Lighting System — Los Angeles, Calif. — Ornamental lighting system on Pasadena Ave. between Ave. 61 and Ave. 54, to J. C. Rendler, Inc., 625 South Main St., $26,988. Noted Mar. 20.

Tunnel — Los Angeles, Calif. — Pacific Electric Co., Pacific Electric Bldg., tunnel, 4,230 ft. long, 28 ft. wide, 22 ft. high, concrete lined, (rock, sand, cement and structural steel furnished by owner), also 6 story (ultimately 8 story), 118 x 160 ft. garage, to Twohy Bros., Sharon Bldg., San Francisco, $3,500,000. Work will be done under supervision of E. C. Johnson, ch. engr. and M. C. Halsey, structural engr. of Pacific Electric R.R. Co.

Wharf—Oakland, Calif.—Alaska Packers, Inc., 101 California St., San Francisco, wharf, 750 ft. long, cement, creosoted piles, lumber, rails and fittings furnished by owner, here, to A. W. Kitchen, 110 Market St., San Francisco, $150,000. Noted May 24, 1923.

ROAD WORK—ROCKFORD, ILL.

Bids were opened Mar. 19, by H. Short, clk., Winnebago Co., for constructing 3.9323 mi. road, Sect. X-15d, State Aid No. 14. (A) G. Welch, Beloit, Wis. (awarded contract); (B) Milburn Bros., Rockford; (C) A. R. Garnock, Eau Claire, Wis. The unit bids were as follows:

	A	B	C
27,800 cu.yd. earth excavation	$0.60	$0.65	$0.65
27,000 sq.yd. earth shoulders	.07	.10	.08
41,525 sq.yd. P. C. concrete pavement	1.64	1.55	1.65
87.9 cu.yd. class A concrete	23.00	25.00	22.00
8.2 cu.yd. class X concrete	23.00	25.00	30.00
1,491 lb. reinforcing steel	.05	.06	.06
200 lin.ft. 24 in. sewer pipe	2.32	3.50	3.25
46 lin.ft. 18 in. sewer pipe	1.70	2.00	2.50
96 lin.ft. concrete curb	.40	1.00	.50
576 lin.ft. guard fence	.70	1.00	.65
66 lin.ft. 12 in. sewer pipe	.90	1.50	1.50
2 section markers	15.00	15.00	15.00
600 lin.ft. curb and gutter	.70	1.20	1.10
21 sq.yd. mesh reinforcement	.20	.30	.30
Moving bridge at Sta. 28 (lump sum)	650.00	2,500.00	500.00
3 section corner markers	10.00	15.00	20.00
3.9323 mi. seeding	20.00	30.00	4.00
'Extended totals	$91,212	$92,608	$93,716

Sea Wall—Crystal Beach, Ont.—Buffalo & Crystal Beach Corp., 438 Main St., Buffalo, N. Y., 1,000 ft. concrete sea wall, to Pigott Healy Constr. Co., 36 James St. S., Hamilton, $43,000.

Material and Equipment

PROPOSED WORK

Cement — Alabama — State Hy. Dept., Montgomery, rejected bids 66,000 bbl. cement. W. S. Keller, state highway engr. Noted Apr. 3.

Road Machinery, etc.—Burlington, Wis.—A. Zechel, city clk., soon takes bids road machinery, incl. graders.

Tractors—St. Paul, Minn.—H. W. Austin, city purch. agt., rejected bids Mar. 4, two 10-ton tractors. Noted Mar. 13.

BIDS DESIRED

Sand Grit, etc.—Long Island City, N. Y.—May 5, by M. E. Connolly, pres. Queens Boro, Boro Hall, 5,000 cu.yd. sand grit or broken stone chips of trap rock, to Bureau of Highways. Former bids rejected. Noted Apr. 10.

Rolls, Crushers, etc. — Bowling Green, Ky.—E. B. Crump, 1144 State St., in market for rolls, crushers, belt conveyor, etc. for rock asphalt crushing plant.

Switchboard, etc.—Cleveland, O.—May 9, switchboard and switchboard equipment for 15,000 k.w. turbo generator, 120,000 lb. of 000 to 10 weatherproof copper wire, 900 series multiple transformers also subway and pole type constant current regulators.

Road Oil—Madison, Wis.—Taking bids on approximately 60,000 gal. road oil for 1924, to be asphaltic of flash point of 80 degrees C. E. E. Parker, City Hall, engr.

Truck—Long Prairie, Minn.—May 5, by L. J. Ramstad, aud. Todd Co., one Graham Bros. truck of 1½- to 2-cu.yd. dump body with hydraulic hoist. A. M. Graves, Long Prairie, engr.

Road Oil—St. Paul, Minn.—May 6, by State Hy. Dept., 1246 University Ave., 110,000 gal. road oil. C. M. Babcock, engr.

Road Machinery—Texas—May 15, by State Bd. Control, c/o R. B. Walthall, 125 four horse graders with 7 ft. blades, also 16 tractor drawn graders with 8 ft. blades, approximate weight to be 4,000 lb., extra attachments to be listed and described. J. W. Francis, equipment engr.

Road Roller—Brackettville, Tex.—Kinney Co. taking bids 10 ton gasoline road roller.

Tractor, etc.—Clarksville, Tex.—May 12, by W. McMaster, aud. Red River Co., one 5 ton caterpillar type tractor, and one 8- to 10-ft. blade grader with engine hitch.

Pipe — Dallas, Tex. — Taking bids 200 tons 10 in. and 180 tons 12 in., B. B. & S. or De Lavaud pipe. E. A. Kingsley, city engr.

Tractors—McKinney, Tex.—May 14, by Collin Co., 4 caterpillar type tractors for 12 ft. blade grader. F. W. Cawthon, co. engr.

Pipe—Snyder, Tex.—Taking bids 15,118 ft. 4- to 8-in. c.i. pipe. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Dredging Equipment — Windsor, Ont. — St. Clair Dredge & Contract Co. Ltd., Windsor, in market for complete dredging equipment.

BIDS RECEIVED

Sand Grits—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, Apr. 23, 4,000 cu.yd. sand grits, from Highgrade Builders Supply Co., 6th St. and 2nd Ave., $9,560.

Boiler Equipment—Greensboro, N. C.—North Carolina College for Women, conduits, steam fittings, boiler connections, etc., in connection with new mechanical plant at above, to Riggs Distler & Co., 216 North Calvert St., Baltimore, Md., $96,000; boiler equipment, to Walsh & Weidner, Main and Scymr Sts., Chattanooga, Tenn., $52,000.

Brick, Reinforcing Steel, etc.—St. Paul, Minn.—H. W. Austin, city purch. agt., Apr. 15, 1,144 sq.yd. 3-in. vertical fibre brick from Purington Paving Brick Co., East Galesburg, Ill., $1.59 per sq.yd.; 64.946 tons straight reinforcing steel for Water Dept., from Speers-Jevne, 832 Builders Exch., Minneapolis, $3,934; 13 tons c.i. flange pipe and specials, from South Park Fdry. & Machine Co., 23 East 6th St., $140 per ton. Noted Apr. 10.

Fordson Tractors — St Paul, Minn. — H. W. Austin, city purch. agt., Apr. 8, 10 Fordson tractors, from Central Garage, 9 West Exchange St., Muessel Motor Co., 1800 University Ave., Owens Motor Sales, 709 University Ave., Nolan Iron Co., 70 West 4th St., and W. S. Williams Motor Co., 128 Concord St., all bid $12,580. Noted Apr. 3.

CONTRACTS AWARDED

Trucks—St. George N. Y.—J. A. Lynch, pres. Richmond Boro, Boro Hall, one 1½ ton and one 2 ton automobile trucks with dump bodies, to Kruger Motor Car Co., $2,585 and $2,685 respectively. Noted Apr. 24.

Bucket Loaders, Street Flusher, Street Sweeper, etc.—Minneapolis, Minn.—F. S. Gram, city purch. agt., 2 gasoline operated bucket loaders for gravel, to W. H. Kuhlmann & Co., 605 West Bway., $1,644 each; street flusher, to Galion Iron Wks. & Mfg. Co., 234 Plymouth Bldg., $2,135 for "Etnyre" make; motor-driven pickup street sweeper, to Elgin Sales Corp.; 10 South La Salle St., Chicago, $6,461; Wehr grader with Fordson tractor, to S. W. Eddy Co., 3032 Hennepin Ave., $1,479; 5,270 pieces reinforcing steel ranging from ½ in. x 18 ft., to 1 in. x 24 ft. for Sewer Dept., to C. A. P. Turner Co., 627 1st Ave. N., $5,975. Noted Apr. 3 and 10.

Graders—St Paul, Minn.—Ramsey Co., one 12-ft. heavy dirt road grader to Austin Western Road Mchy. Co., 375 Cedar St., $1,848; one 8-ft. road grader with roller bearings, to Russell Grader Mfg. Co., 2005 University Ave. S. E., Minneapolis, $730. Noted Mar. 27.

Paving Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., 388 tons asphalt for paving boulevard along westerly side of Lake Como, and 40 tons asphalt filler, to Standard Oil Co. of Indiana, 1937 Southwest 4th St., Minneapolis, $20 per ton and $24.70 per ton respectively. Noted Apr. 10.

Scrapers and Graders, etc.—Washburn, N. D.—McLean Co., 2,664 lin.ft. 12-24 in. corrugated metal culverts to Wheeling Corrugating Co., 155 26th St., S. E. Minneapolis, Minn., six 5 ft. extra heavy fresnos, six 9 ft. drag scrapers and 6 patrol graders, to Northwestern Sheet & Iron Wks., Wahpeton, and Russell Grader Mfg. Co., 2005 University Ave. S. E., Minneapolis, Minn.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: May 13.

Roads and Bridges

STATE HIGHWAY COMMISSION
Richmond, Va.
April 21, 1924.

Sealed bids will be received at the offices of the State Highway Commission, State Office Building, Richmond, until 10:30 a.m. Tuesday, May 13th, 1924, for the construction of the following:

1. PROJ. F-143G-RT. 10—Three Miles East of Bedford to Bedford, Bedford County. Approx. 3.0 miles of Bit. Mac. surfacing only. No Special Design Bridges. Work will not be started on this project until the contract which is now under way has advanced sufficiently to allow a surfacing plant on the project.

2. PROJ. F-260B-RT. 31—Ashland—2.3 Miles South, in Hanover Co. 2.3 miles of Sheet Asphalt Surface on Concrete Base, Alt. Bids on 8"-6"-8" concrete, and 4" Gravel sub-base, 4" asphaltic conc. base and 1½" Sheet Asphalt Top. Approx. 7,860 cu.yds. Exc., 300 cu.yds. borrow, 152 lin.ft. pipe, 111 cu.yds. "A" conc., 6,831 lbs. reinf. steel. No special design bridges. This work will be let in conjunction with project F-358A.

3. PROJ. F-265B-RT. 111—End Proj. 265A to 3.6 Mi. towards Raven, in Buchanan Co., 3.6 Mi. 16′ Bituminous Macadam, approx. 24 Ac. clearing and grubbing, 74,681 cu.yds. excavation, 2,190 lin.ft. pipe, 84 cu.yds. "A" conc., 280 cu.yds. "B" conc., 6,970 reinf. steel, 13,510 lin.ft. wood, gd. rail. No Special Design Bridges.

4. PROJ. F-294B-RT. 21—5 Mi. E. Luray-Rappahannock Co., Line, 1.6 Mi. Bituminous Macadam, approx. 15,600 cu. yds. excavation, 700 lin.ft. pipe, 29 cu.yds. "B" conc., 3,650 lin.ft. wood gd. rail. No Special Design Bridges. Page Co.

5. PROJ. F-310B-RT. 12—Lawrenceville (Sta. 117-46) to Sta. 280-70, Brunswick Co., 3.1 Mi. in length, 1.5 Mi. 18′-8″-6″-8″ conc., 1.6 Mi. 20′ Gravel roadway, approx. 3 Ac. clearing, 21,000 cu.yds. exc., 540 lin.ft. pipe, 136 cu.yds. "A" conc., 103 cu.yds. "B" conc., 8.960 lbs. reinf. steel, 30 lin.ft. tile drain, 520 lin.ft. gd. rail. No Special Design Bridges. Right is reserved to eliminate gravel surface.

6. PROJ. S-323B-RT. 20—Phoenix-Charlotte C. H., (Sta. 633-00 to 983-00) Charlotte Co. 6.6 Mi. Top Soil surfacing only. No Special Design Bridges. Work will not be started on this project until the contract which is now under way has advanced sufficiently to allow soiling outfit on the project.

7. PROJ. F-333-RT. 10—Oakland Church—Suffolk, Nansemond Co. 8.2 Mi. Gravel Roadway, approx. 20 Ac. clearing, 25,000 cu.yds. exc, 10,000 cu.yds. borrow, 1,428 lin. ft. pipe, 38 cu.yds. "A" Conc., 59 cu.yds. "B" conc., 3,242 lbs. reinf. steel, 288 lin. ft. wood gd. rail. No Special Design Bridges. Right reserved to let contract for Gr. & Dr. only.

8. PROJ. F-358A-RT. 31—Ashland—1.4 Mi. North, Hanover Co., 1.4 Mi. Sheet Asph. Surface on conc. base. Alt. Bids 18′-8″-6″-8″ Conc. and 4″ gravel sub-base, 4″ Asphaltic Conc. Base and 1½″ sheet Asphalt Top, approx. 3,572 cu.yds. exc., 480 cu.yds. borrow, 112 lin.ft. pipe, 108 cu.yds. "A" conc., 6,628 lbs. reinf. steel. No Special Design Bridges. This project will be let in conjunction with project F-260B.

9. PROJ. F-368-RT. 36—Alexandria—Beginning Proj. 113—in Fairfax Co. Approximately 2.2 Mi. in length, Sta. 0-00 to 58-90 1½″ Binder, 1½″ Sheet Asphalt Top, Sta. 58-90 to 114-00 3″ Bit. Base, and 1½″ Sheet Asphalt Top. Approx. 2,500 cu. yds. Exc., 160 lin.ft. pipe, 10 cu.yds. "A" conc., 57 cu.yds. "B" conc. No Special Design Bridges.

Proposal guaranty to be $500.00 for bids less than $100,000 and $1,000 for bids more than $100,000.00. Certified, or cashiers check or proposal bonds acceptable.

Plans and specifications are on file at the office of the State Highway Commission and the offices of the following District Engineers: F-143C Salem, F-260, F310C and F358A Richmond, F-265B Bristol, F-294B Staunton, S-323 Lynchburg, F-333 Suffolk, F368 Culpeper.

Additional plans for bidders on the above project may be obtained upon application to the State Highway Dept., upon receipt of $5.00 payable to H. G. Shirley, $2.50 of which will be refunded if plans are returned within two weeks after bids are opened.

Engineers will be at the following places to show prospective bidders over work as follows: F-143C N. & W. R.R. Station Bedford, Va., 12 Noon Wed., May 7th. F-260 and F-358 Dist. Engr. Office Richmond 10 a.m. Fri. May 9th, F-365B Stinson Hotel, Grundy 12 Noon Tues., April 29th, F-294B Luray 11 a.m. Mon. May 5th, S-310C Hotel Lawrenceville, 10.30 a.m. Fri. May 2nd, S-323B Phoenix 11 a.m. Mon. May 5th, F-333 Dist. Engr. Office Suffolk 11 a.m. Mon. April 28th, F-368 R.R. Station Alexandria 10:30 a.m. Tues. May 6th.

State Highway Commission reserves the right to reject any or all bids.

H. G. SHIRLEY,
Chairman.

C. S. MULLEN,
Chief Engineer.

Bids: May 12.

Street Paving

Red Lion, Pa.

Sealed Proposals will be received by the Boro Council of Red Lion, Pa., until 7:00 P.M., May 12, 1924, for paving approximately 19,000 sq.yds. of streets all within the Boro of Red Lion, at which time Bids will be publicly opened and read at Council Meeting.

Bids will be received upon Reinforced Concrete, Sheet Asphalt or Asphaltic Concrete on a concrete base.

Plans and Specifications may be had after May 1st, from the Boro Engineer, J. A. Michels, upon payment of $5.00 which will not be returned.

Proposals must be made on proposal forms and enclosed in envelopes, both of which will be furnished by the Boro Engineer.

J. A. MICHELS, Boro Engineer.
Red Lion, Pa.

Bids: May 24.

Concrete Road

Bement, Ill.

Sealed proposals will be received by the Board of Supervisors of Piatt County, Ill., until 1 o'clock p.m., May 24th, 1924, for the construction of four sections of P. C. Concrete road, consisting of 13,689.2 sq.yds. with earth shoulders consisting of 38,942.2 sq.yds. and earth excavation 9,949.2 cu.yds. Concrete culverts and drains.

Plans and specifications may be seen at the office of the county clerk or the county superintendent of highways; a certified check must accompany each bid for 5% of the amount of the bid.

The Board reserves the right to reject any or all bids or proposals and to waive technicalities.

W. J. DAY,
Co. Supt. of Highways.
Dated this 28th day of April, 1924.

Bids: May 15.

Water Plant Improvement

Sayre, Pa.

Sealed Proposals for Extension to Brick Pumping Station Building; Electric-Motor-Driven Centrifugal Pumping Units; Steam-Engine Driven Centrifugal Pumping Unit; Cast Iron Pipes, Special Castings and Valves; Vitrified Pipe; Pipe Laying, and Coagulating Basin, addressed to The Sayre Water Company, Sayre, Pennsylvania, will be received on Thursday, May 15th, 1924, previous to which time the Drawings and Specifications may be examined, and information obtained at the office of The Sayre Water Company, Sayre, Pennsylvania, or at the office of William H. Boardman, 426 Walnut Street, Philadelphia, Pennsylvania.

A certified check for $500.00, drawn to the order of "The Sayre Water Company," or an equivalent Bidder's Bond, must accompany each proposal.

The Sayre Water Company reserves the right to reject any or all proposals or to accept any proposal for the whole or any portion of the proposed installations, all as provided in the said Specifications.

CHAS. C. WEST,
General Manager,
Sayre, Pennsylvania.

Bids: May 9.

Street Improvements

Roselle Park, N. J.

Sealed Proposals will be received by the Mayor and Council of the Borough of Rosselle Park, Union County, N. J., at 8:30 P.M. (Daylight Saving Time) on Friday, May 9, 1924, at the Borough Hall in said Borough, for the Improvement of the following named streets in said Borough with reinforced concrete pavement and bluestone curbing: Webster Avenue from Locust Street to Sherman Avenue, Sherman Avenue from Webster Avenue to Grant Avenue, Lehigh Place from Webster Avenue to Clay Avenue.

The estimated amount of surface pavement required is 15,500 square yards; curbing, 8,400 lineal feet.

Plans, profiles, cross sections and specifications for the above work, prepared by the Borough Engineer, are on file in the office of the said engineer, 505 Chestnut Street, Roselle Park, N. J. and 100 East 45th Street, New York City, and may there be inspected by prospective bidders. Bidders will be furnished by the engineer with a copy of the specifications and blue prints of the plans and profiles on proper notice and payment of the sum of $5.00.

Bids must be made on the standard proposal forms in the manner required by the specifications; must be enclosed in sealed envelopes bearing the name and address of the bidder on the outside, addressed to the Mayor and Council, Borough of Roselle Park, Union County, N. J., and must be accompanied by a certificate of a surety company guaranteeing the furnishing of a bond on the work, and also accompanied by a certified check for not less than 5% of the total bid, and be delivered at the place and on the hour above named.

The Council reserves the right to reject any or all bids, to waive any or all defects or informalities, or to accept any bid as they may deem for the best interests of the Borough.

By order of the Mayor and Council of the Borough of Roselle Park, N. J.
April 18, 1924.

J. WALLACE HIGGINS,
Borough Engineer.

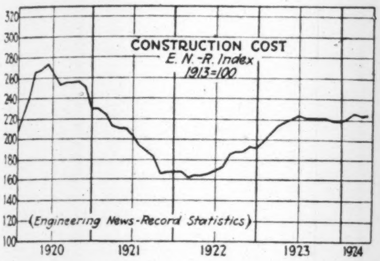
CONSTRUCTION NEWS

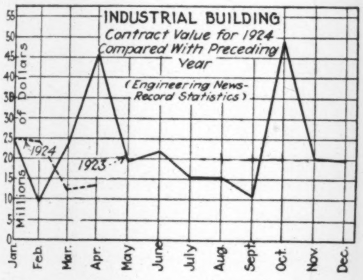
Engineering News-Record, May 8, 1924

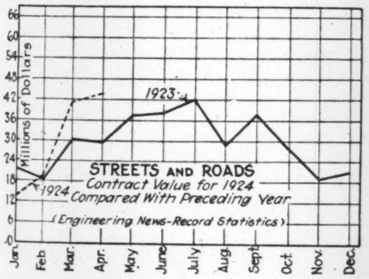
The Construction Barometer

Contracts Show Increase During First Week in May — Volume for Month May Be Smaller Owing to Higher Labor Cost and Restriction of Demand for Materials

THAT the volume of May construction may not measure up to the mark attained last month is suggested by the accompanying charts of *Engineering News-Record's* Construction Cost and Volume Index Numbers. The Cost Index in March was 224.7, in April it was 221.6 and in May, 222.4. The cost drop in April gave rise to a greater volume of construction for that month, therefore the rise in the May cost level will probably have the reverse effect. Cost is greater than a year ago; volume is smaller. The advance in the May Cost Index was due principally to higher wage schedules for building labor, since prices of materials have been steadily tending downward during the last thirty days.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Apr. 17	$28,549,000	$22,293,000	$50,842,000
Apr. 24	22,575,000	12,153,000	34,728,000
May 1	23,838,000	20,548,000	44,386,000
3 weeks	$74,962,000	$54,994,000	$129,956,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

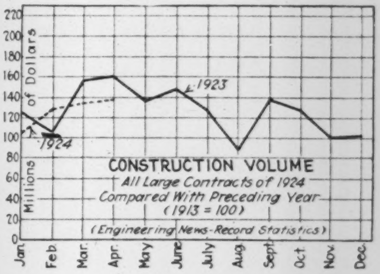
Week Ended	No.	Public Work	No.	Private Work
Apr. 17	16	$4,210,000	49	$16,139,000
Apr. 24	10	5,810,000	24	9,124,000
May 1	20	4,801,000	33	11,761,000
3 weeks	46	$14,821,000	106	$37,024,000

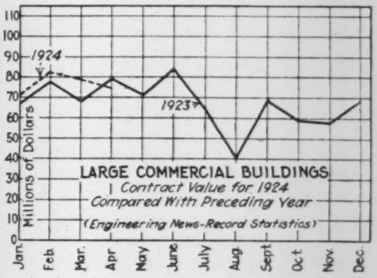
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

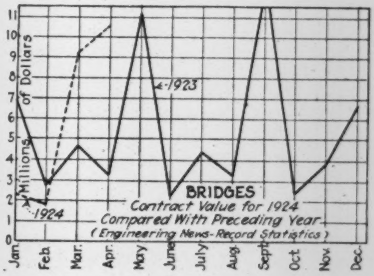
Week Ended	Private	Public			
		All Buildings	Streets and Roads	Waterworks and Sewers	All Public
Apr. 17	42	52	109	41	254
Apr. 24	25	51	104	55	282
May. 1	30	50	100	51	249

PRICES OF BASIC MATERIALS STILL DECLINING

	Quoted on May 8 at	Price was	On
Structurals, Pittsburgh, 100 lb.......	$2.25 @2.35	$2.25 @2.50	May 1
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.....	63.00	64.00	Apr. 10
Fir, San Fran., M.ft...	36.00	38.00	Jan. 24
Common labor, hr....	.56	.55	Apr. 24







Waterworks

PROPOSED WORK

N. Y., Attica—Voted $55,000 bonds to enlarge water system and construct new reservoir. Noted Apr. 24.

N. Y., Binghamton—Had plans prepared extending mains in 5 streets. $25,000. H. M. Gitchell, supt. Water Dept.

N. Y., Saranac Lake—Bd. Dirs. Trudeau Sanitorium plans water supply reservoir. $15,000-$18,000. Address E. R. Baldwin, c/o owner.

N. Y., Saratoga Springs—Making plans new water supply system from Jenny-Hunt Effner Lakes. $500,000. J. P. Wells, Cutler Bldg., Rochester, hydraulic engr. Noted Apr. 17.

N. Y., Sodus—Bd. Village Trustees plans new water supply system. To exceed $25,000. A. Shufelt, chn. bd. water comrs.

N. Y., Wilson — Bd. Trustees & Bd. Water Comrs. plan extending water supply system. $15,000. C. S. Taggart, chn. Bd. Water Comrs.

N. J., Avon-by-Sea—Plans drilling wells and constructing pumping station. $42,000. J. Thomson, mayor. Engineer not selected. This corrects report in May 1st issue.

La., Berwick—Having preliminary plans prepared electric light plant and waterworks incl. 50,000 gal. standpipe, two unit 3 phase light system, mains, etc. $50,000. H. A. Mentz, Magnolia, Miss., engr.

O., Barberton—Plans 3.5 mi. 24 in. c.i. pipe line and standpipe, 60 ft. diam., 55 ft. high, 1,500,000 gal. capacity. $200,000. J. Mentzer, service director.

O., Cleveland—Making preliminary plans chemical house, mixing chambers, filter house, grading and sidewalks at Baldwin Reservoir. $750,000. G. W. Hamlin, City Hall, engr.

O., Girard—Plans 1 m.g. water purification plant, twin settling basins, wells, mixing basins, filter beds, pump house, etc. $60,000-$70,000.

O., Piqua — Plans filtration plant. $500,000.

Wis., Mukwonago — Having plans prepared waterworks improvements, incl. pumping machinery, airlifts, air compressor and concrete reservoir, also new septic tank. R. Cramer, 1105 Vliet St., Milwaukee, engr. Noted Mar. 20.

Minn., Waconia—Voted $25,000 bonds, waterworks system. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted Apr. 10.

Kan., Goff—Rejected bids 14,423 ft. 2- to 6-in. pipe, 5108 lb. reinforcing, 50,000 gal. steel tank on 80 ft. tower, 3 deep wells and 100 g.p.m. pump and motor. Shockley Eng. Co., 800 Graphic Art Bldg., Kansas City, Mo., engrs. Noted Jan. 24.

Mo., Columbia—Soon takes bids 12 in. mains downtown, 400 hp. boiler, steam turbine centrifugal pump, 3 m.g. concrete reservoir, 2 deep wells, 1,500 kw. generator set, new electric and feeder lines, etc. $190,000. Noted Sept. 13.

Waterworks (Continued)

Mo., Chaffee — Soon takes bids 4 in. mains in various streets, $26,000, also 8- to 12-in. sanitary sewers in various streets, $23,000. C. E. Smith, Ry. Exch. Bldg., St. Louis, engr.

Mo., Portageville—Election soon to vote on $40,000 bonds waterworks improvements. A. C. Moore, 221 West 3rd St., Joplin, consult. engr.

Mo., Potosi—Making plans waterworks and sewers. $50,000. Alexander Eng. Co., 517 Woodruff Bldg., Springfield, engrs. Noted Nov. 15.

Tex., Ranger—Soon takes bids 1 m.g. filter plant and 500,000 gal. standpipe. $100,000. N. Werenskiold, Marvin Bldg., Dallas, engr.

Ariz., Williams—Voted bonds and final plans in progress for waterworks improvements. Burns & McDonnell, 415 Marsh-Strong Bldg., Los Angeles, Calif., engrs.

Calif., Corona—Temescal Water Co. having plans prepared pipe line, 130,000 lin. ft. 30 in. concrete pipe; earth dam, 19 ft. high, 1,100 ft. long on top, 16 ft. wide at top; pumping plants: two 10 in. centrifugal, total lift 40 ft., operated by 100 hp. motors. $200,000. Private plans.

Calif., Eureka—Plans to purchase 1,000 lin.ft. 8 in. Class B c.i. pipe, also 12,500 lin.ft. 2 in. standard black pipe, random lengths, for immediate delivery. J. Griffiths, supt. pub. wks.

Calif., Fresno—Fresno City Water Co. appropriated $185,000, improvements to water system. G. B. Jackson, genl. mgr.

Calif., Los Angeles—Having plans prepared 21 in main and laterals along line, Mulholland Dr. To exceed $25,000. W. Mulholland, ch. engr. City Bureau of Waterworks.

Calif., Oakdale—Plans 600 g.p.m. pumping plant. H. E. Shipman, water supt.

Calif., San Bernardino—Voted $275,000 bonds extending water system. C. E. Johnson, city engr. Noted Apr. 5.

Que., Beauport—Plans to enlarge water system. $200,000. E. Hamel & Co., 51 St. Pierre St., Quebec, engrs.

Que., Three Rivers—Had plans prepared filtration plant, 6-24 in. c.i. mains, 3 m.g. centrifugal pump, etc. $300,000. C. Gelinas, Three Rivers, engr.

Que., Farnham—Having plans prepared 1 m.g. filter plant, 6 new lines, 1,000 ft. 16 in. c.i. pipe, elevated tank, 150,000 gal. capacity, 100 ft. high. $90,000. A. Plancondon, 70 St. James St., Montreal, consult. engr.

Que., Montreal—Takes bids end of May, 24,364 ft. 8 in. mains in 19 various streets and avenues. R. Bauset, city clk.

B. C., Vancouver—Plans election to vote on $100,000 bonds for improvements at intake works, also $65,000 for fire protection system in Stanley Park. C. Brackenridge, city engr.

BIDS DESIRED

N. Y., Buffalo—May 19, by Dept. Pub. Wks., Municipal Bldg., two 72 x 135 in. and two 72 x 72 in. rectangular sluice gates, for filter plant. G. C. Andrews, Col. Ward Pumping Sta., engr.

N. Y., Silver Creek — May 23, by Bd. Water Comrs., furnishing c.i. pipe, Div. 1, hauling and laying c.i. pipe, Div. 2. J. P. Wells, Cutler Bldg., Rochester, hydraulic engr.; adv. E. N.-R. May 8.

N. J., Highlands — May 26, by Boro Council, Boro Hall, steel standpipe. F. Kieferdorf, mayor; adv. E. N.-R. May 8.

N. J., Keansburg (Arlington, P. O.)—May 27, by Boro Council, at office of H. E. Cowley, boro clk. c.i. pipe, pumping station and filters. Alexander Potter, 50 Church St., New York City, consult. engr.; adv. E. N.-R. May 8.

Pa., Downington — May 22, by E. B. Wagner, secy. Town Council, filter plant of three 500,000 gal. units, small concrete dam, and pumping station; adv. E. N.-R. May 8.

Pa., Sayre — May 15, by Sayre Water Co., extending brick pumping station, electric motor driven centrifugal pumping units, steam engine driven centrifugal pumping unit, c.i. pipes, vitr. pipe, specials castings and valves, pipe laying, coagulating basin, etc. C. C. West, genl. mgr.

La., Alexandria — May 19, by City Comrs., 2 m.g. rein.-con. reservoir. H. J. Duncan, engr.

O., Cleveland—May 15, for 60 in. c.i. or steel main in Sect. 2 Ridge Rd. To exceed $75,000. A. V. Ruggles, City Hall, engr.

Ill., Fairfield—May 14, by F. M. Yohe, c/o Wayne County Clerk, constructing pump house and sluiceways, installing two 100 hp. semi-diesel oil engines, two 24-in. centrifugal pumps, two 5 x 5 ft. concrete sluicegates, etc. $40,000.

Mich., Jackson—May 21, by City Clerk, rein.-con., brick and steel high service pumping station; adv. E. N.-R. May 8.

Minn., Red Wing—May 14, pump house and concrete foundations for pump equipment. S. T. Irvine, clk. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engrs.

Minn., Winona—May 19, by city, 13,398 lin.ft. 4- to 14-in. c.i. Class B water pipe, 28 brick manholes, 15,400 lb. c.i. specials, 28 gate valves, 17 fire hydrants. $30,877. E. E. Chadwick, city engr.

Mo., Chillicothe—May 16, by City Auditor, 500 hp. water tube boiler with super heater, stoker and accessories, stoker for boiler, 7 x 175 ft. brick or concrete stack, remodeling and constructing addition to boiler room. E. E. Harper, 3031 Park Ave., Kansas City, engr.

Okla., Oklahoma City — May 20, by M. Peshek, city clk., water supply improvements; adv. E. N.-R. May 8.

Wash., Lynden—May 12, by City Council, 500,000 gal. filter unit, incl. filter basins, settling basins, etc., furnishing and erecting 100,000 gal. steel tank on 90-ft. steel tower. Shibley & Bovard, Northwest Bank Bldg., Portland, Ore., engrs. Noted Apr. 3.

Que., Cap-De-la-Madeline — City taking bids 1,500 g.p.m. centrifugal pump. $6,000.

BIDS RECEIVED

N. Y., Jamestown—For 2 m.g. concrete reservoir, from Mullen, Guinnane & Ludwig, 303 North Main St., $28,829. Noted Mar. 27.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Maurice Ave. and 67th St. and removing existing connections, etc., at Queens Blvd and Fisk Ave., here, from Hanratty Contg. Co., 605 Beach Terrace, New York. $124,159. Noted Apr. 24.

N. Y., Long Island City — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, Apr. 29, mains in Culver and Hunt Places, Alstyne, Burnside, Colonial, Maurice, Nicolls, Peartree and Way Aves. Ivy, Pilgrim, Van Cleff, 20th, 24th, 44th, 51st and 113th Sts., here, from J. A. Gregory, 351 East 124th St., New York, $17,324. Noted Apr. 24.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Apr. 30, mains in White Plains Rd., Chatterton, Gildersleeve, Gleason, Newman and Underhill Aves., from Hanratty Contg. Co., 605 Beach Terrace, $7,530; in Boston Rd., Allerton, Astor, Cruger, Fairmount, Hollywood, Matthews and Wallace Aves., Barry and Cravens Sts., from C. DeBlasio, 339 7th Ave., Mt. Vernon, $7,568. Noted Apr. 24.

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., Apr. 29, mains in Knapp St., Westchester Esplanade, Allerton, Astor, Fenton, Mickle, Seymour and Waring Aves., from Knight & Demicco, 448 East Tremont Ave., $8,400; in Bogart, Hering, Jerome, Lurting, Pierce, Radcliff, Rhinelander, Sherman, Van Nest and Yates Aves., from J. V. Timoney Constr. Co., 220 East 201st St., $7,458. Noted Apr. 24.

Md., Baltimore — Bd. Awards, Apr. 30, furnishing and delivering special 30-in. Poppet valves, Water Contr. 73, from Ellicott Machine Corp., Bush and Severn Sts., $5,186; trench excav. from M. and J. B. McHugh, 829 North Markoe St., Phila., Pa., $36,420. Noted Apr. 24.

N. Y., New York — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Grand Concourse, East Moshulu Parkway, Aqueduct, Montgomery, Van Cortlandt and Waldo Aves., East 163th, East 190th, West 175th, West 180th and West 197th Sts., from Beaver Eng. & Contg. Co., 51 Chambers St., $20,585. Noted May 1.

O., Cleveland—For 2,108 tons 60 in. c.i. mains in West Side, from Great Lakes Dredge & Dock Co., Williamson Bldg., $204,377.

CONTRACTS AWARDED

N. Y., Albany—Filtration plant, to James J. Finn & Son, 176 Sherman St., $445,992. Noted May 1.

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., shaft, etc., to McWane Cast Iron Pipe Co., 27th Ave. N., Birmingham, Ala., $57,397; screen well and conduits, to Jarrett-Chambers Co., 30 East 42nd St., New York City, $174,835. Noted Mar. 27.

N. Y., Dunkirk — Bd. Water Comrs., water pump, 8 m.g. capacity, to Worthington Pump & Mchy. Corp., 115 Bway., New York City, $41,975. Noted Apr. 10.

N. Y., La Salle—Bd. Village Trustees water system standpipe; foundation to J. T. Smith & Son, La Salle, $8,740; standpipe and painting, to Chicago Bridge & Iron Co., 608 South Dearborn St., Chicago, $17,830. Noted Dec. 13.

Pa., Sharon—Constructing 3 story, 80 x 200 ft. (3 m.g. capacity), addition to filtration plant with booster stations along line of distribution, to Burnip Constr. Co., 223 East Broad St., Columbus, O., $200,000. Noted Feb. 7.

O., Cincinnati—Director Pub. Serv., Apr. 24, reservoir for Eastern Hills, 500 ft. 8 in., 400 ft. 24 in. and 150 ft. 30 in. iron pipe, 2,000 ft. 8- to 12-in. vitr. pipe, 13,000 sq.yd. gunite, 18,000 cu.yd. rein.-con., 70,000 cu.yd. earth excav., from M. Penker & Sons, 123 Valencia St., $579,462. Engrs. est. $720,000. Noted Apr. 17.

O., Cleveland—Sect. 3 of West Side high service main, 2,108 tons 60 in. c.i. pipe, 11,000 cu.yd. earth trenching, to Great Lakes Constr. Co., c/o J. T. Martin, B. F. Keith Bldg., $204,377. Noted Apr. 17.

O., Cleveland—For 2,630 tons 60 in. c.i. mains in Woodland Ave., Contr. 30E, to D. Lowensohn Co., 6795 Wakefield Ave., $261,948. Noted May 1.

O., Cleveland—Cuyahoga Co. 15,000 ft. 6 and 8 in. c.i. mains, Impvt. 13 of Co. Sewer Dists. 1 and 2, to D. Pfahl & Co., Fisher Rd., $47,908. Noted May 1.

O., Cleveland—Cuyahoga Co., 13,000 ft. 6 and 8 in. c.i. mains in Miles Rd. Impvt. 550, Sewer Dist. 5, to Curro & Whittaker, 12208 Mayfield Rd., $104,341. Noted Apr. 17.

Ill., Metropolis — City Council, waterworks improvements as follows: to J. V. Boland Constr. Co., Chemical Bldg., St. Louis, Mo., building and foundation $23,567, pipe work and covering $7,384, chimney $3,962 and concrete reservoir $6,100; to Westinghouse Electric & Mfg. Co., 717 South 12th St., St. Louis, Mo., switchboard $3,557, steam turbo engine unit $16,645, condensor $4,207; to F. M. Luth, 3000 Shenandoah Ave., St. Louis, Mo., centrifugal pumps and motors $3,757, deep well $3,245 and laying c.i. pipe $17,245; to Jeffery Machine Co., Pontiac Bldg., St. Louis, Mo., coal elevator $1,525; to Chicago Bridge & Iron Wks., 608 South Dearborn St., Chicago, steel tower and tank $8,475; to Elliott Machine Co., Victoria Bldg., St. Louis, Mo., closed heater $525; to Reeves & Skimmer Machine Co., 2211 Olive St., St. Louis, Mo., boiler feed pumps $620; to Natl. Cast Iron Pipe Co., 122 South Michigan St., Chicago, cast iron pipe $27,117; to Ludlow Valve Mfg. Co., 209 South La Salle St., Chicago, valves and hydrants $3,640. General supervising contractor, W. I. Tune, Metropolis.

Tex., Frisco—Pipe, to U. S. Cast Iron Pipe & Fdry. Co., Magnolia Bldg., Dallas, $11,200; tank and tower, to Pittsburg Des Moines Steel Co., Praetorian Bldg., Dallas, $6,000; 2 in. pipe and fittings, to Nelson Mfg. Co., 915 McKinney Ave., Dallas, $3,000.

Ill., Roselle—Deep Well to M. T. Peterson, 120 North Franklin St., Madison, Wis.; tank to Grover Corp., East Chicago. Noted Apr. 10.

Wis., Milwaukee—For 20,401 ft. 6- to 12-in. c.i. mains in Fernwood Dist., to L. J. Stevenson, 1720 Cedar Ct., $17,941. Noted Mar. 27.

Minn., Fergus Falls—For 5,991 lin.ft. 6- to 10-in. c.i. pipe, Class B, 16 ft. long, nineteen 6- to 10-in. c.i. valves, and twelve 6-in. c.i. valves, split sleeve, (about 125 tons), to Amer. Cast Iron Pipe Co., 712 Plymouth Bldg., Minneapolis; 6,500 lb. pig lead to Western Smelting & Refining Co., 7th and Douglas Sts., Omaha, Neb.

Que., Beauport—Furnishing 450 tons 4, 6, 8 and 10 in. c.i. pipe, and 7 tons fittings, to Kennedy & Co., 285 Beaver Hall Hill, $25,000.

Sewers

PROPOSED WORK

Mass., Boston—Plans sewerage system in Germantown Dist., West Roxbury, $165,000 will be expended this year. Total $2,000,000. E. P. Murphy, div. engr.

N. Y., Syracuse—Plans sewage pumping station at Kirkpatrick and Van Rensselaer Sts. and new sewers in Turtle, Pulawski, Sand, Kirkpatrick, Solar, Clinton, Spencer, Bear, Basin, Hiawatha, Geddes, Liberty and Marquette Sts. To exceed $200,000. T. H. Mather, city engr.

O., Painesville—Plans sewage treatment works. $50,000. C. M. Crabbe, Painesville, engr.

Sewers (Continued)

Ill., Belleville—Making preliminary plans straightening Richland Creek from Illinois to 3rd, Lincoln and West Adams, probably closing West Creek in conduit, new storm sewers and disposal plant. $345,000-$484,000. C. A. Heinzelmann, City Hall, engr.

Ill., East St. Louis—Having surveys made storm and sanitary sewerage system and sewage disposal. Black & Veatch, 701 Mutual Bldg., Kansas City, Mo., engrs.

Minn., Waconia — Voted $25,000 bonds sewerage system, etc. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted Apr. 10.

Kan., Guff—City rejected bids 14,188 ft. 8-in. vitr. clay pipe, 80 ft. 8-in. c.i. pipe, 31 manholes, 3 flush tanks, Imhoff tank, etc. Shockley Eng. Co., 800 Graphic Arts, Kansas City, Mo., engrs. Noted Jan 24 under Waterworks.

Mo., Chaffee—See "Waterworks."

Mo., Potosi—See "Waterworks."

Mo., Portageville—Election soon to vote on $30,000 bonds for sewers. A. C. Moore, 221 West 3rd St., Joplin, consult. engr.

Mo., St. Louis — Bd. Pub. Serv. takes bids about July 15, Sect. B of River Des Peres Project, 1.25 mi., partially lined opened channel, 140 ft. wide at bottom, 100 ft. at top, 18 ft. deep, closed sanitary sewer and system of laterals from 12- to 48-in. $485,000. W. W. Horner, 300 City Hall, engr. Noted Feb. 14.

Tex., Dallas—J. P. Stephenson, c/o Koch & Fowler, engrs., Central Bank Bldg., had plans prepared 18-24 in. sewers from city limits to Midway Rd. at Bluff View Estates. $75,000.

Tex., El Paso—Voted $100,000 bonds extending system, additional mains and laterals, also enlargement of plant. Address Mayor Dudley. Noted Apr. 17.

Okla., Pittsburg—Election May 20, $30,000 bonds, 4 mi. sewerage system and disposal plant, incl. Imhoff tank and 9,500 ft. 8 in. and 2,000 ft. 10 in. vitr. clay pipe. C. O. Waring, clk. Engineer not selected.

Okla., Sand Springs — City defeated $152,000 bonds for sewers. Holway Eng. Co., 515 New Wright Bldg., Tulsa, engr.

Calif., Claremont — Having plans prepared sewerage system. To exceed $35,000. O. A. Gierlich, Monrovia, engr. Noted Feb. 14.

Calif., Dos Palos — Los Palos Sanitary Sewer Dist. having plans prepared sewerage system, probably vitr. pipe. $25,000 or more. A. Jensen, Rowell Bldg., Fresno, engr. Noted Oct. 11.

Calif., Elsinore—Voted bonds and making plans sewer improvements. Burns & McDonnell, 415 Marsh-Strong Bldg., Los Angeles, engrs. Noted Dec. 20.

Calif., La Verne—Voted $60,000 bonds, sewage disposal plant. Noted Apr. 10.

Calif., Pomona — Voted $25,000 bonds, Elrod treatment plant. F. C. Troehe, city engr. Noted Mar. 13.

Calif., Redondo Beach—Voted $25,000 bonds, extending sewers. Noted Mar. 20.

Calif., Sonoma—Plans to vote on $25,000 or more bonds, sewage disposal improvements.

Calif., South Pasadena (Branch Pasadena)—Voted $25,000 bonds, sewage disposal plant.

Calif., Watsonville—Having plans prepared and will probably vote on $25,000 bonds, sewage treatment plant. H. B. Kitchen, city engr.

Ont., Brampton—Plans sanitary sewers in Eastern Ave., Lowes, Nelson, McMurchy, and Church Sts., also storm sewers in Craig, Elliott, Wellington and Guest Sts. $35,000. C. M. Corkett, City Hall, engr. Prices wanted on materials.

Ont., Fort Erie—Rejected bids completing sewerage system. $225,000. Will readvertise.

Ont., Welland — Plans to repair main sewer wrecked by gas explosion. $30,000. A. Coulson, City Hall, engr.

B. C., Vancouver—Election May 31, to vote on $200,000 bonds, extending sewers in various parts of city. C. Brackenridge, city engr.

BIDS DESIRED

N. J., Keansburg (Arlington, P. O.)—May 27, by Boro Council at office of H. E. Cowley, boro clk., disposal plant, sanitary and outfall sewers. Alexander Potter, 50 Church St., New York City, consult. engr.; adv. E. N.-R. May 8.

Pa., Phila.—May 12, by Dept. Pub. Wks., Bureau Surveys, City Hall, 26 branch sewers in Aikens, Broad, Durham, Edna, 57th, Haines, Judson, Janney, Knox, Linmore, Magnolia, Middleton, Mitchell, Oxford, Sheridan, Spring, Trinity, Weikel and Dupont Sts., Dicks, Malvern and Manyunk Aves., Cobbs Creek Parkway, Edgemoor and Flanders Rds., Georges Lane.

D. C., Wash.—May 28, by Dist. Comrs., sewers in Piney Branch, Halbrook and 7th Sts., 19,720 cu.yd. excav., 2,930 cu.yd. concrete and 364 cu.yd. vitr. brick masonry also 255 cu.yd. sewer brick masonry.

O., Cleveland—May 14, by Cuyahoga Co., 17,000 ft. 8- to 48-in. vitr. clay sewers, Impvt. 300. R. F. MacDowell, Court House, engr.

Mich., Springwells — See "Streets and Roads."

Mont., Shelby—June 2, by A. M. Hart, city clk., 6,000 lin.ft. 8 in. sewers, 4,000 cu.yd. earth excav., Impvt. Dist. 14; adv. E. N.-R. May 8.

Mo., St. Louis — June 3, by Bd. Pub. Serv., 208 City Hall, Sect. "A" Ohio-Montrose Public relief sewer, and Sect. "B" North Baden Public sewer extension; adv. E. N.-R. May 8.

Ark., Pine Bluff — See "Streets and Roads."

Tex., Luling — Taking bids sanitary sewers and disposal plant. $40,000. Koch & Fowler, Central Bank Bldg., Dallas, engrs.

BIDS RECEIVED

Md., Baltimore—Bd. Awards, Apr. 30, storm water drains in Sewer Dists. 48 and 34-A, Storm Water Contr. 68, 4,000 ft. 15- to 36-in. storm drain and inlet connections, from Ryan Constr. Co., 8 Light St., $22,897. Noted Apr. 24.

O., Cleveland—For 90 ft. of 6 ft. 3 in., 290 ft. 6 in. and 290 ft. 5 ft. 9 in. (a) brick or (b) segmental block, in Kensington Rd., from Graham & Henderson, 1274 West 108th St., (a) $52,830 (b) $47,410; double lay 2,160 ft. 24 in. vitr. tile sewer in Marcelle Rd., from Joseph Co., Prospect Four Bldg., $34,530; 1,820 ft. 12- to 24-in. vitr. tile sewer in Krakow, Rathbun and Berdelle Aves., from Shannon & O'Shea, 3380 West 135th St., $7,515; 680 ft. 33 in. and 270 ft. 30 in. vitr. sewer in Kazimer Ave. from W. McDowell & Son, 10319 Miles Ave., $15,490; 79 ft. 12- to 18-in. vitr. tile sewer in South Hillview Ave., from F. Phillip Co., Engineers Bldg., $4,217; 270 ft. 2 "C" brick and 270 ft. 24 in. vitr. tile sewer in East 68th St., from Donnelly & Miller, $8,361; 630 ft. 12- to 24-in. vitr. tile sewer in East 108th St., from E. Cesa, 2462 Baldwin Rd., $4.144.

O., Cleveland—Cuyahoga Co. 9,150 ft. 8- to 18-in. vitr. clay sewers, Impvt. 31, from Salem & George Bros., Erie Bldg., $44,260.

O., Massillon—Director Pub. Serv., May 1, for (a) concrete pipe, (b) segmental block (c) brick (d) concrete sewers in (1) Tuscarawas Trunk (2) North End Trunk (3) Wooster Trunk (4) Sippo Trunk (5) Wetmore Trunk, from United Eng. & Constr. Co., Sandusky, (a1) $99,397 (b1) $97,655 (2) $42,410 (3) $28,252 (4) $41,420 (5) $19,188; Kohlbarger & Hurley, Marion (c1) $108,763 (d1) $107,208. Noted Apr. 24.

Mich., Detroit—Dept. Pub. Wks., 4,461 ft. Wyoming Ave. Sewer, Sect. 6, 4,362 ft. 7 ft. 6 in. and 99 ft. 4 ft. 6 in. cylinder, from R. A. Mercier, 5435 Wesson Ave., $124,626; also Swain Ave. Outlet Sewer from Greiling Bros., Morrell St., $58,930. Noted Apr. 10.

Mich., Royal Oak — C. J. Crawford, drainage comr. Oakland Co., deepening and widening 13,600 ft. Red Run Drain, incl. underpinning 4 bridges 25-56 ft. spans, from Davis & Paupore, 3151 Leland Ave., Detroit, $39,169; 10,371 ft. Campbell Ave Drain, Sect. 2, 9 ft. 6 in. to 10 ft. diam., brick or monolithic concrete, from R. A. Mercier, 5435 Wesson Ave., $480,000; 17,865 Campbell Ave. Drain, Sect. 3, 24 in. to 9 ft., vitr. crock, concrete and brick, from S. Healy, 6466 Epworth Blvd., Detroit, $439,677; furnishing 70 tons structural steel I beams from Beach Mfg. Co., Charlotte, $3,072. Noted Apr. 24.

Neb., Fremont—Laying 8.25 mi. concrete and c.i. pipe from A. A. Dobson Constr. Co., 1st Natl. Bank Bldg., Lincoln, concrete pipe only $29,268, A. A. Donbson Constr. Co. and Wright Bros., Fremont, c.i. pipe only $25,064; Mickelson Cement Products, Alberlee, Minn., $56,590. Noted Apr. 17.

Wash., Seattle—Bd. Pub. Wks., sewers in 34th Ave. W. et al., from Scalzo & Co., Seattle, $100,373. Engrs. est. $89,936. Noted Apr. 24.

Calif., Glendale — See "Streets and Roads."

Calif., Los Angeles — See "Streets and Roads."

CONTRACTS AWARDED

Mass., Brighton (Boston, P. O.)—City of Boston, last link of Shepard Brook Sewer, here, to V. Grande, 22 Hull St., Boston, $33,000.

Mass., Dorchester (Boston P. O.)—City of Boston, Dorchester Brook Sewer, to V. Barletta, 10 Whipple Ave., West Roxbury (Boston P. O.) $53,860. Noted Apr. 24.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, Sect. 2C, modification and extension of biological plant, 26th Ward disposal works, to Niewenhous Co., Inc., 316 East 161st St., New York, $558,726. Noted May 1.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, **e. e. means engineers estimate**, sewer in Benson Ave., to J. W. Murphy, 8866 26th St., $27,300; sewer in 65th St., to Tomasetti & Co., Inc., 1133 60th St., 86.86% e. e. ($33,770); in Bay 34th St., to Nazzarro & Querriero, 82.41% e. e. $6,083; 73rd, West 23rd, East 37th and West 7th Sts., and Delamere Pl., to S. Ambrocio, 106 69th St., 88% e. e. $5,510, 93% e. e. $800, 81% e. e. $1,400, 84.98% e. e. $470, 80% e. e. $800 respectively; 80th St. and Ft. Hamilton Parkway, to Manmill Constr. Co., 2035 Douglass St., 88.8% e. e. $4,618 and 98.2% e. e. $1,740 respectively; 7th Ave. to C. F. Vacharas, 645 40th St., 93% e. e. $4,037; Ft. Hamilton Parkway, to Tozzi Contg. Co., 95.75% e. e. $1,406. Noted May 1.

Pa., Upper Darby (branch Phila., P. O.)—Comrs. Upper Darby Twp., 17,400 ft. Cobbs Creek Sutfall Sewer from 60th to 69th Sts., to W. H. Garson, 5033 Brown St., $176,000. Noted Mar. 27.

Fla., Miami Beach — To Gedney & Murphy, St. Petersburg, storm sewers $35,968, sanitary sewers $58,447; to J. J. Quinn Co., Miami, storm sewers 15, 16, 17 and 21, $50,113, sanitary sewers 18 and 19, $42,000, sanitary sewer 20, $38,000. Noted Mar. 13.

Miss., Greenwood — See "Streets and Roads."

O., Cleveland—Cuyahoga Co., 22,000 ft. 8- to 48-in. brick sewer in Miles Rd. Impvt. 501, to Curro & Whittaker, 12208 Mayfield Rd., $148,217. Noted Apr. 17.

O., Euclid—For 5,775 ft. 30 in. concrete sewer in Lake Shore Blvd., to Graham & Henderson, 1274 West 108th St., Cleveland, $128,823. Noted Apr. 24.

O., Shaker Heights (Cleveland P. O.)—Vitr. clay sewers in Scottsdale Rd. east and west sections, to Curro & Whittaker, 12208 Mayfield Rd., Cleveland, $44,795; 2,970 ft. 8- to 24-in. vitr. tile sewer in Winchell Rd., to Salem & George Bros., Erie Bldg., Cleveland, $24,169; in Lomond Blvd., to C. W. Jackson, 1318 East 84th St., Cleveland, $54,270. Noted May 1.

Mich., Detroit—Dept. Pub. Wks., 5,294 ft. Six Mile Rd. Sewer, Sect. 9, monolithic concrete in tunnel, 4 ft. 6 in. to 6 ft. 9 in. cylinder, to G. R. Cooke, 1260 Penobscot Bldg., $122,147; 5,468 ft. Seven Mile Rd. Sewer Sect. 9, brick in tunnel 5 ft. to 5 ft. 6 in. cylinder, to W. Blanck Co., 827 Ford Bldg., $128,246. Noted Apr. 17.

Wis., Milwaukee — Monolithic concrete and pipe sewers in Roosevelt Dr., to Clayton Constr. Co., 397 Farwell Ave., $203,009; Sherman Blvd. from Roosevelt Dr. to Concordia Ave., to G. E. Zimmermann, 3402 Grand Ave., $114,899; Sherman Blvd. from Concordia Ave., to Burleigh, St., to Hammen & Co., 342 East North Ave., $86,329; Oklahoma Ave., etc., to Milwaukee Sewer & Drainage Co., 928 Humboldt Ave., $15,004. Noted Apr. 24.

Wis., Milwaukee—Sewerage Comn., 508 Market St., setting 72,000 filter plates in connection with sewage disposal plant on Jones Island, to Klug & Smith, Mack Blk., $32,913.

Neb., Syracuse—Constructing sewers in various streets, to W. B. Carter, 506 U. B. Bldg., Sioux City, Ia., $34,788.

Mo., Cameron — Sewers, disposal and pumping plants, to Carrothers Bros. Constr. Co., 310 Walsix Bldg., Kansas City, $57,980. Noted Apr. 17.

Tex., Royse City—Will lay 23,000 ft. 6, 8 and 10 in. pipe, also build disposal plant, by day labor. E. L. Dalton, Wilson Bldg., Dallas, engr. in charge construction. $25,000.

Colo., Denver—For 10 mi. 8, 10 and 12 in. vitr. sewers in South Side Special Sanitary Sewer Dist. 9, to Pendergast & Connor Constr. Co., 1st Natl. Bank Bldg., $60,153. Noted Apr. 27.

Calif., Alhambra—Sewerage system, to Culzak & Bebeck, 1824 North Brannick St., Los Angeles, 1,276 lin.ft. 12 in. vitr. pipe $1.15, 42,799 lin.ft. 8 in. $1.05, total $96,500. Noted Apr. 17.

Sewers (Continued)

Calif., Santa Ana — See "Streets and Roads."

Waste Disposal

BIDS DESIRED

Md., Baltimore — May 14, by Bd. Awards, 3 story, 55 x 173 ft. disposal plant, 28th and Sisson Sts. $150,000. S. Purcell, City Hall, ch. engr. Noted Feb. 7.

BIDS RECEIVED

N. Y., Rockaway Beach (Ind. Sta. Far Rockaway)—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., Long Island City, Apr. 29, constructing and completing building and runway, furnaces, appurtenances and chimney of Rockaway Beach Destructor, here, from Hudson City Eng. & Constr. Corp., 25 Hunterspoint Ave., Long Island City, $298,000. Noted Apr. 24.

CONTRACTS AWARDED

Fla., Jacksonville—For 40 ton addition to incinerator plant, to Nye Odorless Crematory Co., Georgia Life Bldg., Macon, Ga., $28,000.

Ill., Quincy—Garbage incinerator, to Superior Garbage Incinerator Co., Praetorian Bldg., Dallas, Tex. Engrs. est. $25,000.

Bridges

PROPOSED WORK

New York—Bd. Supervs. Ontario Co. (Canandaigua) and Livingston Co. (Geneseo) plan concrete highway bridge over Honeoye Creek. $30,000.

N. Y., Jamestown — Election May 3, $350,000 bonds, West 3rd St. bridge. S. A. Carlson, mayor. Noted Nov. 8.

Tenn., Maryville — Comrs. Blount Co. plans highway bridge at Brobsons Ford. $25,000.

S. D., Pierre—State Hy. Dept., Pierre, having plans prepared 1,800 high truss bridge over Missouri River, here. $500,000.

Missouri — State Hy. Dept., Jefferson City, received no bids Apr. 22, two 24 ft. rein.-con. deck girder spans, 1 concrete pier, etc., over Brushy Creek, Carter Co.; three 20 ft. rein.-con. slab spans, etc., over Long Branch, and five 20 ft. rein.-con. slab spans, etc., over Lamine River overflow, Cooper and Morgan Counties. Noted Apr. 17.

Okla., Ralston—Pawnee Co. voted $200,000 bonds, 3 steel truss bridges across Arkansas River. J. M. Page, c/o State Hy. Dept., Oklahoma City, engr.

Calif., San Francisco — City and San Francisco Co. had plans prepared timber trestle for Bay crossing pipe line of Hetch Hetchy project. $175,000. M. M. O'Shaughnessy, city engr.

BIDS DESIRED

North Carolina—See "Streets and Roads."

Fla., Key West—June 5, by J. O. Kirchheimer, ch. Bd. Comrs. Monroe Co., steel draw-bridge, piers, abutments, operating machinery, fender system, etc., over Barnes Sound between Key Largo and mainland; adv. E. N.-R. May 8.

Ill., Chicago—May 12, at office of H. A. Zender, Cook Co. supt. of pub. serv., single span rein.-con. deck girder, bridge and temporary pile trestle, known as Willow Bridge, Sect. 142C-15D, alternate bids (a) cement furnished by county (b) cement, coarse and fine aggregates furnished by county, (a) $26,606 (b) $25,346; 5 span rein.-con. deck girder and temporary pile trestle, known as Rust Bridge, Sect. 142A-15D, alternate bids (a) cement furnished by county (b) cement, coarse and fine aggregates furnished by state, (a) $86,282 (b) $80,572.

Wis., West Allis—May 12, by Bd. Pub. Wks., A. Wichner, supt., 2 rein.-con. bridges at 77th Ave. over Honey Creek. $25,000. W. Darby, city engr.

Minn., St. Paul—May 19, by G. J. Ries, aud. Ramsey Co., bridge over Mississippi River at Jackson St., 892 ft., 24 ft. roadway and one 6 ft. sidewalk, all timber except one 92-ft. through plate girder lift span. City and Ramsey Co., owners. $125,000. G. M. Shepard, city engr. Noted Apr. 24.

South Dakota—See "Streets and Roads."

Tex., Alice—See "Streets and Roads."

Tex., Clarendon—May 22, by R. Porter, judge Donley Co., 312 ft. steel truss bridge over Salt Fork of Red River, 9 spans, I beam approaches, concrete piers and bents, etc. $25,500. C. L. Hasie, Box 168, Memphis, engr.

Colorado—May 15, by State Hy. Dept., Denver, 2,155 ft. bridge over Arkansas River at Sta. 961 plus on Federal Aid Project 248-A, about 6 mi. north of Salida, Chaffee Co., 350 cu.yd. concrete, 39,500 lb. reinforcing and 228,000 lb. structural steel, etc. $29,155. L. D. Blauvelt, State Office Bldg., Denver, engr.

California—May 26, by State Recl. Bd., Eng. Dept., Sacramento, 6 timber bridges, 18 ft. wide, total length 949 ft., 55 fixed spans of 17 and 19 ft. each on 5-pile bents, incl. 144,000 ft. No. 1 common Oregon pine, creosoted piles, over East and West Levees of Sutter By-Pass, Sutter Co.

California—May 26, by State Highway Comn., Sacramento, bridge across Klamath River near Requa (I-D. N.-A), Del Norte Co., five 210 ft. rein.-con. arch spans and two 50 ft. rein.-con. approach spans. R. M. Morton, state highway engr. Noted June 7.

Calif., Los Angeles—June 2, by Bd. Pub. Wks., rein.-con. viaduct, 9th St., across Los Angeles River. $650,000. J. Griffin, city engr.

BIDS RECEIVED

N. Y., Buffalo—City, substructure of Stevenson Bridge over improved Cazenovia Creek Channel, from J. Johnson Constr. Co., 765 Abbott Rd., $37,200; superstructure from McClintic-Marshall Co., 1201 Oliver Bldg., Pittsburgh, Pa., $22,480, Independent Bridge Co., May Bldg., Pittsburgh, Pa., Design A $24,840, Design B $22,840, Standard Eng. & Contg. Co., 2463 Bway., Toledo, O., Design A $24,500, Design B $23,700. Noted Apr. 17.

N. Y., New York—E. W. Buckley, comr. Purch., Municipal Bldg., May 2, machinery and steel for North Channel bridge, from Bethlehem Steel Co., 25 Bway., $139,325. Noted May 1.

Missouri — State Hy. Dept., Jefferson City, Apr. 22, three 20 ft. rein.-con. slab spans, etc., over stream, Cooper Co., from W. J. Cochran & Son, Boonville, $4,350; one 60 ft. steel truss span, etc., over Choteau Creek, Cooper Co., from Western Bridge Co., Harrisonville, $12,374; one 40 ft. rein.-con. deck girder span, etc., over creek, Dade Co., from R. H. Sharp, Reeds Springs, $4,043; one 60 ft. steel truss span, etc., over Muddy Creek, Linn Co., from Meek & Galbreath, Chillicothe, $11,193; one 25 ft. rein.-con. deck girder span, etc., over Northview Branch, Webster Co., from C. F. Johnson, Buffalo, $2,664; one 35 ft. rein.-con. deck girder span, etc., over creek, Benton Co., from Bertman & Menefee, Sedalia, $3,717; one 180 ft. and two 80 ft. steel truss spans, etc., over Lamine River, Cooper Co., from Haller & Davis, Boonville, $41,375; one 80 ft. steel truss span, etc., over Maugua Creek, Webster Co., one 35 ft. rein.-con. deck girder and four 20 ft. rein.-con. slab spans, etc., over tracks of Chicago & Alton R.R., Lafayette Co., and two 12 ft. rein.-con. slab spans, etc., over Witchet Creek, Lafayette Co., from M. E. Gillioz, Monett, $9,013, $8,865 and $4,558 respectively; three 20 ft. rein.-con. slab spans, etc., over Mulky branch, five 30 ft. I-beam spans, etc., over Davis Creek Drainage Ditch and three 30 ft. I-beam spans, etc., over Davis Creek, all Lafayette Co., from Cook-O'Brien Constr. Co., 305 Ry. Exch., Kansas City, $5,891, $8,328 and $5,630 respectively. Noted Apr. 17.

CONTRACTS AWARDED

New Jersey—State Hy. Dept., Trenton, concrete encased plate girder bridge of 9 fixed spans and 1 double leaf bascule span with concrete piers and abutments, also temporary bridge and removing existing bridge over Manasquan River, Monmouth and Ocean Counties in Municipalities of Brick and Wall, to S. S. Thompson, 111 Chestnut St., Red Bank, $424,695. Noted Apr. 10.

Ga., Quitman—Comrs. Brooks Co., 2 concrete arch highway bridges over Piscola Creek, to Luten Bridge Co., York, Pa. Est. cost $25,000.

Fla., Alva—Lee Co., Fort Myers, draw bridge over Calooiahatchee River, here, to Champion Bridge Co., H. C. Quinn, Agt., Box 481, Fort Lauderdale, $36,000.

O., Cleveland — Cuyahoga Co. concrete bridge, Hilliard Rd., to Walsh Constr. Co., 308 Euclid Ave., $809,694. Noted May 1.

Ill., East St. Louis—East Side Levee and Sanitary Dist., bridge over Prairie du Pont Diversion canal, one 169 ft. and two 101 ft. 6 in. concrete spans, to H. H. Hall Constr. Co., Murphy Bldg., $80,400. Noted Mar. 27.

Ia., Cherokee—Cherokee Co., 69 concrete culverts, 1 pony truss and 4 I-beam spans, to Material Supply & Constr. Co., Boone, $44,678.

Ia., Decorah—Bd. Supervs. Winneshiek Co., 9 concrete culverts, to Ward & Teslow, Decorah, $5,566, 13 concrete culverts, to J. J. Grose, Decorah, $6,490, 1 high truss bridge, to Rodies & Bales, Strawberry Point, $17,450.

Ia., Montezuma—Bd. Supervs. Powesheik Co., 2 pony trusses and 3 I-beams, to M. O. Burnett, Morengo, $24,329, 10 box culverts and one I-beam to Iowa Bridge Co., 1263 East 19th St., Des Moines, $15,828, 15 box culverts, to A. Melberg, Vinton, $14,980.

Minnesota—See "Streets and Roads."

Minn., Austin—Mower Co., Bridge 3461 over Cedar River, two 75 ft. concrete arch spans, to Widell Co., Mankato, $48,026. Noted Mar. 20.

Neb., Bridgeport—Morrill Co., c/o W. C. Clark, 700 ft. bridge, 7 spans, on Federal Aid Project 79 C, to Western Bridge & Constr. Co., 748 Peters Trust Bldg., Omaha, $83,300. Noted Apr. 17.

Neb., Nebraska City — See "Streets & Roads."

Mont., Cut Bank—Great Northern Ry. Co., 175 East 4th St., St. Paul, steel and concrete bridge over Cut Bank River, to Widell Co., 1st Natl. Bldg., Mankato, Minn., $115,000.

Arkansas — Comrs. Pulaski, Saline and Garland Counties, 5 steel bridges on Little Rock-Hot Springs Highway, to L. Johnson, 519 North Sergeant, Joplin, Mo., 132,000 lb. structural steel in trusses $0.07, 42,285 lb. structural steel in I beams $0.055, 141.62 cu.yd. concrete $22, 29,015 lb. reinforcing steel $0.055. Noted Mar. 27.

New Mexico—See "Streets and Roads."

California—State Highway Comn., Sacramento, 12 rein.-con. bridges, between Old Elk Grove and Sacramento, Sacramento Co., to T. H. and M. C. Polk, Chicago, $40,099. Noted May 1.

Dams

PROPOSED WORK

Ariz., Flagstaff — City having surveys made multiple arch concrete dam in Schulz Canyon, to impound 50 m.g. Burns & McDonnell, Marsh-Strong Bldg., Los Angeles, engrs.

Calif., Corona—See "Waterworks."

Calif., Merced—Merced Irrigation Dist. had revised plans prepared for Exchequer Dam, rein.-con., gravity section type, 320 ft. high. R. V. Meikle, ch. engr. Noted Dec. 20.

Calif., Pescadero — See "Excavation, Drainage, Irrigation."

BIDS DESIRED

Okla., Oklahoma City — May 20, by M. Peshek, Jr., city clk., sluice gates, operating stands and extensions to dam. $200,000. B. M. Hart, city engr. Noted Nov. 1.

Que., Berthierville — Running Streams Comn., Quebec, taking bids storage dam in River du Loup, north of here. $300,000.

CONTRACTS AWARDED

Vt., Morrisville—See "Unclassified."

N. Y., Potsdam—See "Unclassified."

Railways

PROPOSED WORK

New York—New York, Ontario & Western R.R., Grand Central Terminal, New York City, plans relaying with 100 lb. rails 12 mi. between Oswego and Fulton. $150,000. W. C. Heidenthal, Middletown, engr. m. w.

New York — See "Streets and Roads under Syracuse, N. Y."

California—Bakersfield & Kern Electric R.R. Co. plans improvements to lines. $100,000.

California — Merced Irrigation Dist., Merced, rejected bids relocating Yosemite Valley R.R. $1,500,000. Noted Sept. 20.

Quebec—Canadian Natl. Ry., Windsor Sta., Montreal, plans 6 mi. branch line from Donnaconna to Allensby Junction. $300,000.

CONTRACTS AWARDED

Florida—Fort Myers Southern Ry., c/o D. M. Lamdin, ch. engr., Wilmington, N. C., railroad from Fort Myers to Bonitas Springs, grading 14 mi., to Morrison & Boswell, Inverness; grading 9 mi. to W. R. Wallace & Co., Fort Myers. Noted Mar. 20.

Ontario — W. H. Maund, secy.-treas. Temiskaming & Northern Ontario Ry., North Bay, 17 mi. road bed, from Cassidy to South Lorrain, to Grant Bros., Ltd., Bank Natl. Bldg., Rideau St., Ottawa. Noted Apr. 10.

Texas—Dallas Ry. Co., Interurban Bldg., Dallas, will build Tyler Burlington street railway line in Oak Cliff, also pave same, by day labor. $146,000. R. B. Brown, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Mich., Monroe—Drainage—Comrs. Monroe Co. plan dredging 20 drains. $180,000.

Ill., Cairo—Cairo D. D., c/o City Clerk, voted $150,000 bonds to improve drainage and flood protection system.

Excavation, Drainage, Irrigation (Continued)

Ark., Jonesboro—D. D. 28, c/o M. M. Markle, Jonesboro, having preliminary surveys made reclaiming many acres in Central portion Craighead Co., incl. 10 mi. drainage ditches beginning ¾ mi. south of Brookland. Cob & Lee, Jonesboro, engrs.

Tex., Bay City—See "Unclassified."

Tex., Garland — Garland Levee Impvt. Dist., c/o McKay & Montgomery, engrs., Andrews Bldg., Dallas, had plans prepared 6.5 mi. channeling, Muddy Creek, Dallas Co. $30,000.

Calif., Bakersfield—Buena Vista Water Storage Dist. plans to vote on bonds for system to irrigate 80,000 acres. Engineer not selected.

Calif., Escondido — Escondido Mutual Water Co. having plans prepared 1,800 lin. ft. 42 in. steel siphon, and lining 22,462 lin. ft. main ditch. J. B. Dixon, supt. Private plans.

Calif., Pescadero—D. Atkins, et al. 260 California St., San Francisco, having plans prepared several earth fill dams and pumping plants, to irrigate ultimately 720 acres, here. C. E. Grunsky, 57 Post St., San Francisco, engr.

BIDS DESIRED

Ill., Danville—May 31, by Comrs. Union D. D. 3 of Grant and Ross Twps., 14,300 ft. 12- to 24-in. tile. J. F. Fisher, Danville, engr.

Ill., Fairfield—See "Waterworks."

Ill., Paxton—May 26, by Comrs. Sibley D.D., at office of Clerk Ford Co., 25,597 ft. main open ditch extending west from Sibley, involving 119,149 cu.yd. excav., Branch 1, 3,575 ft. hard burned shale tile, etc. Contractor will be entitled to construct at same price per cu.yd. an outlet ditch 1 mi. long, leading from lower end of drainage ditch to main ditch of Mackinaw Dist.

Neb., Omaha—May 13, by J. P. Hoctor, city clk., filling in and reclamation of park ground at Levi Carter Park by dredging lake. Noted Apr. 24 under "Unclassified."

BIDS RECEIVED

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., Apr. 22, dredging Buffalo Inner Harbor to completed contract depth for maintenance of channel to June 30, 1925, from Great Lakes Dredge & Dock Co., D. S. Morgan Bldg., $0.41 per cu.yd. scow measure. Noted Apr. 17.

CONTRACTS AWARDED

Wis., Milwaukee — Dredging various rivers and channels, 133,600 cu.yd., to Great Lakes Dredge & Dock Co., 216 West Water St., $0.4375 per cu.yd. Noted Apr. 24.

Ark., Osceola—Sub. Dist. 1 of D. D. 12, reconstructing and enlarging 24 mi. drainage ditches, 12- to 30-ft. bottom and construction 6 mi. new ditches 6- to 10-ft. bottom, approximately 575,000 cu.yd., to McWilliams Co., Inc., Exch. Bldg., Memphis, Tenn., $0.13 per cu.yd.

Calif., Merced—Merced Irrigation Dist., canals, to J. G. Hoskins, Turlock, Div. 1 (1) $0.1125 (2) $1.25 (3) $0.16; Niman & Cook, Turlock, Div. 2 (1) $0.104 (2) $1 (3) $0.18; J. Phillips 637 Santa Ray Ave., Oakland, Div. 3 (1) $0.14 (2) $0.14, Divs. 4 and 5 (1) $0.14 (2) $0.14.

Calif., Williams — Williams Irrigation Dist. will build 13 mi. canal, 140,000 cu.yd. earthwork, by day labor. Noted Apr. 10.

Streets and Roads

PROPOSED WORK

N. Y., Dansville — Bd. Village Trustees plan paving Knox and other streets. To exceed $25,000. C. Grant, village pres.

N. Y., Newark — Bd. Village Trustees plan paving several streets. $50,000. C. H. Drake, pres.

N. Y., Old Forge—Bd. Village Trustees plan resurfacing and constructing new roads. To exceed $25,000. E. J. Lenhardt, pres.

N. Y., Rensselaer—Made plans improving South St., repaving Bway. and paving 5th St., Aiken, Chestnut and Fowler Aves. To exceed $25,000. A. J. Kaufman, city engr.

N. Y., Syracuse — Had plans prepared paving Garfield Ave., $31,900; eliminating curve on Liverpool Rd., $14,200. T. H. Mather, city engr.

N. Y., Syracuse—New York State Rys. plans paving Spring St., $35,000 also new loop at end of Irving Ave., $10,000. H. E. Bean, engr. way & structures.

N. Y., Waterloo—Bd. Village Trustees plan paving various streets. $27,000-$30,000. L. V. Fillingham, village clk.

N. Y., Watertown — Common Council soon takes bids paving Huntington, Leray, Newell, Engine, Center and River Sts. To exceed $25,000. P. B. Sutton, city engr.

N. J., Hackettstown—Warren Co. (Belvidere), with State aid, plans concrete paving Mountain Ave., here. $55,000. H. W. Vetter, Belvidere, engr.

W. Va., Lewisburg—Williamsburg Dist. Greenbrier Co. election May 27. $130,000. bonds for roads.

W. Va., Wheeling—Bd. Pub. Wks. soon takes bids paving 8th, 24th, 39th, 42nd, and York Sts. To exceed $25,000.

Fla., Sandford—Having plans prepared sheet asphalt paving 11,760 sq.yd. Myrtle and Holly Sts., $29,400; 16,464 sq.yd. 8th Ave., 15th, 16th and 5th, Sts., $41,160; 10,584 sq.yd. Elm Ave. and 14th St., $26,460; 11,760 sq.yd. Park and Maple Aves., etc., $29,400; 11,760 sq.yd. 12th and 6th Sts., $29,400; 11,760 sq.yd. 11th and 3rd Sts., $29,400; 9,958 sq.yd. 7th Ave., $25,000; 12,936 sq.yd. Highland Ave., 9th and Hughes Sts., $32,340. F. T. Williams, Sandford, engr.

Ala., Eufaula — Plans paving various streets, to exceed $25,000.

Ala., Tuscaloosa—City takes bids about May 5, paving 10 blocks with asphaltic concrete. W. H. Nicol, Tuscaloosa, engr.

Louisiana — Taxpayers of 7th, 8th and 9th Wards, Jefferson Parish, plan election to vote on $400,000 bonds for concrete highway from Hanson City near Charles Parish line to Protection levee at Carrollton, where highway will connect with South Claiborne Ave., in New Orleans, which will be improved by City of New Orleans and State Hy. Dept.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, plans grading, bridges, etc., 15 mi. Bolivar-Fayette Co. Rd., Hardeman Co. J. G. Creveling, highway comr.

Tenn., Blountsville—Comrs. Sullivan Co. plan improving 9 mi. Bristol-Big Creek Rd. $50,000.

Tenn., Byrdstown—Pitckett Co. making surveys grading and surfacing, probably limestone, 8 mi. Byrdstown-Fentress Co. line Rd.

Tenn., Nashville—City plans to gravel and oil Wharf Ave., Jefferson and Chestnut Sts. Work probably be done by city forces. W. W. Southgate, city engr.

Tenn., Nashville—Davidson Co. plans to improve 2 mi. Gallatin and Hillsboro Pikes, Federal Aid Project 206, Davidson Co. Hy. Comn., Court House, engrs.

Tenn., Pulaski — Giles Co. appropriated $25,000 6 mi. Weakley Bridge-Lawrence Co. Rd., 16 ft. Work will be done under supervision State Highway Dept.

Tenn., Rogerville — Hawkins Co. voted $75,000 bonds 11 mi. Rogersville-Pressmans Home Rd.

Kentucky—State Hy. Dept., Frankfort, plans improving various roads (**S. P. means State Project**), grading 11 mi. Carrollton Milton Rd., 24 and 28 ft., S. P. 13, Carroll Co., 17.65 mi. Bosworth Trail, 24 and 28 ft., S. P. 30, Clay Co., 34 mi. Fulton-Tennessee Rd., 24 and 28 ft., S. P. 54, Fulton Co., road from Greenup City to Carter Co. line, S. P. 28, Greenup Co., 4 mi. Elizabethtown-Larue Co. line Rd., 24 and 28 ft., S. P. 41, Hardin Co., 11 mi. Central Highway-Ramsey-Muhlenberg Rd., 24 and 28 ft., McLean Co., road from Christian Co. line to Tennessee State line, 24 and 28 ft., Todd Co.; surfacing 14 mi. Williamsburg-Jellico Rd., 18 ft., S. P. 35, Whitley Co., Bardwell-Hickman Co. line Rd., 18 ft., S. P. 7, Carlisle Co., Bardwell-Ballard Co. line Rd., 24 and 28 ft., S. P. 9½, Carlisle Co., road from Greenup to Lewis Co. line, 24 and 28 ft., S. P. 20, Greenup Co.; with waterbound macadam 3.5 mi. Cave City-Horse Cave Rd., 18 ft., Hardin Co.; with gravel 4 mi. Lebanon-New Market Rd., S. P. 25, Marion Co., 22 mi. Louisville-Paducah Rd., 18 ft., Hancock Co., 9 mi. Lebanon-Boyle Co. line Rd., 18 ft., S. P. 25, Marion Co.; reconstructing 6.1 mi. Elizabethtown-Leitchfield Rd., Hardin Co. J. S. Boggs, highway engr.

Ky., Benton—Marshall Co. plans election $40,000 bonds, for roads.

Ky., Bowling Green—Warren Co., plans repairing, grading and macadam surfacing various roads. $56,000.

O., Canton—Plans 1.5 mi. 12th St. N. W., 30 ft., brick, $150,000, Gross Ave. N. E., brick, $35,000; ½ mi. Harrison Ave., 30 ft., asphalt, $30,000; ½ mi. Dewalt St. N. W., 20 ft., $27,500. W. E. Sarver, City Hall, engr.

O., Cincinnati — Plans improving Canal Parkway, incl. two 20 ft. sidewalks, two 40 ft. asphalt roadways, one 30 ft. concrete parking space. $4,417,765. F. Krug. City Hall, engr.

O., Cleveland—See "Waterworks."

O., East Liverpool — Soon takes bids brick paving ½ mi. West 4th St. $30,000. J. A. George, City Hall, engr. Noted Jan. 24.

O., Massillon — Soon takes bids brick paving Jarvis Ave. $30,000. C. E. Rice, Massillon Ave., engr.

O., Massillon — Plans improving Commonwealth Ave., High, Plum and Wallace Sts. $127,500. C. E. Rice, Massillon, engr.

O., New Philadelphia—Tuscarawas Co. takes bids this summer improving 3.5 mi. Newcomerstown-Oxford Rd., 20 ft. $80,000.

O., St. Clairsville—Plans grading, curbing and paving 3,380 ft. Newell and North Market Aves., brick, block or concrete. H. M. Davies, mayor.

O., Wooster—Soon takes bids asphalt resurfacing Liberty St., $57,022; grading, laying necessary sewer connections and paving College and Scovel Aves., Spink, University and Spring Sts., brick, $98,362, asphalt $81,032. C. L. Orr, city engr. Noted Jan. 24.

Ind., Crown Point—Lake Co. plans grading and gravel surfacing 11 mi. W. J. Fulton Rd., 30 ft., $170,000; 7.6 mi. Peter W. Meyn Rd., 30 ft., $133,500. C. K. Wallace, Crown Point, engr.

Ind., Evansville—Bd. Pub. Wks., plans paving William St. from Elsas to Kentucky Aves., brick, asphalt, concrete or asphaltic concrete. To exceed $25,000. J. D. Saunders, city engr.

Ind., Indianapolis—Marion Co. plans paving W. O. Lee Rd., 30,624 sq.yd. concrete on concrete. $78,200. J. J. Griffith, Indianapolis, co. engr.

Michigan — State Hy. Dept., Lansing, plans grading and gravel surfacing 44,668 sq.yd. State Trunk Line Rd. in Lapeer. G. C. Dillman, ch. engr.

Mich., Highland Park (Detroit, P. O.)—Plans prepared grading and paving 32 alleys, 30,109 cu.yd. excav., 92,646 sq.yd. 6 in. concrete paving. L. C. Whitsit, 28 Gerald Ave., engr.

Mich., Otsego — Having plans prepared 26,000 sq.yd. concrete pavement, and 13,000 lin.ft. concrete curb and gutter. $75,000. A. Lenderink, Kalamazoo, engr.

Mich., Saginaw—Saginaw Co. Rd. Comn. plans shaping and surfacing 3.006 mi. in Assessment Dist. Rd. 60, Saginaw Co., gravel on stone. $36,000. R. W. Roberts, Saginaw, engr.

Mich., Saginaw West Side—Saginaw Co. plans grading and surfacing 20 mi. roads. $300,000. R. W. Roberts, Saginaw, engr.

Wis., Milwaukee — Milwaukee Co. Hy. Comn. making plans concrete surfacing, etc., Hopkins Rd. from 27th St. to county loop, Old Chicago Rd. from Clement to Howell Aves., 77th Ave. from Greenfield to Lincoln Aves., 51st Ave. from railroad tracks to Beloit Rd., 10th Ave., from Marquette to Madison Aves., Marquette Ave. from 10th to 12th Aves. Wisconsin Hy. Comn., Madison, engrs.

Wis., Stevens Point—Portage Co. voted $150,000 bonds, concrete surfacing State Trunk Highways 10 and 18. T. E. Cauley, comr.

Ia., Cedar Rapids—Plans paving 20,000 sq.yd. with brick, concrete or asphalt. T. F. McCauley, 1422 A Ave., W., engr.

Ia., Emmetsburg—Palo Alto Co. defeated $800,000 bonds, hard surfacing roads. Noted Apr. 3.

Ia., Kanawha—Plans paving 8 blocks. $28,000. J. Lilly Kanawha, engr.

Ia., Lehigh — Plans paving 10 blocks. $30,000. J. E. Lowrie, city clk.

Minn., Hibbing—Plans paving 25 blocks. $100,000. J. P. Murphy, city clk.

Kan., Baxter Springs—City soon takes bids grading and surfacing with rein.-con., brick on concrete or asphaltic concrete 8 blocks 10th, 11th, 12th and 13th Sts. $25,000.

South Dakota—State Hy. Dept., Pierre, plans 8.5 mi. Belle-Fourche-Spearfish Rd.

N. D., Lisbon—J. A. Gray, aud. Ransom Co., rejected bids Apr. 9, grading 6 mi. Federal Aid Project 214, 42,418 cu.yd. excav., etc. $25,000. Work will be readvertised. Noted Mar. 27.

Wyo., Cheyenne — City Council having plans prepared and will open bids about June 15, improving 4,900 ft. Randall Ave., 44 ft., grading, curbs and paving. $125,000. J. A. Bruce, Cheyenne, engr.

Missouri — State Hy. Dept., Jefferson City, received no bids Apr. 22, grading 17 mi. road, 26 ft., in Carter Co., also 6.105 mi. roads, 34 ft., in Cooper and Morgan Counties. Noted Apr. 17.

Mo., Chillicothe—Soon takes bids grading, concrete curbing, guttering and paving with concrete or brick on concrete 14 blocks 10th, 9th, Normal, Springhill and Walnut Sts. $50,000.

Mo., Kansas City — Jackson Co. soon takes bids repairing 18,490 sq.yd. Independence Rd., concrete, vitr. brick or willite. L. F. Koeler, Kansas City, engr.

Mo., Moberly—Making plans paving, resurfacing, repairing, 40 blocks. Benham

Streets and Roads (Continued)

Eng. Co., 512 Gumbel Bldg., Kansas City, engrs.

Mo., St. Louis—Soon takes bids grading, concrete curbing, guttering and asphalt paving Pine-Lawton and Partridge Ave. cut-off, $25,400, widening 12 blocks Vandeventer Ave., from 60 ft. to 80 ft., $482,586, H. Bartholomew, Municipal Courts Bldg., engr.; grading and paving 2 ft. strip on either side of existing roadway, rearranging curbs, etc. on Watson Rd., $32,000, concrete curbing and paving 10,590 sq.yd. Folsom St., bitulithic, $45,000, concrete curbing, guttering and paving 21,100 sq.yd. Forest Park Blvd., warrenite on concrete, $63,000, W. W. Horner, 300 City Hall, engr.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, takes bids about July 8, grading and surfacing 16 blocks various streets, 17,500 sq.yd. 7 in. concrete. $50,000. W. W. Horner, 300 City Hall, engr.

Ark., Hot Springs—Soon takes bids grading and surfacing 50,000 sq.yd. various streets, concrete, asphaltic concrete, sheet asphalt, etc. C. Smith, City Hall, engr.

Ark., Little Rock—Making preliminary plans grading and surfacing 18 mi. in Arkansas-Missouri Highway Dist., 18 ft., Bates type concrete. Ford & MacCrea, Gazette Bldg., engrs.

Ark., Little Rock—Soon takes bids grading and surfacing 15,000 sq.yd. Brown St. in Dist. 352, concrete, asphaltic concrete or alternate. V. P. Knott, Southern Trust Bldg., engr.

Ark., North Little Rock — Soon takes bids grading and concrete surfacing 26,000 sq.yd. in Baring Cross Suburb. H. R. Carter, Exch. Bank Bldg., Little Rock, engr.

Tex., Anahuac—Chambers Co., election May 24, $100,000 bonds, roads in Precinct 4. $100,000. J. F. Wilson, co. judge.

Tex., Austin—R. M. Fisher, c/o Koch & Fowler, engrs., Central Bank Bldg., Dallas, having plans prepared paving in new 155 acre addition, here. $25,000.

Tex., Boston—Bowe Co. election soon to vote on $490,000 bonds, hard surfacing roads in Texarkana and Red River sections.

Tex., Cameron—Milam Co. plans gravel surfacing 11 mi. State Highway 36, 16 ft. $129,000. A. F. Mitchell, co. engr.

Tex., Carrizo Springs—Dimmitt Co. making plans grading and shell and gravel surfacing 12.58 mi. State Highway 85, State Aid Project 483, 16 ft. $75,000. J. G. Lott, co. engr.

Tex., Crockett—Rd. Dist. 3, c/o L. L. Moore, judge Houston Co., having plans prepared 4 roads. $240,000. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Tex., Dallas—Had plans prepared widening Akard St. from 50- to 70-ft., paving same and miscellaneous condemnation, etc. $120,000. E. A. Kingsley, city engr.

Tex., Dallas—A. L. Stevens, c/o Koch & Fowler, engrs., Central Bank Bldg., having plans prepared paving, curbing and guttering in 300 acre addition west of Kessler Park. $25,000.

Tex., Eagle Lake—Colorado Co. election soon $400,000 bonds, roads. B. H. Faber, Columbus, engr.

Tex., El Paso — Voted $50,000 bonds, grading streets and alleys; $100,000 bonds permanent paving business streets. Address Mayor Dudley. Noted Apr. 24.

Tex., Marlin—Falls Co. election May 24, $115,000 bonds, roads in Rd. Dist. 6. J. P. Wehrung, Lott, engr.

Tex., New Boston — Bowie Co. voted $130,000 bonds constructing State Highways 5 and 8 in New Boston Precinct. F. E. Hess, Medical Arts Bldg., Dallas, engrs.

Tex., Pecos—Reeves Co. making plans grading and caliche surfacing 3.79 mi. State Highway 3, 16 ft. $45,750. A. J. Adcock, Balmorhea, co. engr.

Tex., Rockdale — Rockdale Rd. Dist. voted $75,000 bonds, 14 mi. State Highway 63. A. F. Mitchell, Cameron, engr.

Tex., San Diego—Duval Co. election May 17, $400,000 bonds, hard surfacing State Highway 12. G. A. Parr, co. judge.

Tex., San Marcos — Election May 20, $25,000 bonds, permanent paving streets. Total estimate $75,000. Address A. L. Davis, San Marcos.

Oklahoma—State Hy. Dept., Oklahoma City, plans grading and concrete paving 50 mi. Payne Co., 18 ft., 500,000 sq.yd. concrete, 375,000 cu.yd. excav., $1,000,000, 4 mi. Skiatook Rd., 18 ft., Tulsa Co., 42,000 sq.yd. concrete, 31,000 cu.yd. excav., $125,000, 35 mi. Lee Highway, 18 ft., Stevens Co., 375,000 sq.yd. concrete, 260,000 cu.yd. excav., $400,000, 35 mi. Logan Co., 18 ft., 400,000 sq.yd. concrete, 250,000 cu.yd. excav., $750,000, 35 mi. Nowato Co., 18 ft., 425,000 sq.yd. concrete, 250,000 cu.yd. excav., $500,000. J. M. Page, highway engr.

Okla., Blackwell—Plans grading and paving 13 blocks 8th, 9th and C streets, 15,300 sq.yd. vertical fibrebrick or concrete, 7,800 lin.ft. curbing and 5,100 cu.yd. excav. $63,000. W. Ritzhaupt, Jr., Blackwell, engr.

Okla., Muskogee — Making preliminary plans paving with brick on concrete, asphalt on concrete or asphaltic concrete Honor Heights Blvd. $30,000. J. R. Marsh, City Hall, engr.

Okla., Muskogee — Plans grading and paving 26 blocks Dorchester, L, 26th and Spaulding Sts., 28,500 sq.yd. asphalt or concrete, 13,700 lin.ft. curbing, 5,800 cu.yd. excav. $118,000. J. R. March, City Hal,, engr.

Okla., Nowata—Nowata Co. plans hard-surfacing 35 mi. roads, 425,000 sq.yd. concrete, 250,000 cu.yd. excav. $500,000. J. M. Page, Capitol Bldg., Oklahoma City, engr.

Okla., Muskogee—Soon takes bids grading and surfacing Honor Heights Blvd., brick on concrete, rein.-con. or asphat on concrete. $30,000.

Okla., Okmulgee—Okmulgee Co. election May 19, $400,000 bonds, completion of 25 mi. roads, 260,000 sq.yd. concrete, 175,000 cu.yd. excav. J. W. Page, Capitol Bldg., Oklahoma City, engr.

Okla., Stigler—Plans grading and paving Main and 3rd Sts., 10,000 sq.yd. concrete, 3,100 cu.yd. excav. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Nevada—State Highway Comn., Carson City, making plans gravel surfacing 17.2 mi. Pepuop Summit to Silver Zone, Elko Co., 2.4 mi. in Winnemucca, Humboldt Co., road from Winnemucca to Colconda, Humboldt Co., 10 mi. road across Mormon Mesa, Clark Co., 10.25 mi. from Westgate to Eastgate, Churchill Co., 12.64 mi. Moor to Pepoup Summit, Elko Co.; concrete and gravel surfacing 7 mi. Sparks to Hafed, Washoe Co., 3.2 mi. in Las Vegas, Clark Co. G. W. Borden, state highway engr.

Wash., Auburn—City Council takes bids about May 21, concrete paving 21 blocks in northwestern district. J. A. Fallgreen, Auburn, engr.

Wash., Chehalis—Making plans concrete paving, storm sewers, etc. in Alfred and Lewis Sts., et al. $80,000. E. G. Sturdevant, Chehalis, engr.

California—State Highway Comn., Sacramento, having plans prepared grading highway between Newport Beach and Laguna, Orange Co., to exceed $25,000; 8 mi. Banta to western county line, San Joaquin Co., asphaltic concrete; 4 mi. Fairfield to Rockville, Solano Co., concrete shoulders; 4.3 mi. Greenville to Livermore, Alameda, concrete shoulders; heavy grading 65 mi. in Sacramento Canyon, Tehama Co., incl. 35,000 cu.yd. earth work per mile. R. M. Morton, state highway engr.

California—State Highway Comn., Sacramento, rejected bids improving 1.2 mi. highway between Sea Cliff and Rancho El Rincon, Ventura Co. and constructing seawall. Noted Apr. 10.

Calif., Escondido — Having plans prepared paving various streets in residential section, 2 in. macadam. To exceed $100,000. F. Witt, city engr.

Calif., Eureka — Having plans prepared improving Commercial St., Warrenite-bitulithic pavement and storm sewers; also grading and paving Spring St. $25,000 or more. H. H. Hannah, city engr.

Calif., Eureka—Humboldt Co. having surveys made 2⅓ mi. Miranda-Salmon Creek Rd. from Blocksburg to Pauls Point. A. J. Logan, co. surv.

Calif., Hawthorne — Plans paving Hawthorne Blvd. from Los Angeles and Redondo Rd. to Short St., 20 ft., 6 in. concrete, culverts, etc., to exceed $150,000; Hawthorne Ave. from Redondo Blvd. to Torrance, 20 ft., 5 in. Willite, $60,000.

Calif., Los Angeles—Having plans prepared paving West Adams St. between Montclair St. and Culver city limits. To exceed $25,000. J. Griffin, city engr.

Calif., Oakland — Appropriated $88,360 opening and improving Jefferson St. between 17th St. and San Pablo Ave. (property owners will pay balance of cost). W. W. Harmon, city engr.

Calif., Oroville — Butte Co. had plans prepared improving Oroville Pentz Rd., Route 22, Sect. E, 25,670 lin.ft. 20 ft. grading, 2,800 cu.yd. crushed rock surfacing; Gridley Colony Rd., Route 3, Sect. B, 2,012 broken stone surfacing, 106 tons asphaltic oil, Grade E. H. H. Hume, co. rd. engr.

Calif., Pomona—Voted $400,000 bonds paving various streets. F. C. Troehde, city engr. Noted Mar. 13.

Que., Lasalle—Plans paving 1,262 ft. St. Patrick Rd., concrete, $10,000, 1,265 sq.yd. Strathyne Rd., Dolminy Terrace, Sterling and Rotheray Aves., bituminous macadam $20,000, grading Bronx Park, $20,000. P. A. Beique, 103 St. Francois Xavier St., Montreal, town engr.

Que., Shawinigan Falls—Election in May to vote on $72,960 bonds concrete pavements on 1st Ave. to Des Hetres St. J. A. Valiquet and E. Bernier, Shawinigan Falls, engrs.

Ont., Brampton — Plans cement pavements on Elizabeth and Frederick Sts. $30,000. C. M. Corkett, City Hall, engr. Prices wanted on materials.

Ont., Mount Forest—Having plans prepared and takes bids about middle of May, concrete pavements on Queen and Main Sts. $60,000. G. G. Reid, City Hall, engr. Prices wanted on materials.

Ont., Toronto—Plans asphalt surface on Robinson St. $8,095, concrete curbs on Cannon Ave. $233, 5,000 sq.yd. concrete pavement on Millwood Rd., $19,310, concrete sidewalks on Brookdale Ave. $2,318, Belsize Dr. $15,871, Coxwell Ave. $3,800, Kennedy Rd. $1,200, Thurston Rd. $5,890, Belcourt Rd. $5,893, Cheston Rd. $5,888, Gresham Rd. $5,890, and Manor Rd. $20,318. R. C. Harris, city engr.

B. C., Vancouver — Election May 31, $200,000 bonds, grading and paving various lanes and streets, also $120,000 for Main St. from Hastings St. to 7th Ave. C. Brackenridge, city engr.

BIDS DESIRED

Maine—May 21, by State Hy. Comn., Augusta, bituminous macadam surfacing 1.77 mi. in Bridgton, 5.24 mi. in Turner, 2.03 mi. Houlton, 4.3 mi. in Gray and 3.5 mi. in New Gloucester; gravel surfacing 4.05 mi. in Orneville and La Grange. P. D. Sargent, ch. engr. Noted May 1.

N. Y., Endicott — C. F. Hunt, village engr., taking bids furnishing and applying 35,000 gal. road oil.

N. Y., New York—May 9, by J. Miller, pres. Manhattan Boro, Municipal Bldg., granite block paving 10th Ave., West 184th and West 108th Sts.

N. Y., New York—May 15, by Dept. Parks, Municipal Bldg., repaving walks in Melrose Park, Bronx Boro.

N. Y., St. George—May 15, by J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving Richmond Terrace and Bay St., granite block.

New Jersey—May 19, by State Hy. Dept., Trenton, rein.-con. paving, building 1 small span bridge, etc., on Route 7, Sect. 2, Golf Course to Andersons Corner, Monmouth Co. A. L. Grover, secy.; adv. E. N.-R. May 8.

N. J., Trenton—May 16, by City Comn., paving and repaving 21 streets, sheet asphalt and granite block. J. E. English, engr. streets; adv. E. N.-R. May 8.

Pa., Ebensburg — May 19, by Comrs. Cambria Co., 9,100 ft. rein.-con. or brick on Ligonier Pike, 18 ft. wide. L. R. Owen, co. engr.

Pa., Grove City—May 23, by L. L. McKay, boro. secy., paving various streets. F. P. Graham, boro. engr.; adv. E. N.-R May 8.

Maryland—May 20, by State Rds. Comn., Baltimore, concrete paving highways in Garret, Frederick, Anne Arundel and Worcester Counties, Contrs. G-28, F-76, AA-39 and Wo-32; gravel surfacing highway in St. Marys Co., Contr. SM-27; highway in Baltimore Co., Contr. B-63, alternate bids on sheet asphalt resurfacing and penetration macadam resurfacing. J. N. Mackall, chn.; adv. E. N.-R. May 8.

North Carolina—May 20, by State Hy. Comn., Raleigh, hard surfacing, etc., Projects 107-B, 237-B, 617, 791-B and 812-B, in Betrie, Johnston, Cabarrus, Yadkin and Burke Counties; macadam or sand asphalt paving, etc., Projects 318, 888 and 890 in Brunswick and Yancey Counties; topsoil, sand clay, gravel or grading, etc., Projects 111, 117, 134, 415, 422, 432, 891 and 212, Camden, Currituck, Gates, Durham, Franklin, Granville, Yancey and Craven Counties; bridge Project 580-B, Randolph Co.

Ga., Forsyth—May 16, by Road Commissioners, City Hall, paving, etc., various streets, 22,500 sq.yd. concrete with curbs and gutters, 20,000 sq.yd. sidewalks, 2,000 lin.ft. storm drains. J. B. McCrary Eng. Co., Citizens and Southern Bank Bldg., Atlanta, engrs.

Fla., Gulfport—May 20, by Town Council, W. W. Swift, clk., vitr. brick paving 27,000 sq.yd. Davis Blvd., $67,500, 11,125 sq.yd. Bon Air, Grant, Palm, Shore and 2nd Sts., $27,800, 19,082 sq.yd. Lee Ave., $47,700, 18,760 sq.yd. Sunset Ave., $46,900, 17,452 sq.yd. 3rd St., $43,600, 21,540 sq.yd. Lakeview Ave., $53,800. R. D. Brodie, Gulfport, engr.

Fla., Key West—June 5, by J. O. Kirchheimer, chn. Bd. Comrs. Monroe Co., 4.48 mi. stone surfacing, oiling and subgrading highway, also necessary trestles; adv. E. N.-R. May 8.

Streets and Roads (Continued)

Louisiana—May 22, by State Hy. Comn., Reymond Bldg., Baton Rouge, gravel surfacing State Project 341 C, Arcadia-Natchitoches Highway, Bienville Parish. J. M. Fourmy, ch. engr.

La., Haynesville—May 24, by City Council, grading, concrete curbing and guttering and concrete paving 7 blocks in downtown section.

Kentucky—May 20, by State Hy. Dept., Frankford, **(S. P. means State Project)**, bituminous surfacing 3.07 mi. Lawrenceburg-Chaplin Rd., S. P. 44-B, Anderson Co., 3.9 mi. Lawrenceburg-Kentucky River Rd., S. P. 20-C, Anderson Co., 4.15 mi. Pineville-Magnet P. O. Rd., S. P. 5-S, Bell Co., 14.8 mi. Paris-Winchester Rd., S. P. 32-A, Bourbon Co., 5.12 mi. Grayson-Ashland Rd., S. P. 47-A, Boyd Co., 16.14 mi. Danville-Stanford Rd., S. P. 22-E, Boyle Co., 16.6 mi. Lenoxburg-Germantown Rd., S. P. 57-E and F, Brachen Co., 16.5 mi. Newport-Falmouth Rd., S. P. 21-A and B, Campbell Co., 10 mi. Hopkinsville-Pembroke Rd., S. P. 2-G, Christian Co., 7.7 mi. Winchester-Richmond Rd., S. P. 50-B, Clark Co., 8.09 mi. Cave City-Bowling Green Rd., S. P. 11-H, Edmondson Co., 11.41 mi. Richmond-Irvine Rd., S. P. 29-B, Estill Co., 2.9 mi. Lexington-Georgetown Rd., S. P. 5-H, Fayette Co., 5 mi. Frankfort-Georgetown Rd., S. P. 17-E, Franklin Co., 9.6 mi. Lancaster-Kentucky Rd., S. P. 25-E-1, Garrard Co., 6.12 mi. Greenup-Ashland Rd., S. P. 20-B, Greenup Co., 5 mi. Falmouth-Cynthiana Rd., S. P. 21-E, Harrison Co., 11.15 mi. Munfordsville-Bearwallow Rd., S. P. 11-J, Hart Co., 17.4 mi. Louisville-Taylorsville Rd., S. P. 18-A, Jefferson Co. 6.84 mi. Richmond-Kingston Rd., S. P. 5-K, Madison Co., 4.5 mi. Lebanon-Danville Rd., S. P. 25-B, Marion Co., 1.9 mi. Louisville-Paducah Rd., S. P. 8-S, McCracken Co., 3.85 mi. Paducah-Mayfield Rd., S. P. 9-A, McCracken Co., 10.5 mi. Shakertown-Brooklyn Bridge Rd., S. P. 47-E, Mercer Co., 3.14 mi. Mt. Sterling-Frenchburg Rd., S. P. 32-C, Montgomery Co., 9.14 mi. Mt. Sterling-Paris Rd., S. P. 32-B, Montgomery Co., 14.55 mi. Bloomfield-Lawrenceburg Rd., S. P. 44-A, Nelson Co., 8.3 mi. Carlisle-Sharpsburg Rd., S. P. 61-B, Nicholas Co., 4.8 mi. Falmouth-Covington Rd., S. P. 62-C, Pendleton Co., 2 mi. Georgetown-Frankfort Rd., S. P. 17-F, Scott Co., 3.2 mi. Georgetown-Lexington Rd., S. P. 5-G, Scott Co., 6.6 mi. Shelbyville-Eminence Rd., S. P. 46-D, Shelby Co., 4.34 mi. Hopkinsville-Elkton Rd., S. P. 1-L, Todd Co., 8.3 mi. Mt. Vernon-London Rd., S. P. 5-M, Rockcastle Co, all foregoing 14 ft.; 13.1 mi. Frankfort-Shelbyville Rd., 18 ft., S. P. 17-D, Franklin Co. J. S. Boggs, highway engr.

O., Cambridge — May 23, by Guernsey Co., improving 6 mi. Newcomerstown-Cambridge Rd., 20 ft. $150,000.

O., Cleveland—May 14, paving Castalia Ave. N. E., Durkee Ave. S. E., Hope Court S. W., Iroquois Ave. N. E., Laisy Ave. S. E., St. Catherines Ave. S. E., Train Ave. S. W., East 84th, East 97th, East 100th, East 112th, East 118th, East 123rd and East 139th Sts. $200,000. R. Hoffman, City Hall, engr.

O., Cleveland—May 14, by Cuyahoga Co., paving Lorain Rd. 2. $246,622. F. Lander, Court House, engr.

O., Columbus—May 24, by Franklin Co., guttering and paving 954 ft. bridge, 60 ft., over Scioto River, on Broad St., brick $16,324, sheet asphalt $15,588; brick paving 1,945 ft. bridge and approaches on Mound St., $35,739.

O., Rocky River — May 20, paving 7 streets. To exceed $25,000. E. H. Arnold, Town Hall engr.

Ind., Anderson—May 15, by Comrs. Madison Co., paving R. W. Webb Rd., 14,436 sq.yd. concrete on concrete. $37,531. A. H. Doyle, Anderson, engr.

Ind., Laporte—May 10, by Comrs. Laporte Co., paving 7,761 ft. Gruenke Rd., 18 ft. $36,705. P. Summy, Laporte, engr.

Ind., Rushville—May 10, by Comrs. Rush Co., macadam paving 8,676 ft. James Shannahan Rd., 18 ft. $27,761. F. L. Catt, Rushville, engr. Noted May 1.

Ind., Terre Haute—May 12, by Comrs. Vigo Co., hardsurfacing 11,220 ft. Fromme Rd., 18 ft., $60,483; 12,230 ft. White Rd., 18 ft., $67,364; concrete surfacing 10,560 sq.yd. Bickel Rd., $27,219. R. E. Givens, Terre Haute, engr. Noted May 1.

Michigan—May 14, by State Hy. Dept. at office Comrs. Oakland Co., Pontiac, grading and surfacing 2.25 mi. State Trunk Line Rd. 10-39, Sect. D, 44,217 cu.yd. excav., 53,397 sq.yd. 9 in. concrete pavement.

Michigan—May 19, by State Hy. Dept., at office Comrs. Bay Co., Bay City, grading and graveling 3.598 mi. State Trunk Line Rd. 20-14, 16,700 cu.yd. excav., 38,539 sq.yd. 7 in. concrete pavement, 11,155 lb. steel, etc.

Mich., Springwells—May 13, by B. P. Esper, city clk., paving 42,000 sq.yd. Schaefer Rd. south of Michigan Central Ry., 8 in. concrete with concrete curbs, also 10,500 ft. 12-96 in. vitr., concrete and brick sewers. Hubbell, Hartgering & Roth, 2348 Penobscot Bldg., Detroit, engrs.

Ill., Bement—May 24, by Bd. Supervs. Piatt Co., constructing 4 sections P. C. concrete road, incl. 52,631 sq.yd. with earth shoulders, also 9,949 cu.yd. concrete culverts, etc. W. J. Day, co. supt. highways.

Ill., Chicago—May 12, at office of H. A. Zender, Cook Co. supt. pub. serv., concrete paving road, Sect. L-1. $36,000.

Wis., Wauwatosa—May 16, by Bd. Pub. Wks., A. Brigham, secy., improving Oakhill, Melrose, Grand and Stickney Aves., 54th and 55th Sts., 14,266 sq.yd. rein.-con., bituminous macadam or concrete with Kentucky rock asphalt, 11,640 cu.yd. grading, 11,829 lin.ft. concrete curb and gutter. J. E. Lowther, City Hall, engr.

Ia., Adel—May 14, by Auditor Dallas Co., gravel surfacing and maintenance graveling 10.85 mi. roads, 10,000 sq.yd. gravel, 15,778 "yard-mile" hauling, 153,790 units half mile hauling. To exceed $25,000. E. L. Kaser, co. engr.

Ia., Anamosa—May 14, by D. Stevens, city clk., 23,000 sq.yd. paving, 11,500 lin.ft. concrete curb and gutter. $65,000. M. Tschirgi & Sons, 712 Amer. Trust Bldg., Cedar Rapids, engrs.

Minn., Willmar—May 15, by S. Nelson, aud. Kandiyohi Co., 8 mi. Job 2401, State Rd. 18, between Pennock and Minnesota Trunk Highway 49, 42,597 cu.yd. excav., etc.; regraveling 13 mi. State Aid Rd. 2, between Atwater and Crescent Beach on Green Lake. $27,000. H. L. Wadell, Willmar, engr.

Kan., Independence—May 28, by Clerk Montgomery Co., grading and surfacing with bituminous macadam 2.029 mi. Project 121 Sect. H, 22,220 sq.yd. bituminous macadam, 16,185 cu.yd. concrete, 9,232 lb. steel pipe, etc. H. K. Hibbard, co. engr. Noted Apr. 1.

Kan., Minneapolis—May 29, by Clerk Ottawa Co., grading 7.021 mi. Federal Aid Project 185-A, 34,333 cu.yd. excav., 27,346 lb. reinforcing, 366 cu.yd. concrete, etc. L. R. Miller, co. engr. Noted Apr. 1.

Kan., Oskaloosa — May 16, by Clerk Jefferson Co., grading and surfacing with bituminous macadam, gravel on macadam, waterbound macadam, concrete or brick 7.7 mi. Federal Aid Project 220, Sect. A, 81,952 sq.yd. paving, 15,995 cu.yd. excav., etc., 5.5 mi. Sect. B, 69,525 sq.yd. paving, 20,922 cu.yd. earth and 67 cu.yd. rock excav., etc.; with concrete, bituminous filled brick or bituminous macadam 0.528 mi. Federal Aid Project 222, Sect. D, 10,115 sq.yd. paving, 4,206 lin.ft. curb and gutter, etc., Eidmann & Marshall, Smith Bldg., Topeka, engrs. on foregoing projects; with brick or concrete 0.97 mi. Federal Aid Project 227, Sect. B, 11029 sq.yd. paving, 2,772 lin.ft. curb and gutter, 5,588 cu.yd. earth and 15 cu.yd. rock excav., etc., Dodd & Finney, 216 West 6th St., Topeka, engr.; grading 6.249 mi. Federal Aid Project 222, Sect. A, 55,682 cu.yd. earth and 2,300 cu.yd. rock excav., etc., 7.387 mi. Sect. B, 56,799 cu.yd. excav., etc., 5.275 mi. Sect. C, 43,064 cu.yd. excav., etc., R. C. Ham, co. engr. Noted Apr. 24.

Kan., Wichita—May 31, by Clerk Sedgwick Co., grading and surfacing 1.989 mi. road, 21,775 sq.yd., concrete or bituminous filled brick on 5- or 6-in. concrete, 14,027 cu.yd. excav., 15,359 lb. reinforcing, etc. M. Roseberry, co. engr.

Kan., Wichita—May 31, by clerk Sedgwick Co., grading and paving 1.261 mi. Federal Aid Project 130-C, 13,318 sq.yd. bituminous filled brick or concrete, 4[illegible]06 cu.yd. excav., 7,575 lb. reinforcing. M. Roseberry, co. engr. Noted Apr. 1.

South Dakota — May 13, by State Hy. Dept., Pierre, **(F. A. P. means Federal Aid Project)**, grading 11.43 mi. F. A. P. 179 Deuel Co., 141,126 cu.yd. excav., 13.49 mi. F. A. P. 160 Brookings-Moody Counties, 108,968 cu.yd. excav., 2.73 mi. F. A. P. 130 B Custer Co., 12,174 cu.yd. excav., 15.08 mi. F. A. P. 172 A, Edmunds Co, 137,633 cu.yd. excav., 15.6 mi. F. A. P. 95 B, Faulk Co, 127,623 cu.yd. excav., 1.52 mi. F. A. P. 173 Faulk Co., 14,225 cu.yd. excav., 11.21 mi. F. A. P. 162 A, Haakon Co., 111582 cu.yd. excav.; graveling 5.12 mi. F. A. P. 49 B and C, Lyman Co., 7,700 cu.yd. gravel, 8.73 mi. F. A. P. 88 B Meade Co., 13,100 cu.yd. gravel, 11.25 mi. F. A. P. 105 A Brown Co., 13,300 cu.yd. gravel, 2.41 mi. F. A. P. 153 Union Co., 7,814 cu.yd. gravel; also following bridges, on F. A. P. 179 Deuel Co., 89.5 cu.yd. concrete, 5,468 lb. reinforcing and 29,500 lb. structural steel, on F. A. P. 160 Brookings-Moody Counties, 327.1 cu.yd. concrete, 33,841 lb. reinforcing and 125,967 lb. structural steel, on F. A. P. 162 A Haakon Co., 469.71 cu. yd. concrete, 67,351 lb. reinforcing and 147,958 lb. structural steel, on F. A. P. 95 B Faulk Co., 42.63 cu.yd. concrete, 4000 lb. reinforcing and 14,745 lb. structural steel. F. D. Hudgins, ch. engr.

South Dakota — May 14, by State Hy. Comn., Pierre, grading **(F. A. P. means Federal Aid Project)** 19.66 mi. F. A. P. 164, Brookings-Moody Counties, 173,730 cu. yd. excav., 18.56 mi. F. A. P. 183 Beadle Co., 128,580 cu.yd. excav., 8.3 mi. F. A. P. 95 C Faulk Co., 53,776 cu.yd. excav., 12.099 mi. F. A. P. 176 Kingsbury Co., 86,210 cu.yd. excav., 4.58 mi. F. A. P. 138 B Meade Co., 23,147 cu.yd. excav., 1.38 mi. F. A. P. 135 B Minnehaha Co., 24,476 cu. yd. excav., 9.98 mi. F. A. P. 158 A Clay Co., 71,469 cu.yd. excav., 14.03 mi. F. A. P. 170 D, Minnehaha Co., 131,941 cu.yd. excav., 22.44 mi. and bridge on F. A. P. 177 A, Pennington Co., 228,260 cu.yd. excav., also following bridges, on F. A. P. 164 Brookings-Moody Counties, 703.29 cu. yd. concrete, 82,915 lb. reinforcing and 189,513 lb. structural steel, on F. A. P. 183 Beadle Co., 344.19 cu.yd. concrete, 61,652 lb. reinforcing and 142,150 lb. structural steel, on F. A. P. 138 B Meade Co., 135.38 cu.yd. concrete, 13,460 lb. reinforcing and 845 lb. structural steel, on F. A. P. 170 D Minnehaha Co., 47.27 cu.yd. concrete, 4,407 lb. reinforcing and 21,053 lb. structural steel, on F. A. P. 158 A, Clay Co., 266.56 cu.yd. concrete, 26,819 lb. reinforcing and 110,970 lb. structural steel, culverts on 21.86 mi. F. A. P. 173 B Faulk Co., and 25.1 mi. F. A. P. 172 C, Walworth Co. F. D. Hudgins, ch. engr.

N. D., Devils Lake—May 12, by J. A. Kramer, aud. Ramsay Co., gravel surfacing 13 mi. Federal Aid Project 153, and grading 12 mi. Federal Aid Project 225, 93,643 cu.yd. excav., etc. $55,000.

N. D., Ellendale—May 16, by C. C. Misfeldt, aud. Dickey Co., grading 6.525 mi. Federal Aid Project 211 A, 51,152 cu.yd. excav., etc. $20,000, also 7.889 mi. Federal Aid Project 212, 74,356 cu.yd. excav., etc. $27,000.

N. D., Stanley—May 15, by F. J. Haines, aud. Mountrail Co., grading 6 mi. Federal Aid Project 248, 48,357 cu.yd. excav., etc. $25,000.

Mont., Shelby—June 2, by A. M. Hart, city clk., concrete sidewalks, etc., in Impvt. Dists. 8, 9 and 11; adv. E. N.-R. May 8.

Mo., St. Louis — May 27, by Bd. Pub. Serv., 208 City Hall, paving 13,300 sq.yd. Bates St., rein.-con., $61,00, 3,500 sq.yd. Oleatha St., concrete, $12,600; granite curbing and paving 10,595 sq.yd. McRee, Macklind, Sulphur and Theodore Sts., brick on concrete, $65,360, 2,445 sq.yd. Tholozan St., Kentucky rock asphalt, $15,720. W. W. Horner, city engr. Noted Apr. 3.

Ark., Hot Springs — May 20, by City Comrs., c/o C. J. Horner, grading and surfacing 22,400 sq.yd. in Street Impvt. Dist. 70, Prospect Ave., concrete or asphaltic concrete. C. Smith, City Hall, engr. Noted Jan. 10.

Ark., Pine Bluff—May 17, by Bd. Impvt. S. C. Alexander, chn., c/o Coleman & Gantt, 615 Citizens Bank Bldg., 17,584 sq. yd. rein.-con., 5,800 cu.yd. earth excav., 10,500 lin.ft. combined curb and gutter, 1,899 lin.ft. 12, 15, 24 and 36 in. storm sewer in Paving Dist. 76. F. Bennett, 410 Citizens Bank Bldg., engr.

Tex. Alice—May 30, by R. R. Muller, judge Jim Wells Co., grading and bridging 14.3 mi. State Highway 12, Federal Aid Project 429-E, 26 ft. $66,745. L. W. S. Mantel, co. engr.

Tex., Alpine—May 29, by J. A. Burke, judge Brewster Co., grading, gravel and caliche surfacing 13.88 mi. State Highway 3, Federal Aid Project 378-D, 18 ft. $68,648. A. L. White, co. engr.

Tex., Austin—May 22, by G. T. Mathews, judge Travis Co., grading 7.85 mi. Austin Webberville Rd., Sects. B and C, 24 ft., also 100 ft. steel truss bridge across Wilbarger Creek, $32,000. O. Leonard, Box 256, co. engr.

Tex., Cameron—May 30, by J. T. Kemp, judge Milam Co., grading, etc., 4.09 mi. State Highway 43, Federal Aid Project 394-B, 28 ft. $33,160. A. F. Mitchell, co. engr.

Tex., Palo Pinto — May 29, by E. L. Pitts, judge Palo Pinto Co., 29,687 sq.yd. vitr. brick paving and 35,624 lin.ft. concrete curbing on State Highway 1. $79,680. G. W. Courter, co. engr.

Okla., Muskogee—May 13, by H. W. Pramer, city clk., paving 10 blocks Denver Ave., 9,700 sqyd. 6-in. concrete, integral curb and gutter.

Idaho—May 15, by Commissioner Pub. Wks., at office of Comrs. Shoshone Co., Wallace, Federal Aid Project 73-A-B and

Streets and Roads (Continued)

64-B, Coeur d'Allene-Yellowstone Rd., 8 acres clearing, 23,378 cu.yd. earth, 18,465 cu.yd. solid rock and 21,800 cu.yd. loose rock excav., 49,187 sta.yd. overhaul, 7,394 cu.yd. crushed rock or gravel surface, 12,846 lb. reinforcing, 173,963 sq.yd. subgrading, 174,323 sq.yd. paving, 8,535 cu.yd. rock shoulders. P. E. Oxley, Lewiston, and D. M. Faires, Wallace, engrs.

Washington — May 20, by State Hy. Comn., Olympia, grading and surfacing with crushed gravel 9 mi. State Rd. 14, from Port Orchard to Gig Harbor, Kitsap Co., 7.6 mi. State Rd. 12, from Adna to Meskill, Lewis Co.; resurfacing witn crushed rock 32 mi. State Rd. 2 from Easton to Bide-A-Wee, Kittitas and King Counties. J. Allen, Olympia, state highway engr.

Wash., Centralia—May 13, by City Council, concrete paving in L. I. D. 64, 66 and 65. $60,000. N. W. Avery, Centralia, engr.

California—May 26, by State Highway Comn., Sacramento, paving 4.5 mi. highway between Susanville and Johnstonville, Lassen Co., 4,600 cu.yd. crushed gravel or stone (asphalt macadam), 2,300 cu.yd. crushed gravel or stone (shoulders); 3.5 mi. between Redwood City and southerly boundary, San Mateo Co., 5,500 cu.yd. roadway embankment, 9,520 tons asphaltic mixture (surface), furnishing and applying 62,190 sq.yd. asphaltic paint binder, 12,100 tons broken stone (waterbound macadam base and shoulders), etc.

Ont., Blyth—May 10, by A. Patterson, engr., County Bldg., Goderich, concrete pavements in Queen and Dinsley Sts. $60,000.

Ont., Ottawa—Paterson & Bryon, engrs., Sparks St., Ottawa, taking bids paving Main St. in Westboro and Victoria St. in Eastview, for Carleton Co. $30,000.

BIDS RECEIVED

N. Y., Binghamton—Bd. Contr. & Supply, improving with **(a)** bitulithic **(b)** rein.-con. **(c)** brick **(d)** concrete **(1)** Front St. **(2)** State St. **(3)** Susquehanna St. **(4)** Water St., from Municipal Constr. Co., Binghamton, **(a1)** $24,633 **(b1)** $23,637 **(a2)** $61,900 **(a3)** $54,523 **(a4)** $14,627; Stento & Serafini, 84 Court St., **(c2)** $61,396 **(d2)** $50,299 **(c3)** $56,608 **(d3)** $42,957 **(d4)** $11,478; L. Marseleno, 140 Susquehanna St., **(c4)** $15,578 **(d4)** $11,478.

N. Y., Brooklyn—Park Bd., Municipal Bldg., New York, May 1, repairing sheet asphalt pavements on park roads, from Sicilian Asphalt Paving Co., 41 Park Row, New York, $14,075; grading, curbing and paving with sheet asphalt on concrete, Fort Hamilton Parkway, from Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., $113,278. Noted Apr. 24.

N. Y., New York—Park Bd., Municipal Bldg., May 1, asphalt paving roadway of Central Park, from W. J. Fitzgerald, 547 West 45th St., $27,938; paving and repaving with asphalt mastic Harlem River Dr., from L. DiMinna, 2366 Lorrilard Pl., $13,400. Noted Apr. 24.

N. Y., Syracuse—Bd. Contr. & Supply, paving Oswego Blvd., from G. B. Dickinson, Union Bldg., $26,811.

Pa., Ebensburg—Cambria Co., rein.-con. paving 3,000 lin.ft. Ebensburg-Carroltown Highway, Cambria Twp., from E. R. Vipond-Strite-Moore Co., Altoona, $54,780.

Pennsylvania—State Hy. Dept., Harrisburg, Apr. 23, **(R. means Route and A. means Application)**, R. 187 Allegheny Co., from McCrady Bros. Co., Braddock, $332,615; R. 73 Butler Co., from C. Winters Constr. Co., Renfrew, $101,907; R. 116, Fayette Co., from Swaney & Gilmore, R. F. D. No. 5, Uniontown, $103,528; R. 9, Lackawanna Co., from H. B. Sproul Constr. Co. Inc., 218 Adams Ave., Scranton, $118,992; R. 4, Luzerne Co., from J. M. Boyd, 83 Sharp St., Kingston, $154,960; R. 101, A. 2595, Potter Co., from D. L. Dennis, Eldred, $25,618; R. 175, Northampton Co., from Neely Bros. & Russell, Oxford Ave. and Wakeling St., Phila., $122,005; R. 88, A. 1145, Erie Co., from C. H. Fry Constr. Co., Cherry and 19th Sts., Erie, $197,645; R. 187, Westmoreland Co., from Jeffreys & Hart, 259 Wilson Ave., Beaver, $152,569; R. 52, Somerset Co., from James & Nickolson Co., Inc., 307 Johnstown Trust Bldg., Johnstown, $78,955; R. 14, Susquehanna Co., from H. B. Sproul Constr. Co. Inc., 218 Adams Ave., Scranton, $265,787, R. 146, Montgomery Co., from Union Paving Co., 30th and Locust Sts., Phila., $267,894; bids opened Apr. 29, R. 79, Butler Co. from R. H. Cunningham & Sons Co., 617 Penn Ave., Turtle Creek, $397,701; R. 117, Fayette Co., from C. R. McIntyre, Fairchance, $89,660; R. 140 Schuylkill Co., from Crawford Co., 3056 K St. N. W., Wash., D. C., $270,786; A. 143 Westmoreland Co., from R. H. Cunningham & Sons Co., 617 Penn Ave., Turtle Creek, $198,813; A. 523 York Co., from Comerford Constr. Co., 125 South 5th St., Phila., $108,331; R. 189, Armstrong Co., from L. H. Hileman Constr. Co., 217 First Natl. Bank Bldg., New Kensington, $324,755; A. 2659, Bucks Co., from Ross & Whelan Inc., 471 Southard St., Trenton, N. J., stone $43,778, gravel $39,595; A. 2577 Clarion Co., from F. S. Wilson, Kittanning, $146,355; A. 563, Fayette Co., from M. Barber, 180 Henry St., Binghamton, N. Y., $48,058; R. 88, Erie Co., from H. E. Bunce, 125 Fulton St., Olean, N. Y., $247,151; A. 2018, Monroe Co., from Ward & Tully Inc., 189 Montague St., Brooklyn, N. Y., $77,134. Noted Apr. 10.

Delaware—State Hy. Dept., Dover, improving 1.91 mi., Contr. CN-14, Walker-Deakyneville Rd., from Stewart & Donohue, 14th and Grant Sts., Wilmington, (a) stone concrete $77,367 (b) slag concrete $79,947 (c) waterbound macadam $70,445 (d) penetration macadam $84,345 (e) amiesite $84,345; 3.3 mi. Contr. CS-25, Pepper-Lowes Cross Rds., from Field, Barker & Underwood, Commercial Trust Bldg., Phila., (a) $112,758 (b) $108,198 (c) $103,673 (d) $117,027. Noted Apr. 10.

Kentucky — State Hy. Dept., Frankfort, grading, shaping and surfacing 6.5 mi. Somerset-Stanford Rd., Lincoln Co., from Hughes & Ware, Lancaster, 13,000 cu.yd. excav. $0.45 per cu.yd., 16,250 tons crushed limestone $2.75, 200 cu.yd. Class A concrete $21, 60 cu.yd. Class B $23, etc., total $62,517.

O., Cleveland—Improving Cedar Ave., 11,780 lin.ft. granite or stone curb, 7,500 cu.yd. 4 in. drain tile gutter, 17,648 sq. yd. (a) asphalt or (b) brick on concrete, from Cleveland Trinidad Paving Co., The Arcade, (a) $114,005; Bentley Bros., 1836 Euclid Ave. (b) $124,662. Noted Apr. 10.

Michigan — State Hy. Dept., at office Comrs. Lapeer Co., Lapeer, grading and surfacing 1.244 mi. State Trunk Line Rd. 36-4, 7,660 sq.yd. concrete, 6,340 sq.yd. gravel, from Rowe Constr. Co., Sebewaing, $27,596. Noted Apr. 10.

Michigan — State Hy. Dept., at office Comrs. Leelanau Co., Leland, 2.992 mi. State Trunk Line Rd. 22-16, D, 28,436 sq. yd. gravel, and 30,292 cu.yd. excav., and 3.106 mi. State Trunk Line Rd. 22-13 A, 29,156 sq.yd. gravel and 23,194 cu.yd. excav., from Leelanau Co. Rd. Comn., Leland, $25,144 and $26,421 respectively. Noted Apr. 10.

Michigan — State Hy. Dept. at office Comrs. Ingham Co., Mason, grading and surfacing 0.723 mi. State Trunk Line Rd. 14-15, Sect. A, Ingham Co., 8,676 sq.yd. concrete, from Hudson & Coons, Bennington, $24,389. Noted Apr. 3.

Michigan—State Hy. Dept., at office Comrs. Monroe Co., Monroe, grading and surfacing 4.197 mi. Federal Aid Project 50, B 2 and 4, 49,185 sq.yd. concrete, from W. H. Knapp Co., Monroe, $90,630. Noted Apr. 17.

Michigan — State Hy. Dept. at office Comrs. Berrien Co., St. Joseph, grading and surfacing 1.236 mi. State Trunk Line Rd. 58-5, 13,671 sq.yd. concrete, from States Improvement Co., 220 South State St., Chicago, $36,524. Noted Apr. 3.

Michigan — State Hy. Dept., at office Comrs. Oakland Co., Pontiac, grading and surfacing 4.746 mi. Federal Aid Project 97 A, 3.25 mi. State Trunk Line Rd. 10-41, and 0.648 mi. State Trunk Line Rd. 10-37 A, Oakland Co., from Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, $104,139, $75,056 and $18,393 respectively. Noted Apr. 10.

Michigan — State Hy. Dept., at office Comrs. Ottawa Co., Grand Haven, shaping and surfacing 1.502 mi. State Trunk Line Rd. 11-71, Ottawa Co., 1,500 tons bituminous binder, 15,861 sq.yd. bituminous concrete wearing surface, from Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, $34,143. Noted Apr. 10.

Michigan — State Hy. Dept., Lansing, grading and gravel surfacing 7.204 mi. State Trunk Line Rd. 43-1, Barry Co., from C. Reger, Clare, $102,041; 5.508 mi. State Trunk Line Rd. 18-13, Midland Co., from R. H. Macwell & Owens, Hope, $27,984. Noted Apr. 3.

Michigan — State Hy. Dept. at office Comrs. Berrien Co., St. Joseph, grading and surfacing 5.91 mi. State Trunk Line Rd. 58-4, 62,408 sq.yd. concrete, from Woodley Granger Constr. Co., Benton Harbor, $134,354. Noted Apr. 17.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete, from Detroit Asphalt Paving Co., 909 Free Press Bldg., 2,900 sq.yd. Bulwer Ave. $15,824, 1,850 sq.yd. Calvert Ave. $9,986, 3,050 sq.yd. Milner Ave. $16,210. 820 sq.yd. Sylvester Ave. $4,901 1,700 sq.yd. Torrey St. $10,141. 1,600 sq.yd. Weitzel Court $9,362; from Cooke Asphalt Paving Co., 1260 Penobscot Bldg., 4,800 sq.yd. McFerson Ave. $24,774.

Wis., Milwaukee—Concrete paving various alleys, from F. W. Blodgett, 521 Newton Ave., under specifications 1, 3, 4 and 5, $20,687; from Parkinson Constr. Co., 322 27th St., under specifications 2, 7 and 8, $6,640; from Kroening Constr. Co., 39th Ave. and Mitchell St., specification 6, $15,447. Noted Apr. 24.

Wis., Milwaukee—Paving, etc., **(1)** 8th Ave. **(2)** 56th St. **(3)** Franklin St. **(4)** North Ave. **(5)** State St. **(6)** 3rd St. **(7)** Townsend St. **(8)** 29th Ave. with **(a)** asphalt and brick **(b)** asphaltic concrete **(c)** one course concrete **(d)** vibrolithic concrete **(e)** sandstone or granite block **(f)** asphalt resurfacing, from Badger Constr. Co., 97 Wisconsin St., **(1a)** $19,041 **(2b)** $21,052 **(2c)** $21,793 **(2d)** $21,140 **(3b)** $31,339 **(4b)** $16,092 **(6f)** $23,507 **(7b)** $26,090 **(8b)** $26,142; from J. Bluhm & Son, 1298 Achilles Pl., **(3c)** $29,179; from Milwaukee General Constr. Co., 427 Mitchell St., **(4d)** $14,650 **(4c)** $14,119; from R. Gumz, 831 13th Ave., **(5e)** $3,577 **(8c)** $25,254 **(8d)** $24,584; from A. Retzloff, 868 Island Ave., **(3d)** $28,912 **(7d)** $25,514; from Tallmadge, Hunt Constr. Co., Colby-Abbott Bldg., **(7c)** $25,820.

Missouri — State Hy. Dept., Jefferson City, Apr. 22, grading 4.827 mi., 1.89 mi. and 4.215 mi. road from Boonville west, 34 ft., Cooper Co., from Haller & Davis, Boonville, $23,234, $19,431 and $49,761 respectively, 4.204 mi., 3.865 mi. and 4.055 mi. road from Odessa east, 34 ft., Lafayette Co., from L. A. Woods Constr. Co., Smithville, $38,757, $40,405 and $26,582 respectively, 4.793 mi. road from Marshfield north and west and 4.994 mi. road from Marshfield west both 34 ft., Webster Co., from C. E. Johnson & Son, Buffalo, $33,856 and $40,400 respectively, 4.951 mi. road from Washburn south, and 3.314 mi. road from Seligman north and south, both 30 ft., Barry Co., from Kelly & Underwood, Granby, $24,803 and $17,243 respectively, 3.386 mi. Linneus-Laclede Rd., 30 ft., Linn Co., from C. P. O'Reilly & Co., Wainright Bldg., St. Louis, $24,280, 1.15 mi. road from Greenfield south, 26 ft., Dade Co., from Critser & Sons, Miller, $8,537, 2.301 mi. road from Houston south, 24 ft., Texas Co., from Lowing & Lingo, Amy, $8,296, 4.05 mi. road from Odessa east, Lafayette Co., from H. H. Hanenkratt, 53rd and Brooklyn Sts., Kansas City, $22,453, 3.856 mi. road from Odessa east, 34 ft., Lafayette Co., from A. Hood, Independence, $31,221, 3.811 mi. road from Marshall south, 34 ft., Webster Co., from Bryant-Rollins Road Co., Waynesville, $25,386, 3.892 mi. road from Marshfield north, 34 ft., Webster Co., from M. E. Gillioz, Monett, $32,300, 4.883 mi. road from Concordia east and west, 34 ft., Lafayette Co., from A. W. Mosley, Kansas City, $32,023; grading and graveling 5 mi. Stockton-Fairfax Rd., 12 ft., Cedar Co., from Newton Constr. Co., California, $28,970 1.94 mi. road from Perryville north, 16 ft., Perry Co., from H. A. Worman, Pittsfield, Ill., $23,792, 1.136 mi. Paris-Shelbina Rd., 16 ft., Monroe Co., from C. C. Hayward, Shebina, $7,939, 0.634 mi. road from Otterville west, 18 ft., Morgan Co., from Cole Jobe, Clarksburg, $7,687, 4.553 mi. road from Syracuse east and west, 18 ft., from F. Kersting, Jefferson City, $62,418, 1.666 mi. road from Fredericktown west, 12 ft., Madison Co., from W. A. Reynolds, Marble Hill, $21,102; graveling 2.758 mi. road from Cole Camp west, 12 ft., Benton Co., from C. L. Johnson, Warrensburg, $15,888, 4.019 mi. road from Kahoka east and west, 16 ft., Clark Co., from Layton Constr. Co., Muscatine, Ia., $23,336. Noted Apr. 17.

Tex., Liberty—Liberty Co. (a) grading, etc., (b) gravel surfacing (c) rein.-con. drainage structures and timber piling, on 4.16 mi. State Highway 35, Federal Aid Project 426-A, from C. Vick, Cleveland, (a and b) $20,693; R. B. Sparks, Gaston Bldg., Dallas, (a, b and c) $34,906; E. E. Board, Livingston, (c) $5,017. Engrs. est. $41,654 incl. 10% for engineering and contingencies. Noted Apr. 3.

Tex., San Antonio—Bexar Co. graveling portion St. Hedwig Rd., from C. M. Kelly, 609 Nolan St., $2.40 per yd.; topping same, from Alamo Paving Co., San Antonio $0.49. Engrs. est. $35,000. Noted Apr. 10.

Colorado — State Hy. Dept., Denver, gravel surfacing 12.046 mi. Federal Aid Project 248-A, Chaffee Co., from Western Constr. Corp., 33rd and Blake Sts., Denver, $93,534. Noted Apr. 17.

Calif., Gilroy—Improving various streets, Warrenite pavement, from Southwest Paving Co., Washington Bldg., Los Angeles, $465,000. Noted Apr. 24.

Calif., Glendale—Improving Sonora and 5th St., from E. L. Fleming, 324 West Dry-

Streets and Roads (Continued)

den Ave., 274,600 sq.ft. grading $0.05, 8,540 lin.ft. curb $0.50, 4,596 lin.ft. 8 in. vitr. sewer $1, 149,650 sq.ft. 3 in. macadam $0.105, 38,370 sq.ft. walks $0.17, total $40,000. Noted Apr. 24.

Calif., Los Angeles—Improving Canoga Ave. between Ventura Blvd. and Drumetz Rd., from G. R. Curtis, 2440 East 26th St., grading $90,000, 26,519 ft. heavy curb $0.75, 283,262 sq.ft. walks $0.25, storm drains $1,500, 30,887 ft. light curb $0.65.

Tex., Sanderson—Terrell Co. grading and gravel surfacing 12.48 mi. State Highway 12, Federal Aid Project 324-B, 2,518 cu.yd. concrete, 29,306 cu.yd. roadway, 63,317 cu.yd. borrow, 33,014 cu.yd. solid and 16,590 cu.yd. loose rock excav., 29,681 cu.yd. gravel, etc., from F. P. Holt, Sanderson, $185,978. Noted Apr. 3.

Calif., Stockton — Improving Willow, Walnut, Harding Sts., etc., from C. Moreing, Savings & Loan Bldg., 8,380 cu.yd. cut $0.60, 12,588 lin.ft. walks, $0.20, 197,486 sq.ft. 4 in. crushed rock with 2 in. asphaltic macadam surface $0.13, total $59,500.

CONTRACTS AWARDED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, grading, curbing and flagging Clarendon Rd., to T. B. Scott, 671 Halsey St., $2,874; grading sidewalk space, curbing and flagging Quentin Rd., to G. Mandatto, 129 29th St., $2,016, 80th St., to R. Lynster, 1364 Sterling Pl., $1,085; grading 60 ft. width centrally located Empire Blvd., to C. Bennett Contg. Co., 414 Rutland Rd., $29,820; asphalt paving West 37th St., to M. J. O'Hara, 1228 Park Ave., New York, $7,565. Noted Apr. 17.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, to Cranford Co., 52 9th St., asphalt paving Bay 37th St. $6,387, Quentin Rd. $5,141, 56th St. $8,472, 78th St. $10,131, 81st St. $6,716; to Interstate Paving Co., grading, curbing and flagging East 7th St. $5,005; to Brooklyn Alcatraz Asphalt Co., 407 Hamilton Ave., asphalt paving East 7th St. $10,896, Ave. M $3,225, curbing and asphalt paving East 9th St. $7,035, recurbing and asphalt paving East 35th St. $13,682; to Cleveland Trinidad Paving Co., Flushing, asphalt paving Elderts Lane $9,311, Hubbard Pl. $6,864; to F. C. Cohart, grading Shepherd Lane $8,797; to Grimm Contg. Co., 170 McKinley St., grading, curbing and flagging Shepherd Ave. $6,150; to Galco Contg. Co., grading, curbing and flagging 81st St., $3,072. Noted May 1.

N. Y., Canton — St. Lawrence Co. will pave with bitulithic macadam 5 mi. Hermon-Edwards Rd., 14 ft., $88,271, 2 mi. Brasher Falls-Helena Rd., 12 ft., $32,390, 3.1 mi. Plumbrook Rd., 10 ft., $34,044, 0.34 mi. Brasie Corners-Rossie Rd., $13,722, Madrid-Potsdam Rd., $88,533, and 3.15 mi. Stone Schoolhouse Clare Rd., $22,891. by day labor under supervision of W. F. Willson, co. highway supt.

N. Y., Letchworth Park (Portageville P. O.)—Letchworth Park Com. of Amer. Scenic & Historic Preservation Society, at Wyoming Co. Natl. Bank, Warsau, constructing highway here, to Lathrop, Shea & Henwood, Ellicott Sq., Buffalo, $19,157. Noted Apr. 3.

N. Y., New Hartford — Paving Allport Pl., Hartford Terrace, Hillside Ave. and Pearl St., to H. W. Roberts & Co., 622 Parkway St., Utica, $65,996. Noted Apr. 3.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., granite block repaving West Bway., to J. Meehan & Son, 74 Cortlandt St., $110,395; curbing, recurbing, flagging, reflagging and asphalt paving West 174th and West 175th Sts., to Asphalt Constr. Co., 208 Bway., $9,883 and $8,880 respectively. Noted Apr. 24.

N. Y., Perry—Bd. Supervs. Wyoming Co. will construct highways, by day labor. To exceed $300,000.

N. Y., Plattsburg—Common Council will resurface portions Court, Brinkerhoff, Beekman, Cornelia, Rugar and Riley Aves., by day labor, under supervision of T. G. Burke, supt. streets. $50,000. Noted Apr. 10.

N. Y., Schenectady—Bd. Supervs. Schenectady Co. will improve 9 highways by day labor under supervision of H. W. Cregier, highway supt. $81,000.

N. Y., Syracuse—Bd. Contr. & Supply, paving Clinton Sq., to F. J. Baker, University Blk., $31,538.

New Jersey—State Hy. Dept., Trenton, 2 small bridges and concrete paving 41,215 sq.yd. Route 7, Sect. 3, Anderson Corner to Colts Neck, Monmouth Co., to Union Paving Co., 30th and Locust Sts., Phila., $193,440; 78,440 sq.yd. Route 6, Sect. 10, Marlboro to Quinton, Salem Co., to M. Staub, Main St., Pitman, $278,990. Noted Apr. 10.

Pennsylvania—State Hy. Dept., Harrisburg, 36,690 sq.yd. Route 208, Application 2296, Venango Co., to Jamieson & Narlee Co., Fredonia, $219,790; 51,000 sq.yd. Route 185, Sect. 1, Schuylkill Co., to J. A. Rudolph, 27 Pine St., Tamaqua, $252,922; 36,722 sq.yd. Route 99, Sect. 2, Cameron Co., to W. A. Palmer, 431 East North St., Bethlehem, $209,482; 39,884 sq.yd. Application 2779 Mercer Co., to Meredith, McVaugh & Webb, 1409 West 10th St., Erie, $161,456; 73,780 sq.yd. Route 212, Sect. 5, Bradford Co., to Horn & Devlin, Athens, $371,333. Noted Apr. 10.

Pennsylvania—State Hy. Dept., Harrisburg, rein.-con. on 22,780 sq.yd. Route 74, Mercer Co., to Meredith, McVaugh & Webb, 1409 West 10th St., Erie, $98,575, 19,877 sq.yd. Route 146, Montgomery Co., to McNichol Paving & Constr. Co., 1923 Cherry St., Phila., $78,845, 10,906 sq.yd. Route 307, Application 2712 Centre Co., to P. N. Colgan Inc., Lewistown, $51,551. Noted Apr. 10.

Pennsylvania—State Hy. Dept., Harrisburg, **(R. means Route and A. means Application)** 80,276 sq.yd. concrete on R. 365, Lackawanna-Wyoming Counties, to Public Service Production Co., Newark, N. J., $385,349; 22,515 sq.yd. R. 73, Butler Co., to C. Winters Constr. Co., Renfrew, $101,907; 40,700 sq.yd. R. 187, Allegheny Co., to McCrady Bros., Braddock, $332,615; 44,980 sq.yd. R. 121, Huntingdon Co., to J. M. Hutchinson, Altoona, $282,317; 57,100 sq.yd. R. 216, York Co., to W. Grant Raub, Red Lion, $234,147; 77,500 sq.yd. R. 63, Sect. 2, Indiana Co., to Johnson, Drake & Piper, Erie, $376,473; 22,200 sq.yd. R. 187, Sect. 2, Westmoreland Co., to Jeffreys & Hart, Beaver, $152,569; 19,832 sq.yd. R. 9, Lackawanna Co., to H. B. Sprull Constr. Co., 218 Adams Ave., Scranton, $118,992; 20,280 sq.yd. R. 116, Sect. 3, Fayette Co., to Swaney & Gilmore, R. F. D. 5, Uniontown, $103,528.

Pa., Phila. — Bureau Highways, Dept. Pub. Wks., paving to Eastern Paving Co., 401 Colonial Trust Bldg., 2,286 sq.yd. Almond, Livingston, Mercer, Salmon and Tilton Sts., $10,747; 6,740 sq.yd. Callowhill St. $31,611; to Barber Asphalt Paving Co., 239 North 30th St., 1,643 sq.yd. Marlborough St. $7,926, 4,796 sq.yd. Victoria and 23rd Sts. $16,430; to J. F. Nolen & Sons, 64 Church Lane, 3,620 sq.yd. Baynton St. $15,517, 2,206 sq.yd. Glenwood St. $11,041; to Mazzola & Murano, 414 North Gross St., 2,549 sq.yd. Cherry, Hicks and Spring Sts., $14,800; to Dunlap & Williams, Ridge and Girard Aves., 3,664 sq.yd. Walnut and 2nd Sts. $17,156, 7,324 sq.yd. 12th St. $33,606; to M. J. McCrudden, Real Estate Trust Bldg., 5,204 sq.yd. 58th St. $28,654; to United Paving Co., Real Estate Trust Bldg., curb and footway work in 1st Dist. $15,499; to J. J. McHugh, 1617 Race St., curb and footway work in 2nd Dist. $7,544; to Atlantic Refining Co., 260 South Broad St., 191,100 gal. bituminous material $31,576; to Sun Oil Co., Finance Bldg., 25,000 gal. oil $1,875. Noted May 1.

Pa., Phila. — Bureau Highways, Dept. Pub. Wks., repaving with redressed granite block 11,801 sq.yd. Frankford Ave. and 4,315 sq.yd. 16th St., to Eastern Paving Co., 401 Colonial Trust Bldg., $52,931 and $20,203 respectively; 12, 445 sq.yd. Ridge Ave., 7,946 sq.yd. 2nd Ave., and 9,655 sq.yd. 7th St., to Municipal Paving Co., 632 Kater St., $63,614, $35,433 and $41,785 respectively; 7,993 sq.yd. 5th and 6th Sts., 7,245 sq.yd. 10th St. and 11,804 sq.yd. 13th St., to United Paving Co., 833 Real Estate Trust Bldg., $35,101, $33,586 and $41,929 respectively.

Pa., Phila.—G. H. Biles, dir. pub. wks., City Hall, paving and curbing Delaware Ave. from Porter to Oregon Sts., to Acchione & Canuso Paving Co., 804 South 12th St., $166,431. Noted May 1.

Maryland—State Rds. Comn., Baltimore, concrete paving 1.48 mi. highway in Frederick Co., Contr. F-70, to M. J. Grove Lime Co., Lime Kiln, $49,791, 1.97 mi. highway in Talbot Co., Contr. T-18, to L. Slacum, Cambridge, $53,082, 1 mi. in Harford Co., Contr. H-32, to G. J. Atkinson, Port Deposit, $30,730; macadam resurfacing 6.36 mi. highway in Washington Co., Contr. W-31, to Bester Long Co., Hagerstown, $96,583. Noted Apr. 24.

Md., Baltimore — Bd. Awards, streets listed in Contr. 254-OANA, 22,085 sq.yd. cement concrete, to Aiello Constr. Co., Gough and 4th Sts., $58,615; streets listed in Contr. 255-OCNA, 18,240 sq.yd. cement concrete, to Arundel Constr. Co., Knickerbocker Bldg., $48,042. Noted May 1.

W. Va., Buckhannon—Upshur Co., grading and surfacing 6 mi. road in Meade Dist., to Phillip & Withers, Buckhannon, $151,240.

W. Va., Huntington—Widening and paving Piedmont Rr., to J.M. Randisch & Co., 424 4th Ave., $64,333. Noted Apr. 17.

W. Va., Williamson—Mingo Co., grading Marrowbone Creek Rd., Project 17, to E. C. Price, Huntington, $42,390; Buffalo Creek Rd., Project 24, to B. Wellman, Logan, $26,321. State and Mingo Co. grading and bituminous surfacing Nagatuck-Nolan Rd., Project 3298, to Sutton Constr. Co., Ashland, Ky., $93,833. Bids rejected on Marrowbone-Kermit Rd., Project 3298. Noted Apr. 10.

Fla., Crystal River—Improving Citrus Ave., Crystal and B Sts., 1,100 cu.yd. grading, 7,500 sq.yd. paving, 5,800 lin.ft. curb and gutter, to Barnes & Smith, Crystal River, $36,000.

Fla., Fort Myers—To T. G. Yeates Co., Citrus Exch. Bldg., Tampa, paving vitr brick on shell base, asphalt grouting, 25,000 sq.yd. portion McGregor Blvd., Boy, Carson and Monroe Sts., $100,000, 30,000 sq.yd. 2nd Ave., Anderson and Evans Sts., $110,500, 15,000 sq.yd. Hendry and Jackson Sts., $55,000; 20,000 sq.yd. Lee, Peck and Garret Sts. also alley, $65,500.

Fla., Fort Myers—Lee Co., to Morgan-Hill Paving Co., 514 Graham Bldg., Jacksonville, paving 2½ in. bituminous macadam, 6.83 mi. Sect. 3 $91,042, 0.51 mi. Sect. 2-A $42,568, 10.02 mi. Sect. 2 $136,889, 7.99 mi. Sect. 1 $110,182, 4 mi. Sect. 7 $60,796, 11.37 mi. Sect. 5 $267,857; shell surfacing 4.72 mi. Sects. 6-A and 6-B $65,144; marl base on 11.117 mi. Sect. 6 $50,344; 11.93 mi. Sect. 4 $279,338. Noted Mar. 27.

Fla., St. Petersburg—City, 400,000 sq.yd. new and 90,000 sq.yd. relay pavement, 210,000 lin.ft. granite curb, to Georgia Eng. Co., Augusta, Ga., $1,500,000.

Fla., Starke—Bradford Co., improving highway, to Adams & Sanders, Madison, clearing, etc., 207 acres $60, 77,645 cu.yd. excav. $0.34, road machine grading 1,822 sta. $6, road machine grading sand clay section 438 sta. $2, 8,512 lin.ft. untreated piling $1.20, 182,500 ft. untreated structural timber $65 per M, 8,966 cu.yd. clay surfacing material $0.62, mixing and shaping 80,630 sq.yd. sand clay surface $0.62. Noted Mar. 6.

Miss., Greenwood — Improving various streets 54,244 sq.yd. 3 in. fibre brick on concrete, 19,953 cu.yd. excav., 24,698 lin.ft. straight curb, 2,970 lin.ft. circular curb, 2,300 lin.ft. 15- to 24-in. concrete sewer pipe, etc., to E. A. Finch, Greenwood, $208,706.

Tenn., Nashville — Bd. Pub. Wks. will gravel, oil and surface treat 5 or 6 mi., incl. Murphy Rd., Leshey, 5th, 17th, Fatherland, 12th, Ridley, Meridian and Arthur Aves. Work will be done by city forces. W. W. Southgate, city engr.

Tenn., Paris—State Dept. Hys. & Pub Wks., Nashville, asphalt surfacing 20 mi. Paris-Carroll Co. Rd., 16 ft., Henry Co., to S. Finley & Co., 212 West North Ave., Atlanta, Ga., $100,000. Noted Nov. 1.

O., Akron—Dept. Pub. Serv., grading, curbing, laying sewers and paving, etc., 4,550 sq.yd. Palmer St., brick pavement, asphalt filler, 6 in. base, to McAlonan Bros., 127 West Buchtel Ave., $34,329.

O., Akron—W. F. Peters, dir. Pub. Serv., paving Lexington Ave., to T. E. McShaffrey Constr. Co., 171 South Forge St., $27,032. Engrs. est. $30,000. Noted Apr. 3.

O., Cleveland — City, to Roehl Bros. Paving & Constr. Co., 7002 Lorain Ave., improving Gifford Ave. $21,380, Wentworth Ave. $14,587, West 59th St. $22,577, West 20th St. $6,230, work involves 8,205 lin.ft. stone curb, 9,473 lin.ft. 4 in. drain tile gutter, 12,775 sq.yd. vitr. brick; to Gould & Maybach, 16315 Saranec Rd., improving East 143rd St., 1644 ft. stone curb, 1,680 lin.ft. 4 in. drain tile gutter, 2,235 sq.yd. concrete $9,642; to Baldwin Bros., 4500 Euclid Ave., improving Forest Ave., 2,850 lin.ft. stone curb, 3,030 lin.ft. 4 in. drain tile, 4,540 sq.yd. brick, $26,090; to Cleveland Trinidad Paving Co., The Arcade, asphalt paving 1,440 sq.yd. West 4th St., $5,310, granite curbing and asphalt paving 17,648 sq.yd. Cedar Ave., $116,829.

O., Cleveland—Cuyahoga Co. vitr. brick paving Kinsman Rd. 6, to Lake City Constr. Co., 1624 Discount Bldg., $245,189.

O., East Cleveland (Cleveland, P. O.)—Asphaltic concrete paving, curbing and guttering Hayden Ave. from Doan to Lakefront Aves., also Lee Rd., to Rieley Bros., The Arcade, Cleveland, $39,986 and $40,076 respectively; Hayden Ave. from Doan Ave. to Woodworth Rd., to Freshwater Constr. Co., Natl. Bldg., Cleveland, $60,643.

Ind., Goshen—Elkhart Co., grading and gravel surfacing 24,600 ft. County Unit Rd. 8, 24 ft., to J. Stump, Nappanee $27,155 Engrs. est. $43,310. Noted Apr. 3.

Streets and Roads (Continued)

Ind., Indianapolis — Marion Co., paving 16,774 ft. East 10th St., 18 ft., to McCoun Constr. Co., Cumberland, $81.491. Engrs. est. $87,226. Noted May 1.

Ind., South Bend—Curbs and sidewalks on Ewing Ave., to H. L. Davis & Son, South Bend, $40,022. Engrs. est. $45,260.

Ind., South Bend—St. Joseph Co., resurfacing 211,866 sq.yd. Dixie Highway, to Highways Impvt. Co., South Bend, $29,663. Engrs. est. $34,483.

Ind., Sullivan—Sullivan Co., grading and gravel surfacing 11,195 ft. J. I. Adams Rd., 18 ft., to G. Unger, Carlisle, $26,194. Engrs. est. $32,382. Noted May 1.

Ind., Winchester—Randolph Co., paving 14,080 ft. Marion Hill Rd., 18 ft., to J. L. Teegarden, Union City, $74,450. Noted May 1.

Michigan — State Hy. Dept., Lansing, grading and surfacing 0.893 mi. State Trunk Line Rd. 29-4, Calhoun Co., to Dovey & Klosterman, Batavia, $25,173; 0.999 mi. State Trunk Line Rd. 47-5, Shiawassee Co., to Taylor Constr. Co., Birmingham, $29,809; 3.187 mi. State Trunk Line Rd. 17-14, Van Buren Co., to Kalamazoo Paving Co., Kalamazoo, $81,440. Noted Apr. 24.

Michigan — State Hy. Dept., at office Comrs. Chippewa Co., Saute Ste. Marie, grading and surfacing 2.207 mi. State Trunk Line Rd. 48-6 B, Chippewa Co., to J. Cottle, Rudyard, $22,274. Noted Apr. 3.

Ill., Dwight—Grading and paving North, Seminole, Franklin, Washington Sts., etc., to Hartman-Clark Bros., Dwight, $118,825. Noted May 1.

Ill., Harvey — J. A. Alton, secy. Bd. Local Impvts., 40,000 sq.yd. concrete paving and 20,000 lin.ft. curb and gutter, Specials 152 to 158 inclusive, to G. H. Summerville, Chicago Heights, $130,668; Special 166 to Foley & Riley, 38 South Dearborn St., Chicago, $14,628. Noted Apr. 10.

Ill., Taylorville—Paving Vandeveer St., to Alzina Constr. Co., Unity Bldg., Springfield, 3,575 cu.yd. excav. $0.65, 5,022 lin. ft. curb and gutter $1.15, 5,225 sq.yd. brick paving $3.83 per sq.yd., etc., total $28,624.

Wisconsin — State Hy. Comn., Madison, grading and surfacing, etc., Stevens Point-Wausau Rd., Project 38, Marathon Co., to Hayes Bros., Janesville, 25,994 cu.yd. earth excav. $0.65, 85,377 sq.yd. concrete surfacing $1.18, etc., total $134,751. Noted Apr. 10.

Wis., Elkhorn—Walworth Co. concrete surfacing, etc. Burlington-Lyons Rd., to Whitewater Bridge Co., Whitewater, $53,731; 7,000 cu.yd. gravel surfacing on Lake Geneva-Kenosha Co. line Rd., to P. Berg, Cambridge, $1.29 per cu.yd.

Wis., Hudson—Paving, etc., 8,956 sq.yd. various streets, brick, to Welch Paving Corp., 703 1st Natl.-Soo Line Bldg., Minneapolis, Minn., $37,678. Noted Apr. 17.

Wis., Madison — Dane Co. Hy. Comn., grading and graveling Madison-Lake Milis Rd., to Kutzke & Gallagher, Oregon, $46,990, Verona-Mt. Vernon Rd., to E. J. Smith, Blue Mounds, $14,634, State Trunk Highway 8a, to Mickels & Gallagher, Madison, $5,438, West St., Village Oregon, to R. H. Peterson & Son, Oregon, $2,806, Alboin Deerfield, London-Cambridge and Sun Prairie-Cottage Grove Rds., to H. Johnson, Albany, $13,818, $7,581 and $19,498 respectively; grading and concrete surfacing State Trunk Highway 19, Village Blue Mounds, to J. L. Frame, Blue Mounds, $2,699.

Wis., West Allis—Paving 92,000 sq.yd. various streets, vibrolithic-concrete, to R. Reisinger & Co., 464 Oakland Ave., Milwaukee, $2.40 and $2.43 per sq.yd. Noted Apr. 24.

Ia., Allison—Butler Co., grading 7.28 mi. Austinville-Parkersburg Rd., 26 ft., 101,445 cu.yd. excav., 1,216 ft. 12- to 18-in. pipe, to L. O. Kimball, Clear Lake, $27,514.

Minnesota—State Hy. Dept., St. Paul **(SP means State Project, FAP means Federal Aid Project)**, grading 12 mi. SP 2-32 Sect. 2, FAP 348, Sect. A, 156,000 cu.yd. excav., to Lunde, Hanley & Underhill, Nashwauk, $55,963; grading 4 mi. SP 2-33, Sect. 1, FAP 348, Sect. C, 63,000 cu. yd. excav., to Stanley Bros., St. Cloud, $22,167, Bridge 4230, to Twin City Bridge Co., Minneapolis, $10,894; 20 mi. SP 6-39, Sect. 2, FAP 333; Div. A and B to Carter, Halls, Adlinger Co., 706 1st Ave. N., Minneapolis, $60,670, Div. C to A. J. McKibbin, Lancaster, $38,446, 3 bridges to Babcock Bros., Winnebago, $38,634; 7 mi. SP 9-38, FAP 311, 75,000 cu.yd. excav., to D. Ryan, Marshall, $23,944, Bridge 3923, two 23 ft. spans, and culverts, to Williams Bros., Winnebago, $7,639; 15 mi. SP 9-39, Sect. A, FAP 352, 187,000 cu.yd. excav., to J. Sampson, Faribault, $63,300, Bridge 4253, 80 ft., and culverts to C. H. Vickerman, Caledonia, $8,127; 9.5 mi. SP 13-26, Sect. F, FAP 346, 141,000 cu.yd. excav., to J. J. Davy, Olivia, $39,630; 25 mi. SP 28-25, Sect. A, FAP 360; Divs. A and B to Nelson, Fulton & Nelson, 355 Temple Court, Minneapolis, $102,067, Div. C, to Stanley Bros., St. Cloud, $27,566; 20 mi. SP 29-23, Sect. A, FAP 358, 340,000 cu.yd. excav., to Thomas Bros. & Thursdale, Foley, $113,910, Bridge 4227, 50 ft., to A. H. Ellis, Alexandria, $1,200; 4.5 mi. SP 30-24, FAP 336, 122,000 cu.yd. excav., 29,000 sq.yd. asphalt paving, 6,600 ft. curb, to Welch Paving Corp., 703 1st Natl.-Soo Line Bldg., Minneapolis, $68,555, grading 2 mi. to Nelson, Fulton & Nelson, 355 Temple Court, Minneapolis, $38,507, Bridge 4159, 30 ft. long, to J. A. Jardine, Fargo, N. D., $5,978; 9.5 mi. SP 56-24, Sect. C, FAP 359, 74,000 cu.yd. excav., and culverts to R. F. Nichols, Waseca, $27,095; 12 mi. SP 56-22, Sect. A, FAP 357, 219,000 cu.yd. excav. and culverts, to J. Sampson, Faribault, $94,358, Bridge 4239 and widening Bridge 1571, to Williams Bros., Winnebago, $6,370; 23.5 mi. SP 64-24, Sect. D. FAP 353, 250,000 cu.yd. excav., to Stanley Bros., St. Cloud, $66,316, Bridge 4226, 30 ft. long, to J. H. Atkins, Barnesville, $5,616. Noted Apr. 10.

Minn., Grand Rapids—Comrs. Itasca Co., grading 22 mi. Grand Rapids-Marcell Highway, 28 ft., to Whitmas & Bluntach, Bovey, $100,925.

Minn., Virginia—Paving 9 blocks alleys, concrete, to Range Constr. Co., Virginia, $26,644.

Kan., Dodge City—Ford Co., grading and surfacing with sand clay 4.405 mi. Federal Aid Project 221, to Bennett & Underwood, Garden City, $26,610. Noted Mar. 27.

Kan., Topeka—Shawnee Co., grading and filling 3.933 mi. Federal Aid Project 141, Sect. D, to Dolman & Kanode, Topeka. $25,744; grading 6.497 mi. Federal Aid Project 141, Sect. C, to Ziegler & Dalton, Junction City, $43,941. Noted Mar. 27.

Neb., Omaha—Douglas Co., to J. Kerns Constr. Co., Omaha, paving 44,000 sq.yd. Rd. 52, asphaltic concrete, $2.77 per sq.yd.; to J. E. Turner, Omaha, grading 70,000 cu. yd. Rd. 29, $0.234 and 40,000 cu.yd. Rd. 48, $0.238.

Neb., Nebraska City—Otoe Co., grading and gravel surfacing 2.43 mi. Federal Aid Project 214, to Abel Constr. Co., Nebraska City, $35,552, bridge to Monarch Eng. Co., Falls City, $6,076. Noted Apr. 3.

S. D., Canton—Concrete paving 20,000 sq.yd. various streets to C. H. Atkinson Paving Co., Watertown, $46,859. Noted Mar. 13.

N. D., Carrington — Foster Co., gravel surfacing 11 mi. Federal Aid Project 45 and 3.5 mi. Federal Aid Project 102 and grading Federal Aid Project 252 to Stevens Bros., 15 Piedmont Bldg., St. Paul, Minn., $20,608, $7,750 and $4,967 respectively; gravel surfacing Federal Aid Project 252 to Howard & Webster, Turtle Lake, $5,678.

N. D., Hillsboro — C. D. Olson, aud. Traill Co., grading 7 mi. Federal Aid Project 61 A, 33,328 cu.yd. excav., culverts, etc., also 3 mi. Federal Aid Project 5 G, 19,491 cu.yd. excav., and gravel surface, to W. H. Noell, Jamestown, $12,440 and $26,100 respectively. Noted Apr. 3.

N. D., McClusky—Sheridan Co., grading 13 mi. Federal Aid Project 209, 90,195 cu. yd. excav., etc., and 6 mi. Federal Aid Project 218, 57,875 cu.yd. excav., etc., to F. O. Smith, Steele, $32,360 and $24,118 respectively.

N. D., Valley City—C. W. Nelson, aud. Barnes Co., grading 12 mi. Federal Aid Project 221, 90,437 cu.yd. excav., etc., to W. H. Noel, Jamestown; 11 mi. gravel surface on Federal Aid Project 36, and 10 mi. Federal Aid Project 124, to C. C. Jackson, Jamestown. Total est. $55,000. Noted Apr. 3.

Mont., Livingston — Park Co., Federal Aid Project 59, Sects. A and B, 2.77 mi. gravel surfacing, to J. S. Haley, Bozeman, $25,019. Noted Apr. 10.

Mo., Chaffee — Grading and rein.-con. surfacing several blocks Main and Yoakum Sts., to Regenhardt Constr. Co., Cape Girardeau, $55,850.

Mo., Kirksville—E. L. Barnes, city clk., grading, curbing and rein.-con. paving 14 blocks Normal and McPherson Sts., 30 ft., to Layton Constr. Co., Muscatine, Ia., $48,000. Noted Apr. 10.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, to Skrainka Constr. Co., Security Bldg., concrete paving alley in City Block 5331, $3,725, sidewalks on Arsenal St. in front of city building, $3,298; to Eyermann Constr. Co., 1216 South Grand Blvd., concrete paving alley in City Block 5332, $4,118; to Granite Bituminous Paving Co., Railway Exch., reconstructing Lee Ave., warrenite on concrete, $23,591, 9th St., bitulithic on concrete, $13,812, Penrose St., bitulithic on concrete, $24,486. Noted Mar. 6.

Mo., St. Louis — Bd. Pub. Serv., to Skrainka Constr. Co., Security Bldg., improving alley in City Block 5405, 1,340 sq.yd. concrete, etc., $3,536, reconstructing Finkman Ave., 2,025 sq.yd. Kentucky rock asphalt, $11,458, Magnolia Ave., 2,310 sq. yd. Kentucky rock asphalt, $12,170, San Francisco St., 1,005 sq.yd. Kentucky rock asphalt, $6,283; to Eyermann Constr. Co., 1216 South Grand Blvd., reconstructing Flora Pl., 25,915 sq.yd. Kentucky rock asphalt, $43,048, Klock St., 5,725 cu.yd. grading, 1,650 sq.yd. Kentucky rock asphalt, $14,073; to J. E. Perkinson, 3237 Carter Ave., constructing Dressel Ave., 2,950 sq. yd. Kentucky rock asphalt, $14,715. Noted Mar. 27.

Mo., Springfield—Grading and concrete surfacing 2 mi. Springfield-Ozark Trail, 18 ft., to Springfield Constr. Co., Springfield, $47,575.

Tex., Commerce — Rock asphalt paving 24,411 sq.yd., also curbing and guttering, various streets, to W. H. Nichols, Mercantile Bank Bldg., Dallas, $100,000. Noted Apr. 3.

Tex., Dallas — See "Railways" under Texas.

Tex., Ft. Worth—Paving, etc., Carlock Ave. and Warner Rd., to West Texas Constr. Co., Cotton Exch. Bldg., 8,700 sq. yd. rock asphalt $3.18, 6,000 ft. curb and gutter $1, 3,500 cu.yd. excav. $0.90. Engrs. est. $35,000.

Tex., Kerrville—Kerr Co. improving 5.83 mi. State Highway 41, 18 ft., bituminous Federal Aid Project 405, to Colglazier & Hoff, 922 Austin St., San Antonio, $55,699. Noted Apr. 24.

Tex., Rockwall—Will pave 7,760 sq.yd. of Square, concrete, by day labor. $25,000. V. R. Smitham, Rockwall, engr.

Okla., Oklahoma City — Grading and paving 6 blocks 18th St., 6,700 sq.yd. asphalt, 3,850 lin.ft. curbing and 2,400 cu.yd. excav., to Western Paving Co., Tradesmens Bldg., $34,194. Noted Mar. 20.

Okla., Oklahoma City—Grading and paving 6 blocks Western Ave., to Western Paving Co., Tradesmens Bldg., 6,300 sq.yd. asphalt, $3.88, 2,100 cu.yd. excav. $0.98, etc., total $38,550.

Okla., Oklahoma City—Grading and paving Bway. and B Sts., 5,750 sq.yd. paving, 1,900 cu.yd. excav., to Western Paving Co., Tradesmens Bldg., Oklahoma City, $34,124. Noted Feb. 7.

Okla., Pawhuska—Grading and paving 8 blocks 14th and 15th Sts., 7,900 sq.yd. concrete, 4,800 lin.ft. curbing, to Tibbets & Pleasant, 209 North Nogales St., Tulsa, $38,763.

Colo., Denver—Asphalt paving, to Allied Contractors, Inc., 803 Douglas St., Omaha, Neb., 12 blocks East Denver Paving Dist. 14, $47,208, 12 blocks East Denver Paving Dist. 12, $33,114, 12 blocks South Capitol Hill Paving Dist. 1, $39,335, 12 blocks Capitol Hill Paving Dist. 8, $42,709, 12 blocks Capitol Hill Paving Dist. 7, $36,832; to New Mexico Constr. Co., Albuquerque, N. M., 12 blocks West 33rd Ave. Paving Dist. 1, $36,853, 12 blocks East Denver Paving Dist. 13, $35,589; to Western Paving & Constr. Co., International Trust Bldg., 12 blocks Capitol Hill Paving Dist. 10, $42,043, 12 blocks Capitol Hill Paving Dist. 4, $38,886; curbing, grading and surfacing, to J. Collier, 63 South Logan St., West Denver Impvt. Dist. 3, $33,097. Noted Apr. 24.

New Mexico — State Highway Dept., Santa Fe, Federal Aid Project 18, Carlsbad-Pearl Rd. No. 15, Sect. 1, Eddy Co., to E. V. Graham, Odessa, Tex., 19,634 cu. yd. 6 in. one course caliche surfacing $1.90, total $37,305; Federal Aid Project 28, Fort Bayard to Bayard Sta. No. 48, Sect. 4, Grant Co., to Reynolds & Sutton, Albuquerque, 1,185 cu.yd. gravel shoulders $3.50, 15,242 cu.yd. cement concrete for shoulders $15.60, total $27,925; Federal Aid Project 136, Los Lunas-Gallup Rd. 6, Sect. 2, Valencia Co., to L. Moor Constr. Co., Two Republics Bldg., El Paso, Tex., 9,884 cu.yd. excav. $0.35, 4,932 cu.yd. borrow $0.25, 3,981 cu.yd. two course gravel surfacing $2.25, for bridges; 624 cu.yd. concrete $26, 108 cu.yd. concrete (spillways) $25, 87,350 lb. reinforcing $0.08, 1,080 lin. ft. concrete piling $4.10, 155 tons structural steel $170, 1,367 cu.yd. excav. $5.50, total $81,182; Federal Aid Project 60 A, Santa Fe-Las Vegas Rd. 1, Sect. 6, San Miguel Co., to A. O. Peabody, Albuquerque, 20,957 cu.yd. Class 1 excav. $0.32, 1,028 cu.yd. Class 3 excav. $2.60, 5,566 cu.yd. Class 1 borrow $0.32, 8,583 cu.yd. crushed stone

Streets and Roads (Continued)

surfacing $2.70, 748 cu.yd. concrete $25, $1,250 lb. reinforcing $0.08, 25,545 ft. wooden superstructure $0.90, total $66,-690; Federal Aid Project 133, Silver City-Cliff Rd. 11, Sect. 2, Grant Co., to Anderson Constr. Co., El Paso, Tex., 3,757 cu.yd. two course crushed stone surface $3.65, 125 cu.yd. concrete $30, etc., total $38,625; Federal Aid Project 57, Roswell-Clovis Rd. 18, Sects. 2 and 3, Chaves Co., to L. R. Cullen, Roswell, 3,033 cu.yd. two course gravel surfacing $2.15, 753 cu.yd. two course gravel surfacing $4, 227 cu.yd. concrete $18, etc., total $21,180; Federal Aid Project 139, Deming-Columbus Rd. 29, Sect. 1, Luna Co., to J. Mulligan, El Paso, Tex., 8,690 cu.yd. gravel surfacing $2.39, 61 cu.yd. concrete $22, etc., total $28,918; Federal Aid Project 137, Portales-Clovis Rd. 18, Sect. 2, Roosevelt Co., to Irick & Fridell, Plainview, Tex., 8,996 cu.yd. excav. $0.30, 12,378 cu.yd. Class 1 borrow $0.30, 13,661 cu.yd. 12 in. caliche surfacing, 2 course 6 in. $2, 1,679 cu.yd. cement concrete $14.50, total $61,499. Noted Mar. 27

Calif., Los Angeles — Improving Normandie Ave., grading, 207,752 ft. Warrenite, 11,489 ft. bituminous base, curbs, gutters, etc., to G. H. Oswald, 366 East 58th St., $77,378. Noted Apr. 24.

Calif., Los Angeles — Paving 2.8 mi. highway between Pasadena and Montebello Aves., cement concrete on asphaltic concrete, to G. H. Oswald, 366 East 58th St., $183,863. Noted Apr. 24.

Idaho—State Highway Dept., Boise, surfacing 10.06 mi. Old Oregon Trail, Montpelier to Georgetown, Bear Lake Co., Federal Aid Project 80, to G. K. March, 1126 2nd St., Spokane, Wash., $36,483; 14.83 mi. Hansen to Cassia Co. line, Twin Falls Co., Federal Aid Project 23-C, and 8.28 mi. between Burley and Twin Falls Co., Cassia Co., Federal Aid Project 70, to C. A. Robinson, Twin Falls, $113,790 and $51,392 respectively. Noted Mar. 20.

Utah—State Rd. Comn., Salt Lake City, 11.34 gravel and 1.11 concrete road also concrete bridge, Federal Aid Projects 56 and 57, to Reynolds-Ely, Springville, $149,-478. Engrs. est. $159,319.

Washington—State Hy. Comn., Olympia, crushed rock surfacing 15 mi. State Rd. 12 from Walville to Meskill, Lewis Co., to F. G. Redmonn, Yakima, $33,348; concrete paving 4.85 mi. National Park Highway from Ethel to Mill Creek, Lewis Co., to Forbes & Wilder, Olympia, $168,039.

Wash., Aberdeen—City Council, paving Arnold St. et al., vitrolithic, to Greene Eng. Co., Aberdeen, $2.56 per sq.yd., total $28,-052. Engrs. est. $25,000. Noted Apr. 24.

Wash., Chehalis—Lewis Co., paving Permanent Highway 12, Centralia-Bucoda Highway, 12.101 sq.yd. concrete, to J. H. Collins & Co., Thompson Bldg., Seattle, $32,070. Engrs. est. $35,000. Noted Apr. 17.

Wash., Kelso—City Council, paving, etc., West Kelso Dist., 26,700 sq.yd. 2 in. Warrenite on 3 in. bitumen, 12,300 lin.ft. curbing and 5,000 cu.yd. earth excav., to United Contg. Co., Northwest Bank Bldg., Portland, Ore., $86,531. Engrs. est. $100,-000. Noted Apr. 24.

Wash., Longview—Long Bell Lumber Co., paving Oregon Way from St. Helens to Columbia River, 11,322 sq.yd. 6-in. concrete, etc., to Philbrick & Nicholson, Tacoma.

California—State Highway Comn., Sacramento, surfacing 9.7 mi. highway between Janesville and point 4 mi. west of Milford, crushed gravel or stone, to Warren Constr. Co., Bacon Bldg., Oakland, $47,921. Noted May 1.

Calif., San Bernardino—San Bernardino Co., Rd. Impvt. Dist. 26, improving 10,689 ft. Riverside Dr., 16 ft. grading, 6 in. crushed rock and asphaltic oil pavement, earth shoulders or embankments, 2 ft. wide on each side, to Pierson & Dickerson, Riverside, $25,300. Noted May 1.

Calif., San Francisco—Improving Marina Blvd. between Steiner and Lyon Sts., 87,-907 sq.ft. asphalt with 6 in. foundation, 1½ in. binder course and 1 in. wearing surface, 20,808 sq.ft. artificial stone walks, 3,304 lin.ft. concrete curb, 6,608 sq.ft. vertical fibre brick gutter, etc., to Municipal Constr. Co., 306 12th St., Oakland, $34,895. Noted Apr. 10.

Calif., San Francisco—Southern Pacific R.R., 65 Market St., repaving 5th St. from Townsend to Harrison Sts., asphalt on concrete, etc., to Tibbitts-Pacific Co., 16 California St., $55,000.

Calif., Santa Ana—Improving West 17th St., to B. R. Ford, 407 West 17th St., 152,-569 sq.ft. 7 in. concrete $0.2575. 2,380 ft. 4 in. sewers $0.50, Noted May 1.

Industrial Works

PROPOSED WORK

Mass., Somerville—Service Station—International Harvester Co. of America, 43 Somerville Ave., having revised plans prepared 1 story, 75 x 100 ft. Private plans.

Mass., Springfield—Garage, etc.—Three Level Garage Co., 39 Lincoln St., Boston, plans 3 story, here. $160,000. Private plans.

N. Y., Albany — Pasteurization and Bottling Plant—Uncle Sams Dairy Co. plans plant, 3rd Ave. $70,000-$75,000. Address H. C. Williams, c/o owner.

N. Y., North Tonawonda—Plant—Macbeth Body Co., Inc., plans manufacturing plant, Erie Ave. To exceed $100,000. Address A. S. Loepere, 2157 Seneca St., Buffalo.

N. Y., Rome—Station—Northern New York Utilities, Inc., Light & Power Bldg., Watertown, plans 10,000 hp. steam generating station, here. To exceed $250,000.

N. Y., Utica—Plant—W. J. Schoonover Glass Co., New and Wyoming Aves., Scranton, Pa., plans manufacturing plant, Eagle St., here. $50,000.

Pa., Pittsburgh—Warehouse—Standard Sanitary Mfg. Co., Bessemer Bldg., having plans prepared by Hunting Davis Co., Century Bldg., 5 story and basement, 50 x 250 ft. concrete, brick and steel warehouse, Galveston Ave. $350,000.

Va., Norfolk—Plant—International Cement Corp., 342 Madison Ave., New York, plans plant, here. $2,000,000. Engineer and architect not selected.

La., Berwick—See "Waterworks."

O., Cleveland — Bakery — R. B. Biscuit Co., 2515 Bridge Ave., had plans prepared by Bohnard & Parsson, 1900 Euclid Ave., 3 story, 32 x 107 ft., brick and steel addition, Carroll Ave. $60,000.

O., Springfield — Factory — Crowell Publishing Co., 202 West High St., plans 7 story, fireproof. $1,000,000. J. E. Miller, rec. vice pres.

Mich., Caro — Power Station — Great Lakes Power Co., Bad Axe, having plans prepared by Ayers, Lewis, Norris & May, Cornwall Bldg., Ann Arbor, hydro electric power station here.

Ill., Abingdon—Plant—Amer. Sanitary Mfg. Co. having plans prepared by Lockwood, Greene & Co., 38 South Dearborn St., Chicago, addition to plant. Noted Apr. 10.

Wis., Milwaukee—Factory—A. H. Petersen Mfg. Co., 1614 Fratney St., plans to rebuild 1 story, 62 x 300 ft., brick and timber, plain foundation, recently destroyed by fire. Engineer and architect not selected.

Tex., Call—Saw Mill—Kirby Lumber Co., Commercial Natl. Bank Bldg., Houston, plans saw mill, here. $75,000.

Tex., Corpus Christi—Pressed Metal Mfg. Co. plans 110 x 180 ft. brick and rein.-con. plant. $150,000. W. Shelby, pres.

Tex., Dallas—Mill—Texas Textile Mills, c/o N. Adams, pres., Amer. Exch. Natl. Bank, having plans prepared by L. W. Robert, Jr., Interurban Bldg., 25,000 spindle mill. $5,000,000.

Tex., Dallas — Power Plant — Dallas Power & Light Co., Interurban Bldg., had plans prepared power plant substation, Jefferson and 5th Sts. $174,891. J. Oram, ch. engr.

Tex., Dallas—Terminal—Trinity & Brazos Valley R.R., Cleburne, and Ft. Worth & Denver City R.R., Record Bldg., Ft. Worth, plan freight terminal on Jackson St., here. $500,000. H. A. Stainer, c/o Ft. Worth & Denver City R.R., ch. engr.

Tex., Donna — Plant — H. Hansen plans citrus fruit packing plant, brick and concrete. $40,000.

Tex., Ft. Worth—Cotton Mill—L. H. McKee, 1501 Cooper St., and associates, making plans 3 story, 175 x 300 ft., brick and steel. $500,000. Private plans.

Tex., Ft. Worth—Factory—Burton Concrete Mfg. Co., having plans prepared by E. T. Glasgow, First Natl. Bank Bldg., fireproof factory.

Tex., Ft. Worth—Oil Refinery—Star Refining & Producing Co., Evans St., plans addition. $50,000.

Tex., San Antonio — Factory — G. H. Barnes and J. H. Reagan, City Natl. Bank Bldg., owners Lion Brand Products Co., making plans 2 story, 80 x 160 ft., brick and concrete. $60,000. Private plans.

Okla., Grove—Power Plant—Pub. Serv. Co., 107 East 4th St., Tulsa, purchased site and having surveys made hydro electric power plant on Grand River, near here. $1,000,000. Byllesby Eng. Co., 208 South La Salle St., Chicago, engrs.

Okla., Tulsa—Factory—Cement Securities Co., Denver, Colo., made plans group of buildings, west of here. $2,000,000.

Ariz., Mesa—Plant—Independent Cotton & Oil Co., W. T. Owens, pres., El Paso, Tex., plans cotton seed oil plant, here Will exceed $75,000.

California—Milk Plant—Meyenberg Evaporated Milk Co., 1 Drumm St., San Francisco, plans plant, name of location withheld. $50,000 or more. Engineer and architect not selected.

Calif., College Park (San Jose, P. O.)—Packing Plant—California Packing Corp., 101 California St., San Francisco, having plans prepared by P. Bush, 101 California St., San Francisco, packing plant, here. $100,000.

Calif., Los Angeles — Factory — Pacific Readi-Cut Homes Co., 1330 South Hill St., having plans prepared 2 story, 110 x 250 ft., frame. Private plans.

Calif., Los Angeles—Factory—Art Furniture Co., 649 West Washington St., having plans prepared 2 story, 55 x 150 ft. brick, 16th St. Private plans.

Calif., Los Angeles—Substation—Pacific Electric Ry. Co., Pacific Electric Bldg., plans concrete, near 25th St. and Long Beach Ave. To exceed $60,000.

Calif., Ripon—Milk Plant, etc.—Meyenberg Evaporated Milk Co., 1 Drumm St., San Francisco, plans 1 story frame plant, also brick boiler plant, here. $55,000. Engineer and architect not selected.

Calif., Sacramento — Creamery — Glenn Dairy Co., 3673 Folsom Blvd., had plans prepared 2 story, concrete, A St. $60,000. Private plans.

Ont., Oshawa — Factory — Natl. Pulp Assn. having plans prepared addition to factory. $75,000.

BIDS DESIRED

N. Y., New York—Housing Station—May 13, by Dept. Plant & Structures, Municipal Bldg., rein.-con., brick and steel, plain foundation, 139th St. and Harlem River. Former bids rejected. Noted Apr. 24.

Pa., Phila. — Station — May 9, by C. Wunder, archt., 1520 Locust St., 1 story and basement, 145 x 160 ft. milk distributing station, brick and steel, plain foundation, northwest of Orthodox Ave., for Supplee-Mills-Jones Co., 1523 North 26th St. $200,000.

Md., Baltimore — Garage and Stable — May 17, by McCormick Co., engrs., 121 South Negley Ave., Pittsburgh, Pa., 3 story, 136 x 159 ft., rein.-con. and brick, Exeter and Front Sts., here, for Fairfield Farms Dairy, Inc., 539 North Exeter St.

Wis., Wausau—Factory—Marathon Electric Mfg. Co., A. Kimble, mgr. Plumer Island, taking bids 1 story, 52 x 120 ft., brick and timber addition, plain foundation. $40,000. Private plans.

Neb., Beatrice — Plant — C. H. Cane, archt., c/o Swift & Co., Beatrice, owner, taking bids 3 story and basement, 90 x 144 ft. rein.-con. and brick packing plant. $100,000.

Tex., Dallas—Factory—See "Buildings" under Office, etc.

Calif., San Francisco—Factory—H. H. Meyers, archt., Kohl Bldg., taking bids 3 story, rein.-con., 7th and Howard Sts., for San Francisco Assn. for the Blind, 432 Sutter St. $100,000. Noted Sept. 6.

BIDS RECEIVED

Ia., Cedar Rapids—Plant—Gazette Co., 2 story and basement, 60 x 140 ft., rein.-con. brick, tile and stone, 3rd Ave. and 5th St., general contract from A. J. Smith, 234 Granby Bldg., $74,970. Noted May 1.

CONTRACTS AWARDED

Vt., Morrisville—See "Unclassified."

Mass., Boston — Sub-Station — Edison Electric Illuminating Co., 70 State St., 5 story, 66 x 80 ft., rein.-con., Cambridge St., to Whidden-Beekman Co., 100 Boylston St. Noted Apr. 17.

Mass., Canton—Factory—Norfolk Japanneries, Inc., four 1 story, 60 x 150 ft. timber manufacturing units, and 1 story, 30 x 40 ft. brick boiler house, to Reynolds Bros., Summer St., Boston. Archts. est. $60,000. Noted May 1.

Mass., Peabody—Machine Shop—Danvers Bleachery, 2 story, 52 x 153 ft., brick and concrete, to E. H. Porter, Wallis St. Noted Apr. 17.

N. Y., Penn Yan — Factory — Whitfield Carriage Co., 50 x 200 ft., fireproof, to B. H. Rogers, Penn Yan, $40,000.

N. Y., Potsdam—See "Unclassified."

Pa., Harrisburg—Plant—Air Reduction Co. of America, 342 Madison Ave., New York City, plant to Central Constr. Co.,

Industrial Works (Continued)

Pine and Court Sts., $300,000. Noted Mar. 13.

Pa., Pittsburgh—Laundry—Pearl Laundry Co., 2015 Wayandotte St., 3 story and basement, to Toupet Building Co., 5814 Ellsworth Ave. Archts. est. $150,000. Noted Apr. 10.

Md., Baltimore — Plant—Schluderberg-Kurdle Co., Baltimore and 5th Sts., 7 story, 60 x 225 ft. rein.-con. and brick, plain foundation, Baltimore and 5th Sts., to Whiting-Turner Constr. Co., Stewart Bldg, $300,000. Noted Apr. 10.

La., New Orleans—Roundhouse, etc.—Pub. Belt R.R. Comn., City Hall Annex, 20 x 75 ft. service building, 193 x 268 ft. roundhouse and machine shop, 17 x 27 ft. oilhouse, all rein.-con., brick and steel, Valence, Tchoupitoulas and Lyons Sts., to R. P. Farnsworth & Co., Canal Commercial Bldg., $150,316.

O., Cleveland—Factories—Bowler Fdry. Co., 1688 Columbus Rd., 1 story, 90 x 203 ft. foundry, 40 x 100 ft. cleaning and shipping building, 25 x 42 ft. garage, and 100 x 146 ft. pattern and office building, brick and steel, East 49th St., to W. Dunbar Co., 8201 Cedar Ave. Archts. est. $250,000. Noted Apr. 17.

Ind., Indianapolis — Printing — C. E. Pauley, 225 North New Jersey St., 6 story, 55 x 70 ft., rein.-con., North New Jersey St., to Foster Eng. Co., Pythian Bldg.

Wis., Menomonee—Creamery—New Hudson Road Creamery Co., C. Oberle, secy., 1 and 2 story, 50 x 70 ft., brick, tile and concrete addition, plain foundation, to Tilseth & Walden, Menomonie. $40,000. Noted May 1.

Wis., West Bend — Factory — Amity Leather Products Co. 2 story, 80 x 130 ft., brick and timber, plain foundation, to Hutter Constr. Co., 128 Western Ave., Fond du Lac. $50,000.

Tex., Ft. Worth—Car Repair Shop—Lone Star Tank Co., c/o W. A. Stukey, pres., Wichita Falls, will build car shops, Saginaw Rd., here, by day labor. $75,000.

Tex., Houston — Packing House — Texas Packing Co., 110 Milam St., 3 story, basement and sub basement, concrete and brick, San Jacinto St., to Russell Brown Co., 2104 Main St., $80,000. Noted Mar. 6.

Tex., San Antonio — Plant — Pioneer Flour Mills, 129 East Guenther St., 7 story, 56 x 160 ft. and 36 x 106 ft., concrete and steel, plain foundation, to C. M. Schoenfeld, 324 Humstock Ave. $92,500.

Calif., Los Angeles—Newspaper Plant—Evening Herald, 136 South Bway., 3 story and basement, 150 x 200 ft., brick and rein.-con., Georgia St., to R. E. Millsap, Marsh-Strong Bldg., $225,000. Noted Feb. 21.

Calif., San Francisco—Laundry—Independent Laundry, 2798 19th St., 2 story and basement, 200 x 200 ft., rein.-con., and 1 and 2 story, 40 x 100 ft. addition, Alabama and 18th Sts., to Peterson & Pearson, 180 Jessie St., $98,750. Noted Apr. 3.

Ont., Cornwall—Factory—Courtland Ltd., Cornwall, silk factory here, general contract to Foundations Co. of Canada, 224 St. James St., Montreal, Que., steel to Canadian Vickers Co., 3072 Notre Dame St. E., Montreal, Que.

B. C., Vancouver—Plant—British Columbia Electric Ry. Co., 425 Carrol St., 24 vertical retort gas plant, to West Gas Improvement Co., Manchester, England, $400,000, 250,000 cu.ft. gas holder for Victoria Gas Co., Pembroke St., Victoria, to R. Dempster & Sons, Yorkshire, England, $175,000.

Buildings

PROPOSED WORK

Mass., Boston — Police — City having plans prepared by Ritchie Parsons & Taylor, 15 Ashburton Pl., 7 story, basement and sub-basement, 100 x 140 ft., rein.-con., brick and steel, Berkley, Stuart and Stanhope Sts. $700,000.

N. Y., Binghamton—Store and Office—F. Stento, 127 Susquehanna St., plans store and office, Exchange St. $150,000-$175,000.

N. Y., Brooklyn — Church — German Evangelical Aid Society, c/o Bannister & Schell, archts. and engrs., 339 Lexington Ave., New York, having plans prepared brick, steel and stone, plain foundation, Bushwick Ave. and Chauncey St., here. $300,000.

N. Y., Buffalo — Administration and Study Hall — Nichols School (private), plans administration and study hall, Colvin and Amherst Sts. $175,000. E. H. Letchworth, chn. building com.

N. Y., Dolgeville — Church — Building Com. of Presbyterian Church having plans prepared by Linn Kinne, Mayro Bldg., Utica, new church, South Main St. $150,000-$160,000.

N. Y., Geneva — High School — T. F. Hickey, bishop, 947 East Ave., plans new catholic high school. $250,000.

N. Y., Herkimer—County—Herkimer Co. plans new county building. To exceed $150,000. Address C. Stoddard, member building com. Engineer and architect not selected.

N. Y., Lackawanna — Hotel — F. Hoepfinger plans 5 story and basement, brick, concrete and steel, Ridge Rd. $175,000-$200,000.

N. Y., New York — Apartment — Harco Realty Co., c/o Cross & Cross, archt., 385 Madison Ave., having plans prepared 9 story, brick, steel and stone, plain foundation, 145 East 54th St. Clark, McMullen & Reilly, 101 Park Ave., engrs.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 5 story, 100 x 110 ft., brick, steel and stone, plain foundation, Isham St. Owners name withheld.

N. Y., New York — Garage — W. A. Cameron, c/o S. J. Kessler, archt. and engr., 529 Courtlandt Ave., soon takes bids 5 story, rein.-con., brick and steel, plain foundation, East 182nd St. $350,000.

N. Y., Pelham—School—Bd. Educ. having plans prepared by Starrett & Van Vleck, archts. and engrs., 8 West 40th St., New York, brick, steel and stone, plain foundation. $750,000.

N. Y., Penn Yan—High School—Defeated $162,000 bonds Junior High School. Noted Apr. 10.

N. Y., Rochester—Exchange—Rochester Telephone Corp. plans 2 story, 45 x 135 ft., brick, concrete and steel, Merchants Rd. To exceed $150,000. J. P. Boylan, genl. mgr.

N. Y., Seneca Falls—School—St. Patricks Parish plans new parochial school. $175,000-$200,000. B. L. Quirk, pastor.

N. Y., Watertown — Hospital — Building Com. Mercy Hospital had plans prepared by D. D. Kieff, Flower Bldg., new hospital. $500,000.

N. Y., Watertown—School—Bd. Educ. plans school on Meade St. $400,000. F. Tisdale, supt.

N. Y., Waverly — School — Bd. Educ. plans grade school. $210,000-$250,000. F. L. Van Norstran, village pres.

N. J., Trenton—High School—Bd. Educ. having plans prepared by W. A. Klemann, 1st Natl. Bank Bldg., 2 story and basement, 350 and 380 ft., fireproof. $1,500,000.

Pa., Phila.—Apartment—McLanahan & Bencker, archts., Bellevue Court Bldg., preparing plans 20 story and basement, 127 x 135 ft. brick and steel, plain foundation, Walnut and 19th Sts. Owners name withheld.

Pa., Phila.—High School—Bd. Educ., 19th and Chestnut Sts., having plans prepared 4 and 5 story and basement, 244 x 320 ft. rein.-con. and limestone, plain foundation, 59th and Columbia Sts. $1,750,000. Private plans.

Pa., Phila.—Lodge and Store—Central Hall Assn. of I. O. O. F., H. W. Rommell, chn., 555 North 17th St., having plans prepared by E. A. Wightman, Bankers Trust Bldg., 4 story and basement, 40 x 158 ft. brick, steel and limestone, plain foundation, 16th and Oxford Sts. $150,000.

Pa., Tarr—High School—Bd. Educ. East Huntington Twp. having plans prepared by H. C. Frank, 2nd Natl. Bank Bldg., Connellsville, 2 story and basement, 105 x 160 ft. brick and steel. $150,000.

Md., Baltimore — High School — H. G. Perring, superv. engr. Pub. Impvt. Comn., Hearst Tower, had revised plans prepared by Smith & May, Calvert Bldg., and soon takes bids 3 story and basement, rein.-con. and brick, (excluding swimming pool), Hilton St. $1,100,000. Noted Apr. 24.

Va., Richmond—Hotel—Murphys Hotel, J. T. Disney, pres. and genl. mgr., plans addition to main part of structure. $1,000,000.

W. Va., Huntington—Office—Meanor & Handloser, archts., Professional Bldg., soon take bids 10 story, 50 x 185 ft., rein.-con., steel, brick and marble, 5th Ave., for W. H. Lewis, 817 4th Ave. $150,000.

Fla., Bellair—Hotel—F. Jonesburg, St. Petersburg, having plans prepared by Ritchie, Parsons & Taylor, 15 Ashburton Pl., Boston, Mass., 300 room addition to Belleview Hotel, here. $500,000.

Ala., Birmingham—Hotel—P. Coleman, et al., 1st Natl Bank Bldg., having plans prepared by G. L. Preacher & Co., Healey Bldg., Atlanta, Ga., 14 story, 250 rooms, 5th Ave. and 21st St. $1,250,000. Noted Nov. 29.

Ala., Birmingham — Office — Alabama Power Co., B. M. Bldg., plans 16 to 20 story, 140 x 190 ft., steel and concrete, 6th Ave. and 18th St. $1,000,000 to $1,250,000. Private plans.

Ala., Birmingham—Store—J. G. Whitfield, Springfield, Tenn., plans 6 story, 140 x 150 ft., 18th St. and 4th Ave., here. $400,000. Architect not selected.

La., New Orleans—Amusement—Garden Plunge Co., A. M. Pratt, pres., Carondelet Bldg., having plans prepared by N. Gardner, Knoxville, Tenn., 2 story steel dance pavilion, restaurant, dressing rooms, etc., and rein.-con. open air swimming pool, Canal Blvd. and City Park. $200,000.

Tenn., Memphis—Fraternal—Knights of Pythias, 138 North 3rd St., having plans prepared by Hanker & Cairns, Madison Ave., 5 story, 138 x 140 ft., brick and terra cotta. $230,000. G. H. Gutherie, ch. building committee.

Tenn., Memphis—Hall—G. Turner, ch. building com., Shrine Bldg., having plans prepared by E. L. Harrison, U and P Bldg., for Mazda Grotto Masonic Hall, 120 x 240 ft., Washington and Dunlap Sts. $150,000.

O., Canton—Exchange—Ohio Bell Telephone Co., 317 Tuscarawas St. W., plans 3 story (ultimately 8 story), 66⅔ x 200 ft., brick, 4th St. and Cleveland Ave. N. W. Ultimate cost $1,025,000. Engineer and architect not announced.

O., Cleveland — Apartment — S. Passov, 1054 Linn Dr. had plans prepared by A. W. Harris, Discount Bldg., 3 story and basement, brick, North Moreland Blvd. $200,000. Noted Mar. 6.

O., Cleveland—Commercial—A. Koblitz, 422 Leader-News Bldg., plans 6 story, brick, steel and concrete on 100 x 120 ft. site, 719 St. Clair Ave. $200,000. Engineer and architect not selected.

O., Cleveland — Commercial — Motors Realty Co., c/o G. G. G. Peckham, pres., 1903 East 19th St., having plans prepared by W. S. Ferguson Co., 1900 Euclid Ave., 10 story and basement, 136 x 320 ft., brick, steel and concrete, Euclid Ave. $1,000,000.

O., Cleveland—Store—F. W. Woolworth Co., c/o T. B. Owens, constr. mgr., Penton Bldg., having plans prepared 2 story and basement (ultimately 8 story) 80 x 200 ft., brick, steel and concrete, 1327 Euclid Ave. $200,000. Private plans.

Ind., Corydon—Court House—Harrison Co. having plans prepared by Shopbell, Fowler & Thole, Evansville, 2 story and basement, 150 x 180 ft., stone. $150,000.

Ind., Indianapolis — Furniture — Bauner Furniture Co. having plans prepared by D. A. Bohlen, Majestic Bldg., 7 story and basement, 46 x 156 ft., rein.-con., brick and steel, South Meridian St. $400,000.

Ind., Kokomo — Business — Armstrong-Landon Co. having plans prepared by O. Cook, Kokomo, 6 story and basement, 66 x 132 ft., rein.-con., brick and steel, Main St. $200,000.

Mich., Ann Arbor—Clubhouse—University of Michigan Womens League, 1005 Real Estate Exch., Detroit, having plans prepared by Pond & Pond, 64 East Van Buren Ave., Chicago, 4 story, rein.-con., brick and steel, plain foundation, South University and South 12th Aves., $1,000,000.

Wis., Kenosha—Church—First Methodist Episcopal Church, c/o E. Martin, pastor, 454 West St., making plans 2 story, brick and stone, plain foundation. $500,000. Childs & Smith, 720 North Michigan Blvd., Chicago, archts.

Wis., Madison—School—Bd. Educ., H. W. Pickford, clk., 22 West Dayton St., plans 4 story, rein.-con., brick and steel, plain foundation, Highland St. $250,000. Engineer and architect not selected.

Wis., Milwaukee—Apartment—Leiser & Holst, archts., 105 Wells St., prepared plans 3 story and basement, brick and tile, plain foundation, West Side. Owner's name withheld. $150,000.

Wis., Racine—Auditorium—J. W. Hammes, 622 Chicago St., plans 1 and 2 story, 112 x 160 ft., brick and steel, plain foundation, Douglass Ave. $160,000. Engineer and architect not selected.

Minn., Minneapolis—Dance Hall—Madrid Amusement Co., c/o Larson & McLaren, archts., 816 2nd Ave. S., rejected bids 1 story, 170 x 200 ft., brick and terra cotta. $150,000. Project deferred pending selection of new site. Noted Mar. 13.

Neb., Kimball—Courthouse—Kimball Co. defeated $150,000 bonds for court house. Noted Mar. 27.

Buildings **(Continued)**

Mo., Clarksburg — High School — Voted $235,000 bonds, 2 story and basement, brick, concrete and stone.

Mo., Hannibal—High School—Secretary Bd. Educ., takes bids about June 1, 2 story and basement, 110 x 195 ft., rein.-con., brick and stone. W. B. Ittner, 905 Locust St., St. Louis, archt.

Mo., St. Louis—Apartment—E. M. Worthington, 329 Belt Ave., will build 3 story and basement, with two 40 x 150 ft. wings, rein.-con., brick and stone, Lindell Blvd. Work will be done by separate contracts. J. T. Craven Eng. Co., Century Bldg., archts. and engrs. Noted Mar. 6.

Ark., Little Rock—Church and Sunday School—First Methodist Episcopal Church, 8th and Center Sts., soon takes bids 2 story and basement, concrete, brick and stone. $200,000. J. P. Almand, Boyle Bldg., archt.

Tex., Dallas — Hotel — C. N. Hilton, Waldorf Hotel, and associates, having plans prepared by Lang & Witchell, Amer. Exch. Natl. Bank, 14 story and basement, 75 x 100 ft., brick, concrete and steel, Main St. $1,000,000.

Tex., Dallas — Hotel — J. R. Munns, Slaughter Bldg., soon takes bids 16 story and basement, 50 x 100 ft., steel, concrete and brick, Main St. $800,000. T. J. Litzel, Deere Bldg., archt.

Tex., Dallas—Warehouse—Southwestern Bell Telephone Co., West Ind. Bldg., having revised plans prepared and will re-advertise immediately 2 story, 100 x 150 warehouse, and 1 story, 105 x 110 ft. garage, brick and concrete, Horton St. $150,000. I. R. Timlin, c/o owner, engr.

Tex., El Paso—Church—Baptist Church having plans prepared by Lehmann & Wuehrmann, El Paso, 80 x 140 ft. church incl. large auditorium and Sunday school rooms, rein.-con., brick and stone, plain foundation, Montana and Virginia Sts. $250,000. E. B. McClintock, chn. building com.

Tex., Ft. Worth—Store—C. A. Hickman, 513 West 5th St., having plans prepared by W. G. Clarkson & Co., First Natl. Bank Bldg., 6 story and basement, 50 x 100, brick and concrete. $300,000.

Tex., Ft. Worth—Warehouse—Monnig Dry Goods Co., 1302 Main St., having plans prepared by L. B. Weinman, Texas State Bank Bldg., 6 story and basement, 100 x 200 ft., concrete and brick, Main and Commerce Sts.

Tex., McAllen — Hotel — C. De Palmas having plans prepared 4 story, brick and concrete. $150,000. Private plans.

Tex., San Antonio—Orphanage—Protestants Orphans Home having plans prepared by Adams & Adams, Gibbs Bldg., 2 story, St. Clous Farm on Boundary Rd., near here. $150,000.

Okla., Stillwater—Dormitory—State Bd. Control, Oklahoma City, plans 3 story and basement, 180 x 275 ft., rein.-con., plain foundation, on campus, here, for A and M College. $300,000. Noted May 1.

Wash., Seattle — Church — Dominican Fathers of Parish of Blessed Sacrament, 2390 Bush St., San Francisco, Calif., having plans prepared by Beezer Bros., 1915 Steiner St., San Francisco, Calif., structural steel, brick and stone, here. $300,000.

Wash., Seattle — Club — F. J. Peters, archt., Seaboard Bldg., takes bids about May 25, 2 story, 100 x 200 ft., fireproof, 22nd and Market St. N. W., for Ballard Order of Eagles. $400,000.

Ore., Portland—Warehouse and Office—Sutton & Lewis, archts., Lewis Bldg., takes bids in about 40 days, 7 story, 100 x 200 ft., rein.-con., plain foundation, 13th, 14th and Irving Sts., for F. Frank, 8th and Everett Sts. $300,000. Blaumier, Frank Drug Co., lessee.

Calif., Alhambra—Theatre—C. Rickman, c/o L. L. Smith, archt., Byrne Bldg., Los Angeles, had plans prepared 1 story and basement, 90 x 200 ft., brick, West Main St., here.

Calif., Berkeley — Church, etc. — First Congregational Church, c/o H. G. Simpson, archt., Call Bldg., having plans prepared brick and concrete church buildings, auditorium, chapel, etc., here. $250,000.

Calif., Compton—School—Compton Grammar School Dist. having plans prepared by R. D. King, Van Nuys Bldg., Los Angeles, and F. Goodwin, Compton, 2 brick schools, 6 and 12 rooms. $150,000.

Calif., Los Angeles—Apartment—C. Cole, c/o Stanton, Reed & Hibbard, archts., Metropolitan Bldg., having plans prepared 6 or 8 story and basement, 75 x 125 ft., rein.-con., Vine St.

Calif., Los Angeles—Bank—Central Commercial & Savings Bank, 6301 Santa Monica Blvd., plans 90 x 140 ft., fireproof, Hollywood Blvd. and Vine St. $150,000 or more.

Calif., Los Angeles—Exchange—Southern California Telephone Co., 740 South Olive St., having plans prepared by Bliss & Faville, Balboa Bldg., San Francisco, 9 story and basement, 120 x 171 ft., brick and steel, Olive St. $800,000. Noted Dec. 6.

Calif., Los Angeles—Library—City having plans prepared by C. M. Winslow, Van Nuys Bldg., Los Angeles, and B. G. Goodhue, 2 West 47th St., New York, 4 story, mezzanine and basement, rein.-con., 5th and Flower Sts. $1,500,000. Noted June 14.

Calif., Los Angeles—Store and Office—Peoples Mortgage Co., c/o W. D. Lee, archt., Junior Orpheum Bldg., having sketches made 6 story and basement, rein.-con., 5th and San Pedro Sts. $150,000 or more.

Calif., Orange—Theatre and Store—H. Z. Adams plans brick. $150,000. West Coast Theatres, Inc., Knickerbocker Bldg., Los Angeles, lessee.

Calif., Sacramento—Bank—United Bank & Trust Co., New Montgomery and Market Sts., San Francisco, having plans prepared by G. E. Gottschalk, Phelan Bldg., San Francisco, 1 or 2 story and basement, Class A, rein.-con., here. $200,000.

Calif., San Francisco—Club and Office—California State Automobile Assn., 1628 Van Ness Ave., plans 3 story, rein.-con., Van Ness Ave. and Hayes St. $150,000 or more. H. J. Brunnier, Sharon Bldg., engr. Architect not selected.

Calif., Santa Barbara—Exhibition—Santa Barbara Horse Show Assn., plans 1 story, 32 ft. high, 200 x 300 ft., concrete, hollow tile and steel.

Calif., Santa Monica—Store and Office—R. P. Davie, et al., Dudley Bldg., plan 3 story, 150 x 150 ft., probably brick, 3rd and Utah Sts. $175,000.

Calif., Woodland—High School—Woodland Union High School Dist. having plans prepared by W. H. Weeks, 369 Pine St., San Francisco, fireproof, probably rein.-con. $225,000. Noted Mar. 27.

Que., Outremont — Convent — Bellingham Convent having plans prepared by Viau & Venne, 99 St. James St., Montreal 6 story, 55 x 1,500 ft. rein.-con., Courcellette and Maplewood Sts. $1,500,000.

B. C., Vancouver—Schools—Election May 31, to vote on $550,000 bonds, two 8 room and one 30 room schools, A. A. Barrs, c/o Bd. School Trustees, Hamilton St., archt.

BIDS DESIRED

N. Y., Fort Edward—School—May 15, by Bd. Educ., 3 story, 80 x 120 ft., brick and steel, plain foundation, Bway. $240,000. Roth & White, 109 State St., Albany, archts. Noted Jan. 17.

Pa., Phila.—Apartment—May 10, by C. Oelschlager, archt., 1615 Walnut St., 9 story and basement, 20 x 130 ft., brick and limestone, plain foundation, 16th and Pine Sts. $200,000. Owner's name withheld.

Pa., Williamsport—Theatre, Store and Office—Majestic Theatre, G. H. Bubb, mgr., will build 2 story and basement, 70 x 122 ft. brick and steel, plain foundation. Work will be done by separate contract under supervision of W. H. Lee, archt., 1505 Race St., Phila. $150,000.

Ky., Owensboro—Church—St. Stephens Catholic Church taking bids and opens same about May 19, brick and steel, Locust St. $150,000. F. Erhart, Norton Bldg., Louisville, archt. Noted May 1.

O., Columbus—Laboratory—June 2. by C. E. Steele, secy. Bd. Trustees Ohio State University, 2 story and basement, 80 x 140 ft., brick, tile and concrete, on campus. J. N. Bradford, Ohio State University, archt.

O., Piqua—Wool and Storage—Orr Felt & Storage Blanket Co., taking bids 5 story and basement, 80 x 337 ft., brick and steel. Pretzinger & Musselman, 1155 Reibold Bldg., Dayton, archts.

O., Zanesville—Warehouse—Mosaic Tile Co. taking bids 4 story and basement, 80 x 142 ft., rein.-con. and brick addition. Lockwood, Greene & Co., Hanna Bldg., Cleveland, archts. Noted Mar. 6.

Mich., Highland Park (Detroit P. O.)—Nurses Home—May 12, by D. C. Gowing, city clk., 3 and 4 story, rein.-con., brick and steel, plain foundation, for Highland Park General Hospital. $200,000. G. W. Graves, 233 John R St., Detroit, archt.

Ill., Aurora—Bank and Office—May 10, by G. G. Elmslie, archt., 122 South Michigan St., Chicago, 3 story and basement, 50 x 200 ft., brick, concrete, stone and steel, here, for Old Second National Bank. $150,000. Noted Apr. 3.

Ill., Chicago—Apartment—H. K. Holsman, archt., 37 South Wabash St., taking bids 3 story and basement, 59 x 170 ft., fireproof, 56th and University Sts. $200,000. Owner's name withheld.

Ill., Chicago—Office and Warehouse—P. Gerhardt, archt., 64 West Randolph St., taking bids 6 story and basement, 100 x 192 ft., brick and concrete, plain foundation, Washington Blvd., for A. J. Lindermann & Hoverson Co., 1st and Cleveland Aves., Milwaukee, Wis. Noted Mar. 27.

Ill., Chicago — Synagogue — A. Epstein, archt., 2001 West Pershing Rd., taking bids 3 story, 156 x 162 ft., fireproof, 54th and Greenwood Sts., for Congregation Rodfe Zedeck, Michigan and 48th Pl. $400,000.

Ill., Chicago — Warehouse — A. Epstein, archt., 2001 West Pershing Rd., taking bids 2 story, 100 x 400 ft., fireproof, 1141 West 73rd St., for Tide Water Sales Corp., 3433 South Racine St. $150,000.

Wis., Milwaukee—Church—May 15, by H. C. Haeuser, archt., 445 Milwaukee St., 2 story, 54 x 132 ft., brick and stone, plain foundation, Teutonia Ave., for Immanuel Evangelical Lutheran Congregation, C. F. Dietz, 1122 Garfield Ave., pastor. $150,000. Noted Nov. 29.

Minn., Duluth—Hotel—May 15 (extended date), by M. Tullgren & Sons, archts., 425 East Water St., Milwaukee, Wis., 13 story and basement, brick and concrete, plain foundation, here, for Hotel Duluth Co., c/o W. Schroeder, 86 Michigan St., Milwaukee, Wis. $1,250,000. Noted May 1.

Minn., Plainview—School—May 19, by Bd. Educ., 2 story and basement, rein.-con., brick and tile. E. A. French, clk. G. A. Pass & Son, Mankato, archts. Noted Mar. 13.

Kan., Wichita — Apartment — W. H. Gains, Eaton Hotel, taking bids 5 story, 130 x 173 ft., rein.-con. and brick, plain foundation, Poplar and Douglas Sts. $300,000. Architect's name withheld. Noted Apr. 24.

S. D., Huron — Auditorium and Gymnasium—May 15, by Huron College, 2 story and basement, 85 x 150 ft., rein.-con. and stone. $150,000. Miller, Fullenwider & Dowling, 646 North Michigan Ave., Chicago, archts.

Mo., Canton—Dormitory—June 1, by J. H. Lynch & Son, archts., Dolph Bldg., St. Louis, 3 story and basement, rein.-con., brick and stone, on campus, here, for Culver-Stockton College. $150,000.

Mo., Koch—Employees, etc.—June 3. by Bd. Pub. Serv., 208 City Hall, St. Louis, employees building, $216,500, and kitchen building, $66,500, 2 and 3 story, brick, concrete and stone, at Robert Koch Sanitorium, here. L. R. Bowen, 301 City Hall, St. Louis, archt. and engr. Noted Nov. 22 and Jan. 31.

Mo., St. Louis — Church and Sunday School — May 15, by J. H. Lynch & Son, archts., Dolph Bldg., 2 story and basement, 85 x 110 ft., rein.-con., brick, stone and marble, Kingshighway and Cote Brilliant St., for Salem Methodist Episcopal Church. $150,000.

Tex., Dallas—Office and Factory—Sanger Bros., Main and Lamar Sts., taking bids 4 story and basement, 95 x 117 ft., brick and concrete, Jackson St. $150,000. Lang & Witchell, Amer. Exch. Natl. Bank Bldg., archts.

Tex., San Antonio—Office—May 15, by Willis & Jackson, archts., Chandler Bldg., 9 story and basement, rein.-con., plain foundation, North St. Marys and Pecan Sts., for San Antonio Builders Exch., 201-207 Bedell Bldg. $200,000. M. L. Diver, Calcasieu, Bldg., engr. Noted May 13.

Colo., Denver—Bank and Office—May 15, by Hoyt & Hoyt, archts., Colorado Natl. Bank Bldg., 4 story and basement, 75 x 125 ft., steel, concrete and marble, for Colorado Natl. Bank, 17th and Champa Sts. $400,000.

Colo., Denver—South High School—May 15, by School Bd., School Administration Bldg., superstructure, 3 and 4 story, 326 x 386 ft., rein.-con., brick and terra cotta, South Gilpin and Louisiana Sts. $1,500,000. Fisher & Fisher, U. S. Natl. Bank Bldg., archts.

Calif., Berkeley—Church—J. W. Plachek, supervising archt., 2014 Shattuck Ave., taking bids 3 story, rein.-con., Durant St., here, for Bd. Missions Methodist Episcopal Church South, Lambuth Bldg., Nashville, Tenn. $200,000. Noted Oct. 18.

Calif., Covina — Hospital — T. Jewell, archt., Pacific Finance Bldg., Los Angeles,

Buildings (Continued)

taking bids 1½ story, 110 x 115 ft., brick, for Covina Hospital, 2nd St., here.

Calif., Long Beach—School—Bd. Educ. taking bids Whittier School, brick. To exceed $150,000. H. H. Lochridge, Markwell Bldg., engr. G. M. Lindsay, Laughlin Bldg., Los Angeles, archt. Noted Feb. 21.

BIDS RECEIVED

N. Y., New York—Nurses School—General Medical Superintendent, Bellevue Hospital, 415 East 26th St., general contract for additional wings to Bellevue training school for nurses, from P. J. Carlin Constr. Co., Grand Central Terminal, $412,000; heating work, from Austin Eng. Co., 124 West 42nd St., $32,775; plumbing work, from P. F. Kenny Sons, Inc., 33 Old Bway., $99,400. Noted Apr. 24.

N. Y., Wende (Millgrove P. O.)—Penitentiary—Erie Co., City Hall, Buffalo, general contract, 400 x 500 ft., rein.-con. and brick addition, here from Morris & Allen, Prudential Bldg., $491,467; plumbing, from J. S. Candee, 594 South Park Ave., $48,385. Noted Apr. 24.

Md., Baltimore—Animal House and Aviary—Mayor and City Council, 1 story and basement, 60 x 410 ft., brick and stone, Druid Hill Park, from J. H. Miller, Inc., Eutaw and Franklin Sts., $327,000. Noted Apr. 24.

Md., St. Marys City—Seminary—S. Russell, archt., 11 East Lexington St., Baltimore, 3 story and basement, 42 x 152 ft., concrete and brick, plain foundation, here, for St. Marys Female Seminary, from Hastings & Parsons, Water St., Salisbury, $134,792. Noted Apr. 24.

Minn., St. Paul—School—Dept. Educ., City Hall, Apr. 29, 3 story and basement, 160 x 200 ft., rein.-con., brick and tile, Albert St. and Pascal Ave., general contract from P. E. Swenson & Co., 340 Endicott Bldg., $278,795. Noted Apr. 24.

Calif., San Bernardino—High School—San Bernardino Union High School Dist., rein.-con. high school, general contract from G. Herz, San Bernardino, $151,179. Noted Mar. 6.

CONTRACTS AWARDED

Conn., Kent—Dining Hall—City, 56 x 120 ft. dining hall at Kent School, rein.-con. and brick, to H. P. Cummings Constr. Co., Ware, Mass. Archts. est. $200,000.

N. Y., Albany—Apartment—Ten Broeck Apartment Co., 9 story, 50 x 210 ft., brick and steel, plain foundation, Northern Blvd., to T. A. McHale & Son, Albany, $630,000.

N. Y., Buffalo—School—Bd. Educ., Telephone Bldg., P. S. 31, 3 story and basement, 160 x 200 ft., rein.-con., brick and stone, Lovejoy St., to Tifft Constr. Co., Iroquois Bldg., $556,290. Noted Apr. 10.

N. Y., Gouverneur—Church—Building Com. St. James Catholic Parish, masonry contract for new church, to J. B. Reid, Alexandria Bay, $100,000. Total cost $150,000.

N. Y., New York—School—St. Francis Xavier College, 30 West 16th St., brick, steel and stone, 41 West 15th St., to W. L. Crow Constr. Co., 103 Park Ave. Archts. est. $175,000.

N. Y., Rochester—Natatorium—New York State Railways, Rochester Lines, 175 x 300 ft. outdoor natatorium, to Natatorium Constr. Co., 76 William St., New York City, $300,000.

N. Y., Rochester—Office—Rochester Gas & Electric Corp., 34 Clinton Ave. N., office building, East Ave. and Gibbs St., to W. T. Jackling, 680 Clinton Ave. S.

N. Y., Syracuse—Office—White & Denison Estate, 4 story, tapestry brick, Fayette and South Warren Sts., to Dawson Bros., Union Bldg., $200,000.

N. Y., Troy—Auditorium, School and Rectory—Church of Sacred Heart, 2 story, 120 x 140 ft., brick and steel, plain foundation, Pawling and Spring Aves., to C. P. Boland & Co., P. O. Box 587, $300,000. Noted Feb. 21.

N. J., Camden—Manufacturing—Victor Talking Machine Co., Front and Cooper Sts., 10 story and basement, 70 x 170 ft., rein.-con. and brick, plain foundation, to Stone & Webster, Real Estate Trust Bldg., Phila.

Pa., Elizabethtown—Home for Boys—E. A. Wightman, archt., Bankers Trust Bldg., Phila., 3½ story and basement, 65 x 110 ft. rein.-con., brick and steel, plain foundation, to Hughes-Foulkrod Co., Commonwealth Bldg., Phila., for Masonic Home Assn., Elizabethtown. Noted Apr. 10.

Pa., Hazelton—Exchange—J. T. Windrim, archt., Commonwealth Bldg., Phila., 2 story and basement, 80 x 150 ft. brick and steel, plain foundation, to F. M. Harris, 1520 Parrish St., Phila., for Bell Telephone Co., 17th St. and Parkway, Phila. Noted Apr. 10.

Pa., Phila.—Office—L. Rotschild, archt., 215 South Broad St., 10 story and basement, 60 x 100 ft., rein.-con. and limestone, plain foundation, Sydenham and Locust Sts., to Wark Co., 1600 Walnut St., for C. Kahn, Morris Bldg. Noted Mar. 27.

Md., Baltimore—Office—Physicians and Surgeons Building, Inc., c/o A. F. Olson, 3935 Cedar Ave., 8 story, brick and steel, plain foundation, Cathedral and Richmond Sts., to J. H. Miller, Inc., Eutaw and Franklin Sts., $750,000. Noted May 1.

Md., Baltimore—Synagogue—Beth Tfilloh Synagogue, Equitable Bldg., 2 story, 72 x 73 ft. synagogue and 55 x 85 ft. house, stone, plain foundation, Garrison and Dalrymple Aves., to M. A. Long Co., 17 Guilford Ave. Archts. est. $150,000. Noted Jan. 31.

Md., Baltimore—Warehouse—Canton Co., 3 story, 80 x 200 ft., rein.-con., wood pile foundation, 12th Ave., to Sanford & Brooks Co., Commerce and Water Sts., $150,000.

D. C., Wash.—Apartment—B. S. Simmond, archt., 1013 5th St. N. W., constructing Embassy Apartments, Mt. Pleasant and Harvard Sts., N. W., to G. E. Wyne, Home Life Bldg., 15th and G Sts., $600,000. Owner's name withheld.

D. C., Wash.—Hotel—G. T. Santmeyer, archt., 1415 K St. N. W., constructing hotel, 19th St. between E and F Sts., to F. H. Gore, 1410 G St. N. W., $300,000. Owner's name withheld.

Fla., Miami—Hotel—Buena Vista Hotel Co., H. I. Hausbrough, secy., 6 story, 200 rooms, on site of Old Peacock Hotel, to P. B. Bechard, 202 Point View, cost plus basis. Archts. est. $500,000. Noted Feb. 28.

Fla., Tampa—Hotel—Tampa Terrace Hotel Co., Inc., C. L. Knight & Sons, Agts., Citrus Exch. Bldg., 13 story, basement and sub-basement, 140 ft. front, brick and steel, Lafayette St. and Florida Ave., to Adair & Senter, 102 Crescent Pl., cost plus basis. Archts. est. $700,000.

Ala., Ensley—Church—Baptist Church of Ensley, 2 story, 75 x 110 ft., brick and stone, to Holly & Davis, Ave. L and 25th St., $200,000. Noted Feb. 21.

La., New Orleans—Hospital—Bd. Administrators Charity Hospital, Tulane and Villere Sts., 4 story, 57 x 105 ft., to G. E. and E. E. Reiman Co., Ltd., 307 Weiss Bldg., $238,986. Noted Mar. 27.

La., New Orleans—Warehouse—Marks Isaac & Co., Canal St., 6 story, 37 x 97 ft. storage plant and warehouse, brick and cement, Royal St., to G. F. Favrot, Canal-Commercial Bank Bldg., $90,000.

O., Cleveland—Apartment—S. Glaser, 202 Ulmer Bldg., 3 story and basement, 30 x 166 ft., brick, 1900 Ansel Rd., to A. Bachkoosky and W. Wolkoff, 2184 East 69th St. Archts. est. $150,000. Noted Sept. 6.

O., Cleveland—Commercial—G. Koller, 724 Prospect Ave., 4 story, 50 x 81 ft., brick and steel, 633 Huron Rd., to J. Kutnick, 5902 Longfellow Ave. Archts. est. $150,000.

Ind., Indianapolis—Business—Kothe, Wells & Bauer, 102 South Delaware St., 4 story and basement, 80 x 116 x 188 ft., rein.-con. and steel, Virginia Ave., to Thompson Binger Constr. Co., Hume-Mansur Bldg. Archts. est. $250,000.

Ind., South Bend—Clubhouse—Knights of Columbus, 3 story and basement, 100 x 200 ft., rein.-con., brick and steel, West Jefferson St., to Kuehn-Jordax Constr. Co., 725 Wilber St. Archts. est. $250,000. Noted Jan. 17.

Mich., Detroit—Bank—A. Kahn, archt., 1000 Marquette Bldg., furnishing and erecting structural steel for 5 story and basement, 65 x 74 ft., rein.-con., brick and steel, plain foundation, Griswold St., for First State Bank. Griswold St. and Lafayette Ave., to Whitehead & Kales, 2361 Beecher Ave. Noted Apr. 10.

Mich., Detroit—Office—Donaldson & Meier, archts., 1314 Penobscot Bldg., 8 story and basement, 50 x 120 ft. rein.-con., brick and steel, plain foundation, Washington Blvd., for Bishop M. J. Gallagher, 1230 Washington Blvd., to Talbot & Meier, 250 West Lafayette Blvd. $300,000. Noted Mar. 27.

Mich., Detroit—School—Bd. Educ., 1364 Bway. Ave., 2 story and basement, 150 x 184 ft. rein.-con., brick and steel, plain foundation, Beaumont Ave., to Roswarne, McNab, & Worswick, 333 State St., $307,903. Noted Mar. 27.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., 2 story and basement, 83 x 163 ft. rein.-con., brick and steel, plain foundation, Courtland Blvd., to Cooper-Widenmann Constr. Co., 4612 Woodward Ave., $353,300. Noted Apr. 10.

Mich., Detroit—School—V. J. Water & Co., archts., 403 Hoffman Bldg., 3 story and basement, 151 x 210 ft., brick, stone and steel, plain foundation, Lenox Ave., to F. R. Patterson Constr. Co., 2631 Woodward Ave., for St. Martins Church, Lenox and Avondale Aves. $200,000. Noted Apr. 3.

Mich., Grosse Pointe Shores (mail Grosse Pointe, branch Detroit P. O.)—Clubhouse—Lochmoor Club, 203 Lakeshore Ave., 2 story and part basement, 50 x 25 ft., brick and steel, Vernier Rd., to Corrick Bros., 507 Owen Bldg., Detroit. Archts. est. $200,000. Noted Feb. 28.

Ill., Anna—High School—Bd. Educ., 2 story and basement, 85 x 130 ft., brick, concrete and stone, Anna-Jonesboro Community High School, general contract to Robinson Bros., Anna, $80,000. Archts. total est. $175,000. Noted Apr. 10.

Ill., Chicago—Apartment—R. F. France, archt. and owner, 155 North Clark St., 3 story and basement, 100 x 110 ft., fireproof, Winchester and Cullom Sts., to D. M. Reid, 140 South Dearborn St. Archts. est. $150,000. Noted Apr. 17.

Ill., Chicago—Apartment—Owner, c/o A. Jacobs, archt., 138 North LaSalle St., 3 story and basement, 120 x 130 ft., fireproof, Chase and Paulina Sts., to J. Gamm, 133 West Washington St. Archts. est. $160,000.

Ill., Chicago—Apartment—Lindstrom & Johnson, 77 West Washington St., 3 story, 130 x 252 ft., fireproof, 4726-40 Woodlawn St., to A. Lindstrom, c/o owners. Archts. est. $400,000.

Wis., Milwaukee—Apartment-Hotel—Milwaukee Apartment Hotel Co., c/o R. Razall archt., 114 Grand Ave. 2 units each 4 story and basement, 105 x 116 ft., brick and concrete, plain foundation, Cass St., to Brun Constr. Co., 387 Clinton St. Archts. est. $800,000. Noted Feb. 28.

Wis., Milwaukee—Apartment—Milwaukee Sales & Investment Co., 530 Grand Ave., 8 story and basement, 75 x 167 ft., brick and concrete, plain foundation, Grand Ave., to S. M. Siesel Co., 160 Ogden Ave. $500,000. Noted Mar. 27.

Minn., Bloomington—Home—See "Unclassified" under Contracts Awarded.

Minn., Winona—College—College of St. Teresa, 3 story and basement, L-shaped, rein.-con., brick and stone sisters home, and 65 x 150 ft., stone, brick and rein.-con. chapel, on College campus, to Heffron & Fitzgerald, Rochester, $150,000 each.

Neb., Beatrice—School—Bd. Educ., general contracts for junior high school and Harrington grade School to G. Walker, 3rd and Congress Aves., Leavenworth, Kan.; remodeling South, Fairview and Glenover Schools to Robertson & Conn, Beatrice; heating, plumbing and ventilating in all schools to MacMahon Co., 1316 Oak St., Kansas City, Mo.; electric work in junior high school to Universal Electric Co., Lincoln; electric work in South and Harrington grade schools to Baker-Hartzell, Beatrice; electric work in Fairview and Glenover Schools to Sprague Electric Co., Beatrice. Noted Mar. 20.

Mo., St. Louis—Store—B. Nugent & Bros. Dry Goods Co., Bway. and Washington St., general contract 10 story and basement, 160 x 160 ft., rein.-con., brick, stone and steel store with arcade, to Wimmer Contg. Co., Victoria Bldg. Archts. est. $3,000,000. Noted June 7.

Mo., St. Louis—Sunday School—Centenary Methodist Episcopal Church, 16th and Pine Sts., 3 story and basement, brick, concrete and stone, to Dicke Constr. Co., Syndicate Trust Bldg. Archts. est. $150,000. Noted Jan. 24.

Mo., Savannah—Sanatorium—De Perry Nichols, 4 story and basement, 144 x 184 ft., rein.-con., brick and stone, to Campbell Constr. Co., Perry, Ia. Archts. est. $400,000.

Ark., Little Rock—Auto Service—Five Fifty-Five Tire & Service Co., 225 Bway., 3 story, 140 x 150 ft., rein.-con., brick and stone, to F. Parrott, 2514 Schiller St. $150,000. Noted Apr. 3.

Tex., Ft. Worth—Church—Travis Ave Baptist Church, c/o C. E. Mathews, 3041 Travis St., will build 3 story and basement, 85 x 95 x 140 ft., Travis St., by day labor $150,000. H. Elbon, 3602 St. Louis St., supt. in charge. C. H. Woodruff, Reynolds Bldg., archt.

Okla., Norman—Administration, Medical and Engineering—State Bd. of Affairs, Oklahoma City, general contracts: 3 story and basement, administration building, to Beaty & Burns, Norman, $93,750, medical build-

Buildings **(Continued)**

ing, to C. M. Dunning, 322 North Robinson St., Oklahoma City, $84,000, engineering building to R. M. Crissman, 1513 West 20th St., Oklahoma City, $70,092.

Okla., Tulsa—Hotel—C. P. Alexander, 244 Robinson Bldg., will build 5 story and basement, 100 x 140 ft., rein.-con., brick and steel, plain foundation, Cheyenne St., by day labor. $200,000. Noted Jan. 31.

Okla., Tulsa—Store—Kress Stores Co., 114 5th Ave., 3 story and basement, brick, plain foundation, Boston St., to Shallenberger Constr. Co., 1631 East 6th St., $170,000. Noted Apr. 3.

Colo., Denver — Grade School — School Dist., general contract 2 story, 80 x 254 ft., to A. Danielson & Son, McMann Bldg., $208,400. Noted Apr. 17.

Ore., Portland—Office and Store—B'way.-Oak Corp., B'way. and Oak Sts., 3 story, 100 x 100 ft., rein.-con., to Hurley Mason Co., Gasco Bldg., $250,000. Western Bond & Mortgage Co., lessee.

Calif., Long Beach—Bank and Office—Security Trust & Savings Bank, 502 South Spring St., Los Angeles, 13 story and basement, 75 x 150 ft., 1st and Pine Sts., here, to J. V. McNeil Co., H. W. Hellman Bldg., Los Angeles, $436,000. Noted Mar. 20.

Calif., Los Angeles—Garage and Showrooms—Paige Co. of Southern California, 2200 South Figueroa St., 3 story, 125 x 200 ft., rein.-con., 23rd and Figueroa Sts., to Westcott-DeCamp Co., 1831 North Main St., $185,000.

Calif., Los Angeles—Hotel—Davenport Corp., c/o contractors, hotel, approximately 10 story and basement, to contain 1,000 rooms, rein.-con. Hollywood Blvd. and Gower St., to Foundation Co., Lankershim Bldg. $3,500,000.

Calif., San Diego — Store and Loft — Dohrmann-Commercial Co., Geary and Stockton Sts., San Francisco, 4 story and basement, rein.-con., here, to J. S. Sampson Co., Monadnock Bldg., San Francisco, $165,000. Noted Apr. 3.

Calif., Santa Ana — Apartment — X. Y. Ayers and R. W. Townsend, 9 story and basement, 5 x 190 ft., rein.-con., Main and Washington Sts., to Concrete Constr. Co., Santa Ana, $650,000.

B. C., Vancouver—Bank—Bank of Montreal, 109 James St., Montreal, Que., 3 story, 70 x 100 ft. rein.-con., brick, stone and tile, to Poole Constr. Co. Ltd., Birks Bldg., $410,000. Noted Mar. 27.

Que., Montreal — Home — Grey Nuns, Grey St., 4 story and basement, 60 ft. high, 80 x 400 ft. with 40 x 150 ft. wing, rein.-con., on Cote De Liesse Rd., St. Laurent Parish, to Atlas Constr. Co., Belmont St., $538,000.

Que., Montreal — Mothers Home — Religeuses Ste. Croix, 5 story, 68 ft. high, 50 x 112 ft. rein.-con., St. Laurent Rd., to A. and D. Boileau, 245 McDougall Ave., $150,000.

Federal Government Work

PROPOSED WORK

N. Y., New York—Barracks—Spec. 4970—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans converting building into marine barracks.

Md., Annapolis—Building—Spec. 4973—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans tube transmitter building.

Ala., Florence—Operating Machinery—U. S. Engineer, Florence, takes bids about May 26, furnishing operating machinery for 58 gates at Wilson Dam.

Tex., Galveston—Radio Compass Station—Spec. 4974—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans radio compass station here.

Calif., San Francisco—Pumps—U. S. Engineer plans 9 deep well pumps, 250 g.p.m. capacity eaoh, at Lobos Creek, in wells 100 ft. deep.

BIDS DESIRED

R. I., Pawtucket—Boiler, etc.—May 28, by Treas. Dept. at office Supervising Architect, Wash., D. C., removing present boiler and furnishing and installing new horizontal, portable, smokeless, fire box steel heating boiler at Post Office, here; adv. E. N.-R. May 8.

N. Y., Saranac Lake—Post Office—June 11, by Treas. Dept. at office Supervising Architect, Wash. ,D. C., 1 story and basement, 68 x 73 ft., here; adv. E. N.-R. May 8.

D. C., Wash.—Tender—May 15, at office Commissioners of Lighthouses, Wash., D. C., lighthouse Tender Willow for use in Mississippi River.

W. Va., Huntington—Power House—May 28, by U. S. Engineer Office, War Dept., Wash., D. C. fireproof power house at Dam 32, Ohio River.

Mich., Detroit—Dredging—May 31, by U. S. Engineer, Detroit, dredging in Russell Island Shoal, St. Clair River; adv. E. N.-R. May 8. Noted Apr. 10.

Kan., Leavenworth—Boiler—May 28, by Treas. Dept., Superv. Archt. Office, Wash., D. C., furnishing and installing 2 horizontal smokeless fire box heating boilers at U. S. Court House and Post Office here: adv. E. N.-R. May 8.

Wyoming—Road—May 14, by Bureau Pub. Rds., 301 Customhouse, Denver, Colo., grading and surfacing 4 mi. Buffalo-Tensleep Rd., Washakie Co.

Nevada—Roads—May 28, by C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., San Francisco, Calif., 10.64 mi. Austin-West Forest Highway, Lander Co., 63,024 cu.yd. excav., 7,326 cu.yd. surface, etc.

Calif., San Diego—Hospital—Spec. 4955—June 4, by Bureau Yards & Docks, Navy Dept., Wash., D. C., hospital buildings, plumbing work, etc. Noted Mar. 6.

BIDS RECEIVED

Ky., Addison—Gates—U. S. Engineer, P. O. Box 72, Louisville, 2 mitering gates for lock 5, Green River, and 50 tons steel f.o.b. Addison, from Independent Bridge Co., May Bldg., Pittsburgh, $6,840.

CONTRACTS AWARDED

Mass., Thatcher Island—Radio Compass, etc.—Bureau Yards & Docks, Navy Dept. Wash., D. C., radio compass station, tramway, and repairs to buildings to Howard Bros., 412 Dorchester Ave., South Boston, $13,499. Noted Apr. 17.

N. Y., Brooklyn—Pavements and Walks—Spec. 4953—Bureau Yards & Docks, Navy Dept., Wash., D. C., concrete pavements and walks at Naval Hospital here, to J. D. Eng. Corp., 1976 Nostrand Ave., $4,000. Noted Apr. 24.

Ala., Florence—Cement—U. S. Engineer, Florence, furnishing 56,000 bbl. portland cement for Wilson Dam, Tennessee River: 20,000 bbl. to Atlas Portland Cement Co., B. M. Bldg., Birmingham, $44,160; 20,000 bbl. to Phoenix Portland Cement Co., Birmingham, $44,800; 10,000 bbl. to Dixie Portland Cement Co., James Bldg., Chattanooga, Tenn., $21,100; 6,000 bbl. to Lehigh Portland Cement Co., $13,500.

Ala., Florence—Steel—U. S. Engineer, furnishing 128 tons reinforcing steel, to Truscon Steel Co., 513 North 21st St., Birmingham, $6,183.

Ala., Florence—Steel Gates—U. S. Engineer, Florence, furnishing and erecting 58 steel regulating gates for Wilson Dam, to Newport News Shipbuilding & Dry Dock Co., Newport News, Va., $237,510. Noted Mar. 13.

O., Cincinnati—Dwellings—U. S. Engineer, Cincinnati, lock tenders dwellings at Dams 34, 36 and 38 Ohio River, to W. MacDonald Constr. Co., St. Louis, Mo., $54,885. Noted Apr. 10.

Mich., Detroit—Rip-Rap—U. S. Engineer, Detroit, furnishing, placing, recovery and replacing stone rip-rap at Harbor Beach to T. L. Durdcher Co., Detour, $41,750. Noted Mar. 20.

Mo., Marthasville — Current Retards — U. S. Engineer Office, Kansas City, 1,363 ft. current retards to Woods Bros. Constr. Co., Lincoln, Neb., $74,695. Noted Apr. 3.

Unclassified

PROPOSED WORK

Transmission Line—New York—Adirondack Power & Light Co., 511 State St., Schenectady, had plans prepared 30 mi., 110,000 volt transmission line from Oneida to Syracuse. $250,000.

Transmission Line — New York — Utica Gas & Electric Co., 222 Genessee St., Utica, plans 3 phase high tension transmission line from Trenton to Newport. To exceed $25,000.

Tramway—Gloversville, N. Y.—United States Feldspar Corp., plans 2 mi. aerial tramway. $40,000. C. H. Pedrick, Jr., genl. mgr.

Hydro-electric Development—High Falls, N. Y.—Beaver River Power Corp., Saranac Lake, had plans prepared 50 ft. steel and concrete dam, 600 ft. steel penstock, and power house, etc., here. $85,000. Private plans.

Ornamental Lighting System—Kenmore, N. Y.—Bd. Village Trustees plans ornamental lighting system. $30,000-$35,000.

Ornamental Lighting Posts—Tupper Lake, N. Y.—Village Bd. plans approximately 50 to 60 ornamental lighting posts (clusters). Cost incl. conduit, etc. $30,000.

Car Barns — Phila., Pa. — Phila. Rapid Transit Co., 8th and Dauphin Sts., having plans prepared superstructure of car barns, 20th and Johnstown Sts. $300,000. Private plans.

Trelley Tunnel—Phila., Pa.—City, Fairmount Park Comn., City Hall, having plans prepared completing trolley tunnel in front of Art Museum in Fairmount Park. $200,000. H. Trumbauer, Land Title Bldg., archt.

Hydro Electric Development—Bartletts Ferry, Ga.—Columbus Electric & Power Co., 1151 Bway., Columbus, preparing plans hydro electric development, here. $5,000,000. Stone & Webster, 147 Milk St., Boston, Mass., engrs.

Barges—Mobile, Ala.—Mississi-Warrior Barge Line, Mobile, plans 20 new barges, for use on Warrior River. $150,000.

Swimming Pool—New Orleans, La.—See "Buildings."

Swimming Pool—Cincinnati, O.—Coney Island Park Co., 1011 1st Natl. Bank Bldg., plans 200 x 400 ft. concrete swimming pool. $350,000.

Transmission Line—Oberlin, Kan.—Election soon $30,000 bonds transmission line. Ruckel Eng. Co., Interurban Bldg., Hutchinson, engrs.

Lighting System—St. Louis, Mo.—Soon takes bids electric street lights and standards in various parts of city. $250,000. R. Toenesfeldt, City Hall, engr. Noted Jan. 10.

Flood Control—Bay City, Tex.—Matagorda Co. voted $685,000 bonds improving Colorado River for flood control, incl levees, ditching, etc. W. E. McNabb, co. judge. Noted Apr. 10.

Ornamental Lights—Dallas, Tex.—Making plans ornamental lights on Earvay St. from Commerce to Forest Sts. and Young St. from Houston to Harwood Sts. $80,000-$100,000. E. A. Kingsley, city engr.

River Protection—El Paso, Tex.—Voted $105,000 bonds, embankments, walls and buffers on river bank for flood protection, partly earth and concrete; $49,000 bonds flood retention or protection wall at foot Rio Grande St., earth and rein.-con. Address Mayor Dudley. Noted Apr. 17.

Seawall—California—See "Streets and Roads."

Park Improvements—Palo Alto, Calif.—City plans to vote on over $25,000 bonds, park improvements. J. F. Byxbee, Jr., city engr.

Electrolier System—Sacramento, Calif.—Having plans prepared electrolier system, Montgomery Way, 6th, 7th and 10th Aves., west of Franklin Blvd., within limits South Curtis Oaks Dist. $25,000 or more. A. Givan, city engr.

Steel Gas Holder—La Salle, Que.—Montreal Light, Heat & Power Co., Craig St. W., Montreal, plans 6,000,000 cu.ft. steel gas holder, 240 ft. base diam., in conjunction with extension to gas plant here. Ultimate cost $2,500,000.

Caissons — Montreal, Que. — Grey Nuns, Grey St., plan excavating under building at Cote De Liesse Rd. and sinking 50 caissons, 35 to 40 ft. deep, 4 ft. wide. $50,000 to $60,000. A. Piche, 33 Belmont St., archt.

Harbor Improvements—Toronto, Ont.—Toronto Harbor Comrs., Harbor Bldg. plans dredging, hydraulic filling, concrete walls, wood piling, etc., in Toronto Harbor. $500,000. E. L. Cousins, c/o owner, engr.

Grain Elevator—Vancouver, B. C.—Vancouver Harbor Comrs., 525 Seymour St., making plans 1,000,000 bu. addition to grain elevator, rein.-con. $400,000. W. G. Swan, c/o owner, engr.

BIDS DESIRED

Approaches to Underpass — Hartford, Conn.—May 13, by Bd. Contract and Supply, Municipal Bldg., approaches to Capitol Ave. underpass, 16,100 cu.yd. earth excav., 500 cu.yd. concrete in retaining walls, 4,400 sq.ft. walks, 845 ft. 6-20 in. sewers, etc. P. McGovern, secy.

Classification Yard—Binghamton, N. Y.—Delaware, Lackawanna & Western R.R., Baldwin St., at office of Division Engineer, taking bids new classification yard (exclusive of trackage). $800,000-$900,000.

Hydro-Electric Development — Watertown, N. Y.—Power Corp. of New York, Northern New York Trust Co. Bldg., taking bids hydro-electric development, on Beaver River at Soft Maple Dam, incl. rein.-con. dam, penstock, power house and generating equipment. To exceed $500,000. W. P. Creager, ch. engr. Noted July 13.

Stadium — Shreveport, La. — Louisiana State Fair Assn. taking bids 300 x 600

Unclassified (Continued)

ft. concrete and steel stadium. $75,000. Jones, Olschner & Wiener, Ardis Bldg., archts.

Electrolier System—Bakersfield, Calif.—City Council taking bids 38 electroliers, 8,626 lin.ft. 1 in. conduit, 8,894 lin.ft. lead covered cable, Sonora and H Sts. Noted Apr. 24.

BIDS RECEIVED

Foundations—Brooklyn, N. Y.—Transit Comn., 49 Lafayette St., New York, foundations for electrical repair shop at Coney Island Yard, here, from J. D. Walsh, Inc., 132 4th St., Brooklyn, $37,000. Noted Apr. 24.

Heating and Plumbing—New York, N. Y.—See "Buildings."

Signal Tower, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., May 2, signal tower in Lenox Ave. Yard, Agreement "DA," from J. B. Roberts Co., 1170 Bway., $19,521; structural steel for Westchester Ave. Yard, Routes 19 and 22, from C. Meads & Co., 217 West 14th St., $148,000; tracks for portion of Lenox Ave.-148th St. Yard, from T. H. Reynolds Contg. Co., 50 Park Pl., $70,411. Noted Apr. 24.

Plumbing — Wende (Millgrove P. O.), N. Y.—See "Buildings."

Ferry House, etc.—New Orleans, La.—Bd. Port Comrs., New Court Bldg., concrete and steel ferryhouse at Canal St. facade, from J. Reiss, Carondelet Bldg., $94,530. Noted Apr. 10.

CONTRACTS AWARDED

Power Development — Morrisville, Vt. — Water and Light Comrs., dam and power house, concrete and rein.-con., to J. M. Swan & Co., St. Johnsburg, $110,000. Total cost of project incl. lines and equipment $150,000-$175,000. Noted Apr. 3.

Subway — Brooklyn, N. Y. — Transit Comn., 49 Lafayette St., New York, Route 70, extending along and under Bedford Ave. from DeKalb Ave. to Keap St., here, to Oakdale Contg. Co., 93 Amity St., Flushing, $3,948,831. Noted Apr. 17.

Hydro-electric Development — Potsdam, N. Y.—St. Lawrence Valley Power Corp., concrete and brick power house, saddles for 4,500 ft. penstock, tail race excav., and gravity type concrete dam on Racquette River, 3 mi. from here, to M. C. Tuttle Co., 862 Park Sq. Bldg., Boston, Mass.

Electric Light System—Phila., Pa.—G. H. Biles, dir. Pub. Wks., City Hall, and Bd. Trustees Free Library, City Hall, electric light, power and signal systems in Free Library, 20th, Wood and 19th Sts., to W. V. Pangborne Co., 1927 West Montgomery St., $188,600. Noted May 1.

Transmission Line — Tennessee — Nashville Railway and Light Co., Watkins Bldg., Nashville, will construct 15 mi. electric light and power lines from here to La Vergne, by day labor. Noted Apr. 24. J. P. Brown, supt.

Tunnel—Cleveland, O.—Cleveland Electric Illuminating Co., 300 ft. rein.-con. tunnel, 14 ft. wide, 9 ft. high, at East 165th St., to Great Lakes Constr. Co., B. F. Keith Bldg. Archts. est. $100,000.

Stadium — Milwaukee, Wis. — Marquette University, 1116 Grand Ave., 1st unit of stadium, 2 stands, each 100 x 300 ft., rein.-con., to W. W. Oeflein, 86 Michigan St. $175,000.

Foundation—Bloomington, Minn.—Minnesota Masonic Home Corp., 903 Hennepin Ave., Minneapolis, foundations for 1st unit of home along Minnesota River, to J. and W. A. Elliott Co., 906 Lumber Exch., Minneapolis, $30,000. Total cost $1,000,000.

Unloading Dock—Wichita, Kan.—Cudahy Packing Co., 23rd and Lawrence Sts., 1 story, 31 x 400 ft., rein.-con. unloading dock and icing shed, to H. I. Ellison Co., 401 East Douglas St. Est. cost $45,000.

Pipeline — Texas — McCorkle Pipe Line Co., San Antonio, will build oil pipe line from Duncan, Okla. to Corpus Christi, Gulf outlet either at Corpus Christi or Aransas Pass, 15 pumping stations to be placed at intervals, by day labor, $15,000,000; miscellaneous pumping machinery and oil pumps, to Prescott Co., Menominee, Mich., $1,400,000. Noted Mar. 13.

Pipeline — Texas — Pan Tex Pipe Line Co., Amarillo, 6 in. pipe line from Amarillo to oil fields north of city, to R. Irick, Plainview. $50,000. Private plans.

Transmission Line — Oklahoma — Oklahoma Power Co., Okmulgee, will build 33,000 volt electric transmission line from Weleetka to Wetumka, by day labor. $30,000.

Transit Sheds—Los Angeles, Calif.—Los Angeles City Harbor Comn., 2 story steel, at Berths 230 D and E, 232 A and B, to Lynch-Cannon Eng. Co., 1027 Chapman Bldg., $852,400. Noted May 1.

Wharves—Oakland, Calif.—F. G. White, Ferry Bldg., San Francisco, engr. of wharves, and P. Bush, 301 California St., San Francisco, engr. of buildings, taking bids for superstructure of wharves, etc., here, for Alaska Packers Assn., Wells Fargo Bldg., San Francisco. Contract for piling let to St. Helens Creosoting Co., Matson Bldg., San Francisco; excav. and pile driving, to A. W. Kitchen, 110 Market St., San Francisco, $0.49 per cu.yd. and $147,000 respectively. Noted May 1.

Material and Equipment

PROPOSED WORK

Broken Stone — Brooklyn, N. Y. — E. Riegelmann, boro pres., Boro Hall, received no bids Apr. 23, 4,000 cu.yd. 1½ in. and 1,200 cu.yd. ¾ in. broken stone, 1,000 cu.yd. broken stone screenings, 4,000 cu.yd. sand grit. Noted Apr. 17.

BIDS DESIRED

Road Roller—Little Falls, N. Y.—City Council taking bids 10 ton steam or gasoline road roller.

Riprap, etc.—New York, N. Y.—May 16, by Dept. Purchase, Municipal Bldg., riprap, asphalt binder, sand, cement, broken stone and asphaltic concrete.

BIDS RECEIVED

Asphaltic Oil, etc.—Trenton, N. J.—For 40,000 gal. asphaltic oil and 1,200 tons slag, from R. S. Barrett, Mechanic Bldg., $0.145 per gal. and $3.85 per ton respectively. Noted Apr. 17.

Slag—Trenton, N. J.—State Hy. Dept., Trenton, Apr. 21, crushed slag, dustless screenings: 3,869 tons from Natl. Slag Co., Allentown, Pa., $3,860, 3.500 tons, from Duquesne Slag Products Co., Dover, $4,318, 685 tons, from Philadelphia Slag Co., Pennsylvania Bldg., Phila., $788.

CONTRACTS AWARDED

Asphaltic Road Oil — Boston, Mass. — Dept. Pub. Wks., furnishing 350,000 gal. 45% asphaltic road oil to Pub. Wks. Dept., to Standard Oil Co., 88 Broad St., $0.0687 per gal, total $25,000.

Sand, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 5,000 cu.yd. paving concrete sand, to Hygrade Builders Supply Co., 6th St. and 2nd Ave., $5.700; 4,000 cu.yd. gravel broken stone, to Rosoff Sand & Gravel Corp., 152 West 42nd St., New York, $9.720; 400,000 gal. road oil and 300,000 gal. asphalt cement, to Standard Oil Co., 26 Bway., New York, $23,640 and $17,910 respectively; 7.000 cu.yd. asphalt sand, to J. T. Cunningham, $9,730; 1,400 net tons limestone dust, to New York Trap Rock Corp., 101 Park Ave., New York, $8,862; 250 tons paving pitch, to F. J. Lewis Mfg. Co., Eastern Blvd. and East 177th St., New York, $7,162; 3,000 cu.yd. binder stone, to Calvin Tompkins Co., 30 Church St., New York, $6.920; 50,000 asphalt paving blocks, to Hastings Pavement Co., 25 Broad St., New York, $4,886; 50,000 wood paving blocks, to Southern Wood Preserving Co., 10 East 43rd St., New York, $2,688. Noted Apr. 17.

Metal Reinforcement—Buffalo, N. Y.—May 13, by Commissioner Parks & Pub. Buildings, 124,000 lb. metal reinforcement and 3,000 tons gravel and grit.

Graders and Concrete Mixer—Minneapolis, Minn.—F. S. Gram, city purch. agt., combined grader and scarifier, to Galion Iron Wks. & Mfg. Co., 234 Plymouth Bldg., $1,985 with allowance of $575 for old machine if turned in; grader to Austin Western Road Mchy. Co., 375 Cedar St., St. Paul, $1,165; tractor and concrete mixer, to T. W. Rosholt Co., 421 South 5th St., $4,445 and $2,722 respectively. Noted Apr. 3.

Road Oil—Minneapolis, Minn.—Hennepin Co., 200,000 gal. road oil, to Roxanna Petroleum Corp., 208 South La Salle St., Chicago, $0.0615 per gal. f.o.b. any station in Hennepin Co. Noted Mar. 13.

Brick, Reinforcing Steel, etc.—St. Paul, Minn.—For 16.21 tons straight reinforcing steel for Water Dept., to Truscon Steel Co., 408 Pioneer Bldg., $930; 13 tons c.i. flange pipe and specials, to South Park Fdry. & Machine Co., 23 East 6th St., $140 per ton; 1,144 sq.yd. 3-in. vertical fibre brick, to Purington Paving Brick Co., Galesburg, Ill., $1.59 per sq.yd.; 250 bbl. portland cement to Stiefel Material Co., 501 Concord St., $2.68 per bbl. delivered. Bids rejected on 48.736 tons straight reinforcing steel. Noted May 1.

Engine, etc. — St. Louis, Mo. — Income Leasehold Co., Pierce Bldg., 400 kw. uniflow engine and generator, for power plant, to Chuse Engine & Mfg. Co., Chemical Bldg., $25,000.

Official Proposals

Bids: May 13.

Road Work

STATE OF MARYLAND
STATE ROADS COMMISSION

Baltimore, Md.

Sealed Proposals for building seven sections of State Highway, as follows:

Allegany Co. Cont. A-26. One section of State highway along the Oldtown Road from the Western Maryland Crossing at North Branch to Patterson Depot, a distance of 1.55 miles. (Concrete.)

Prince George Co. Cont. P-50. One section of State highway along the Defense Highway from end of Cont. P-32 toward Collington, for a distance of 2.0 miles. (Concrete.)

Prince George Co. Cont. P-45. One section of State highway from the Crain Highway toward Croom for a distance of 2.0 miles. (Gravel.)

Baltimore Co. Cont. B-62. One section of State highway from Chase toward Cowenton, for a distance of 2.14 miles. (Concrete.)

Hartford Co. Cont. H-37. One section of State highway from end of Contract H-34 toward Dublin, for a distance of 1.0 mile. (Concrete.)

Caroline Co. Cont. Co-34. One section of State highway from end of Contract Co-28 to Burrsville, a distance of 1.35 miles. (Concrete.)

Wicomico Co. Cont. Wi-25. One section of State highway from end of Contract Wi-23 toward Nanticoke, a distance of 2.0 miles. (Concrete.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 13th day of May 1924, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 28th day of April 1924.

JOHN N. MACKALL, Chairman.
L. H. STEUART, Secretary.

Bids: June 6.

Sea Wall, Fill, Sidewalk, etc.

Tampa, Fla.

Sealed bids will be received by the Board of County Commissioners, Hillsborough County, Florida, until 11:00 A.M., Friday, June 6, 1924, for the construction of approximately two and one half miles of concrete sea-wall, hydraulic fill, sidewalk, curb and drainage appurtenances.

Wall extends from city limits of Tampa, south to Ballast Point.

Plans and specifications may be obtained by application at the office of the County Engineer, Court House, Tampa, Fla. A deposit of $10.00 will be required for each set; deposit to be refunded upon return of plans before June 6.

Following is a list of approximate quantities:

Concrete	11,750	Cu.Yd.
Hydraulic Fill	125,000	Cu.Yd.
Timber Piling	51,000	Lin.Ft.
Concrete Handrail	13,000	Lin.Ft.
Sidewalk	13,850	Sq.Yd.
Curb (Concrete)	26,000	Lin.Ft.
Catch Basins	65	

A certified check or bidder's bond executed by a Florida licensed bonding company, for the sum of $5,000.00 must accompany all bids. Make payable to Charles T. Friend, Chairman.

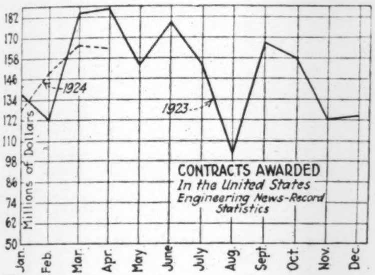
The Board reserves the right to reject any or all bids.

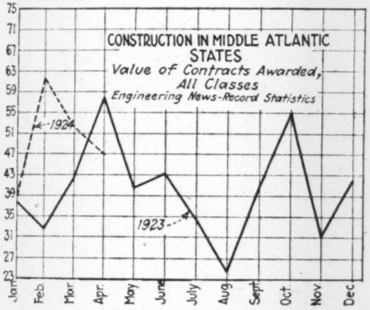
Signed, CHAS T. FRIEND,
Chairman,
Board Co. Commissioners,
Hillsborough Co., Fla.

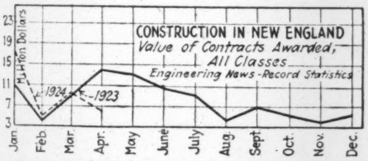
The Construction Barometer

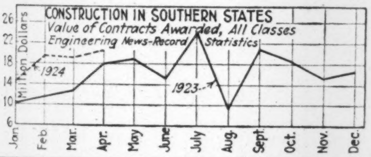
South, Middle West and Far West Show Construction Gains During April — Steady Increase in Large Contract Letting During Past Three Weeks— Public Building Awards Slower

GAINS in construction during April, as compared with the month preceding and with the corresponding period in 1923, occurred in three sections of the country, namely, the South, the Middle West and the Far West. In all the other geographic divisions there were declines. Large contract letting, however, has shown steady gains over the entire country during the past three weeks. Both private and public construction have contributed to these gains. Large public building awards have fallen off gradually since the week of Apr. 24. Judging from the number of large projects now out for bids, any gains in contract letting during the next three weeks, will be in private work.









Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
Apr. 24	$22.575,000	$12,153,000	$34,728,000
May 1	23,838,000	20,548,000	44,386,000
May 8	30,319,000	38,829,000	69,148,000
3 weeks	$76,732,000	$71,530,000	$148,262,000

LARGE BUILDING CONTRACTS— NUMBER AND VALUE

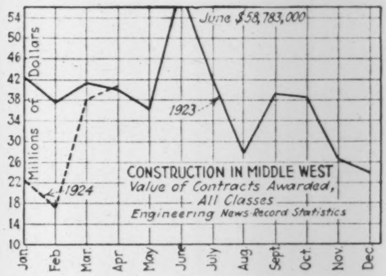
Week Ended	No.	Public Work	No.	Private Work
Apr. 24	10	$5,810,000	24	$9,124,000
May 1	20	4,801,000	33	11,761,000
May 8	10	2,637,000	47	19,111,000
3 weeks	40	$13,248,000	104	$39,996,000

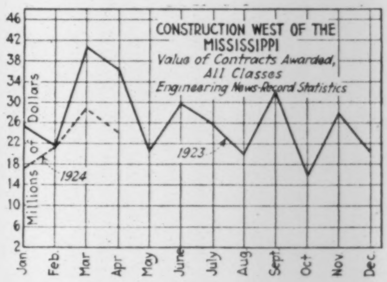
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

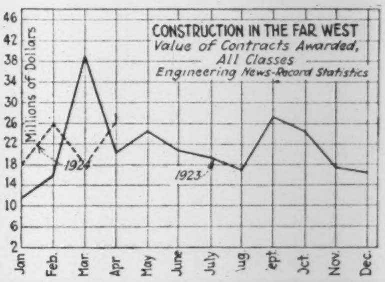
		Public			
Week Ended	Private	All Buildings	Streets and Roads	Water-works and Sewers	All Public
Apr. 24	25	51	104	55	282
May 1	30	50	100	51	249
May 8	35	45	96	40	198

TREND OF STEEL AND LUMBER DOWNWARD

	Quoted on May 15 at	Price was	On
Structurals, Pittsburgh, 100 lb.......	$2.10 @2.35	$2.25 @2.35	May 8
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.....	61.00	63.00	May 8
Fir, San Fran., M.ft...	36.00	38.00	Jan. 24
Common labor, hr....	.56	.55	Apr. 24







Waterworks

PROPOSED WORK

Pa., Pittsburgh — Dept. Pub. Welfare soon takes bids reservoir at Pittsburgh City Home and Hospital at Mayview. $27,000.

Fla., Daytona Beach — Voted $25,000 bonds, waterworks extension. E. A. Donavan, clk.

Fla., Fort Pierce—Election July 1, $125,000 bonds, improving and extending water system. M. Hallowe, Fort Pierce, engr.

Tenn., Jackson—Voted $100,000 bonds improvements and extension to water plant. L. Taylor, mayor. Noted Mar. 6.

O., Carrollton — Voted $85,000 bonds waterworks plant.

O., Sunbury—Making plans 100,000 gal. tank, possibly 2 wells, electrical driven pumping station and about 4 mi. 6 and 8 in. mains. $22,000 bonds voted. Jennings-Lawrence Co., Hartman Bldg., Columbus, engrs.

Ill., Centralia—Voted $120,000 bonds, to purchase and install water works filtration plant, etc.

S. D., Sioux Falls—Plans about 7 mi. mains. S. B. Howe, city engr.

Tex., Blooming Grove — Voted $42,000 bonds waterworks. Elrod Eng. Co., 3124 Elm St., Dallas, engrs. Noted Apr. 17.

Tex., Claude—Election May 31, $45,000 bonds, complete waterworks.

Tex., El Paso—See "Unclassified" under Park Improvements.

Tex., Paducah—Plans complete waterworks plant. $60,000 bonds voted.

Tex., Ralls—Voted $50,000 bonds waterworks. Montgomery & Ward, City Natl. Bank Bldg., Wichita Falls, engrs. Noted Apr. 17.

Okla., Hollister—Election May 16, $15,000 bonds, new water system, incl. deep well and pump, tank and 6,000 ft. 4- and 6-in. c.i. pipe. W. H. Oakley, mayor. Engineer not selected.

Ariz., Flagstaff—Having plans prepared and will soon vote on $375 000 bonds, 50 m.g. concrete reservoir, pipe line, etc. Burns & McDonnell Eng. Co., 412 Marsh-Strong Bldg., Los Angeles, Calif., engrs. Noted Apr. 19, 1923.

Calif., Newport Beach — Having plans prepared water system for Corona Del Mar sub-division. $50,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., San Francisco — City and San Francisco Co. cancelled contract awarded United Iron Pipe & Fdry. Co., Monadnock Bldg., for submarine pipe for Hetch Hetchy project. Noted Mar. 20.

Calif., Santa Barbara—Had plans prepared 12 in. main in State St. between Sola and Gutierrez Sts. $26,000. G. D. Morrison, city engr.

Waterworks (Continued)

Que., Three Rivers—Had plans prepared filtration plant, 6 beds. $370,000. C. Gelinas, city engr. Noted Feb. 28.

BIDS DESIRED

N. Y., Brooklyn—May 23, by N. J. Hayes, comr.. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Eastern Parkway, Lloyd Court, Kenmore and Mansfield Places, 10th, 21st, O, P, U, Danforth, Maspeth, Pennsylvania, and Thatford Aves., President, Union, 53rd, 66th, 68th, 69th, 72nd, 82nd, 85th, West 3rd, West 6th, West 9th, West 10th, West 12th, Batchelder, East 3rd, East 4th, East 26th, East 28th, East 29th and East 96th Sts., here.

N. Y., Fredonia—May 26, by Bd. Village Trustees, excavating and laying about 19,000 ft. 12 in. mains. H. P. Bishop, village clk.; adv. E. N.-R. May 15.

N. Y., New York—May 23, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Bronx Blvd., Unionport Rd., Sexton and Lamport Places, Adee, Barnes, Bissel, Cruger, East Tremont, Hobart, Monticello, Roberts, Wilcox, and Young Aves., East 212th and Victor Sts., Bronx Boro.

Md., Baltimore—May 21, by Bd. Awards, Pumping Station 2, Contr. 213, incl. c.i. pipe lines, sludge pumping station and sludge well, 9 gate valves, 65 tons c.i. pipe and special castings, 12 fire hydrants. B. L. Crozier, City Hall, highways engr.

La., New Iberia—May 20, by L. F. Villermin, city clk., furnishing and installing two 275 kw. alternating current generators, two 1,000 g.p.m. centrifugal fire pumps, one 600 g.p.m. and one 1,000 g.p.m. centrifugal pumps, also new power house and rein.-con. reservoir. J. W. Billingsley, Interstate Bank Bldg., New Orleans, consult. engr.

O., Cleveland — May 21, 60 in. c.i. or steel pipe in Sect. M, Woodland Ave., Contr. 30-M, to exceed $100,000, A. V. Ruggles, City Hall, engr.; mains in 21 streets, to exceed $50,000. R. Hoffman, City Hall, engr.

O., Cleveland—June 12, at office Commissioner Purchases & Supplies, City Hall, filter equipment at Baldwin Filtration Plant. C. P. Jaeger, comr. water and heat; adv. E. N.-R. May 15.

O., Columbus—See "Streets and Roads."

O. Wadsworth—May 17, by village, 500 g.p.m. deep well pump, 14 in. well, wood pump house, etc. To exceed $15,000. R. E. Garvin, Davis and Farley Bldg., Cleveland, engrs.

Tex., Irving—Irving Freshwater Impvt. Dist., c/o M. R. Ferguson, Praetorian Bldg., Dallas, taking bids 30,000 gal. tank on 100 ft. tower, gasoline engine, 30 hp., 250 gal., 2 stage, 135 ft. head, centrifugal pump, double stroke deep well pump, 380 ft. well, pump house, 20,000 ft. miscellaneous pipe, etc. Noted Feb. 14.

Tex., Marshall — Taking bids main extensions. $80,000. M. Ransey, city engr.

Colo., Denver—June 6, (change of date) by City and Denver Co., by and through its Bd. Water Comrs., 1509 Cleveland Pl., Contr. A, 64 m.g. rapid filter plant, Contr. B, intake from Lake to Filter plant, all located on north side of Marston Lake. B. Lowther, ch. engr.; adv. E. N.-R. May 15.

N. M., Tucumcari—June 14, by City Council, R. Paiz, clk., waterworks system. Weiland Eng. Co., 725 Thatcher Bldg., Pueblo, Colo., engrs.; adv. E. N.-R., May 15.

Wash., Kelso — May 22, by City Clerk, 550 ft. 8 in., 2,880 ft. 6 in. and 2,670 ft. 4 in. Class C c.i. pipe, 620 ft. 2 in. and 5,000 ft. ¾ in. galvanized iron pipe. G. Norris, Kelso, engr.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co. 11,500 ft. 6- to 16-in. c.i. mains, Impvt. 551, from Winterbottom & Connelly, 2644 Southington Rd., $72,155. Noted Apr. 24.

Wash., Seattle—Bd. Pub. Wks., May 2, mains, from F. N. Badolato, Box 561, 14,375 ft. 8 in. c.i. pipe $2.10, 1,665 ft. 10 in. c.i. pipe $7, total $59,445. Engrs. est. $64,196.

Que., Montreal—Water main culvert under Canadian Natl. Ry. tracks at Atwater Ave., from D. G. Loomis, 1112 St. Patrick St., $24,635. Noted Apr. 10.

Que., Montreal—Plans 6,457 ft. 8 in. mains in Molson, Langemarck, Liege, Poincare, Viel, Benoni, Henderson, Patricia, Desjardins, Craik, Bousset, Burma, Cote and Boyce Sts. $26,263. E. Gautmer, asst. city clk.

Ont., Smith Falls — J. J. Marsh, chn. Waterworks Dept., general contract for filter plant and dam, etc., from Schultz Bros.. Brantford. $54,400; pumps erected from Bowden Machine Co., Toronto, $2,568, filter equipment from Canadian International Filter Co., Ltd., Toronto, $15,953. Noted Apr. 10.

CONTRACTS AWARDED

Mass., Springfield—Bd. Water Comrs., masonry filters and buildings, to P. J. Cox Contg. Co., 154 Nassau St., New York City. Noted Apr. 10.

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Aves. K and M, Mansfield Pl., Kingston, Lott, Newport and 3rd Aves., Carroll, Malta, 57th, 80th, 81st, 8th, 12th, 28th, 29th, 58th, 59th and 91st Sts., here, to Wattaga Contg. Co., 308 Lenox Ave., New York, $14,500; Bedford, Coney Island, New York, P and Q Aves., Delamere, Elmore and Kenmore Places, East 2nd, 8th, 13th, 18th, 27th, 28th, 34th, 51st, 52nd, 53rd and West 11th Sts., here, to N. De Stefano, 257 Glenn Ave., Tompkinsville, S. I., $10,850; Farragut Rd., Foster, 8th, 10th, M and N Aves., 55th, 61st, 62nd, 64th, 71st, East 7th, East 87th, East 95th, East 98th, East 99th, East 100th and West 5th Sts., here, to Grippo Contg. Co., 85 Webster Ave., Long Island City, $10,246. Noted May 1.

N. Y., Fredonia—Furnishing 19,000 ft. 12 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., Burlington, N. J., Class A $2.14 per ft., Class B $2.21, Class C, sand, b. & s. pipe $2.47; 40 tons special castings to J. B. Clow & Sons, Inc., $0.05½ per lb. Noted Apr. 24.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Fresh Pond Rd., Caldwell, Clermont, Firth, Flushing, Homan, Mount Olivet, Phelps, Prospect and Wilton Aves., Delia, Harrow, Henry, Hosack, Madison, Mazeau, Proctor, Ramsey, Seabury, Stockholm, Van Horn, Van Tassel and Weirfield Sts., here, to Stanhey Constr. Co., $15,000; Maurice Ave. and 67 St. and removing existing connections, etc., at Queens Blvd. and Fisk Ave., here, to Hanratty Contg. Co., 605 Beach Terrace, New York, $124,149; Culver and Hunt Places, Alstyne, Burnside, Colonial, Maurice, Nicolls, Peartree and Way Aves., Ivy, Pilgrim, Van Cleff. 20th, 24th, 44th, 51st and 113th Sts., here, to J. A. Gregory, 351 East 124th St., New York, $17,324. Noted May 1 and 8.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., to Melrose Constr. Co., 230 East 162nd St., mains in Reservoir Oval East, Holt Pl., Crotona, Hull, Reservoir, Rochambeau and Van Cortlandt Aves., East 206th and 211th Sts., $7,780; to Knight & Demicco, Inc., 448 East Tremont Ave., mains in East 223rd and East 224th Sts., Barnes, Boyd, Bussing, Gunther, Bruner, Monticello, Murdock, Nereid, Pittman, Wickham and Dereimer Aves., $19,200, Knapp St., Westchester Esplanade, Allerton, Astor, Fenton, Mickle, Seymour and Waring Aves., $8,400; to J. V. Timoney Constr. Co., 220 East 201st St., mains in Bogart, Hering, Jerome, Lurting, Pierce, Radcliffe, Rhinelander, Sherman, Van Nest and Yates Aves., $7,458; to Hanratty Contg. Co., 605 Beach Terrace, in White Plains Rd., Chatterton, Gildersleeve, Gleason, Newman and Underhill Aves., $7,530; to C. De Blasio, 339 7th Ave., Mt. Vernon, in Boston Rd., Allenton, Astor, Cruger, Fairmount, Hollywood, Matthews and Wallace Aves., Barry and Cravens Sts., $7,568; to Beaver Eng. & Contg. Co., 51 Chambers St., in Grand Concourse, East Moshulu Parkway, Aqueduct, Montgomery, Van Cortlandt and Waldo Aves., East 180th, East 190th, West 175th, West 180th and West 197th Sts., $20,585. Noted May 1 and 8.

N. J., Beach Haven—Filter unit, to J. M. Dedinger, 1131 Winghocking St., Phila., Pa., $3,350; 4, 6 and 8 in. c.i. pipe and specials, to R. D. Wood & Co., 400 Chestnut St., Phila., Pa., $12,140; valves and hydrants, to Rensselaer Valve Co., 50 Church St., New York City, $2,536; excavating and laying pipe, to Beach Haven Plumbing Co., Beach Haven, $3,687.

N. J., Berlin—Twp. Comn., artesian well, to Redpath & Potter Co., 22nd and Cambria Sts., Phila., $2,532; 4 and 6 in. c.i. pipe, fire hydrants and special castings, to R. D. Wood & Co., 400 Chestnut St., Phila., $76,126; 8, 10 and 12 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., 1421 Chestnut St., Phila., $35,067; valves and boxes, to Rensselaer Valve Co., 50 Church St., New York City, $4,841; steel standpipe, to Chicago Bridge & Iron Wks., 30 Church St., New York City, $10,490; standpipe foundation, to R. R. Fernow, Cynwid, Pa., $3,500; excavating and laying pipes, to E. F. Verga, 440 Cartaret St., Camden, $49,187. Noted Apr. 17.

Md., Baltimore—Bd. Awards, furnishing and delivering special 30-in. Poppet valves for additions to Montebello Filters, Water Contr. 73, to Ellicott Machine Corp., Bush and Severn Sts., $5,186; trench excav. for Water Dept., to M. and J. B. McHugh, 829 North Markoe St., Phila., Pa., $36,420. Noted May 8.

Fla., Sanford—Concrete reservoir, 1 m.g., to J. G. Gallespie, Sanford, $14,900; brick power house to Hall & Harris, Orlando, $4,700; pumping machinery to Fairbanks, Morse & Co., 630 West Bay St., Jacksonville; drilling well, to F. J. Rahen, Orlando; steel tank and fuel tanks, to R. D. Cole & Co., Newnan, Ga.; hydrants and valves, to Columbia Iron Wks., 811 Boyce St., Chattanooga, Tenn.; 20 mi. 4 to 6 in. c.i. pipe, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala.; pipe to Central Fdry. Co., Jefferson Co. Bank Bldg., Birmingham, Ala.; city will install distributing system. Noted Feb. 28.

Ill., Danville—Interstate Water Co., general contract for dam to R. McCalman, Inc., Danville; tainter gates to Worden-Allen Co., Port Washington Rd., Milwaukee, Wis.; sluice gates to Coldwell-Wilcox Co., South End., Newburgh, N. Y. Engrs. est. $125,000. Noted Apr. 17.

Wis., North Milwaukee—For c.i. mains to G. W. Mulholland, 2025 Oxford St., Rockford, Ill., 680 ft. 6 in. in 39th St., $2.70 per ft., 68 ft. 8 in. Sheridan Ave. $2.62, 326 ft. 8 in. Hampton Ave. $3.25, 980 ft. 8 in. 32nd St. $3.50, 1,155 ft. 8 in. Hopkins Ave. $3.65, 815 ft. 8 in. North Milwaukee Ave., $4.05; to J. Forrestal Co., 215 15th St., Milwaukee, 460 ft. 8 in. Atkinson Ave. $2.81, 641 ft. 6 in. 31st St. $2.82, 1,475 ft. 8 in. Hopkins Ave. $3.73; to Wenzel & Henoch, 27th St., Milwaukee, 641 ft. 6 in. in 32nd St. and 1,397 ft. 6 in. 40th St. $2.94. Noted May 1.

Neb., Hay Springs—R. Gustafson, city clk., furnishing and laying c.i. pipe, fittings, and setting hydrants and valves to A. C. Smith, Scottsbluff, $15,450, furnishing hydrants and valves to Interstate Mchy. & Supply Co., Omaha, $915. Noted Apr. 17.

Okla., Cushing — DeLavaud pipe for waterworks and sewers, to National Cast Iron Pipe Co., 903 Commerce Bldg., Kansas City, Mo., $115,744.

Sewers

PROPOSED WORK

Fla., Fort Pierce—Election July 1, $100,000 bonds, storm and sanitary sewers. M. Hallowes, Fort Pierce, engr.

Fla., Miami—Election May 21, $150,000 bonds (city's share), sanitary sewers. C. W. Murray, city engr.

Mich., Detroit—Dept. Pub. Wks., having plans prepared 2,019 ft. 12-18 in. sewers in Alley 4081, 7,895 ft. 10-15 in. in Alley 4098, 458 ft. 15 in. in Alley 4111, 302 ft. 12 in. in Alley 4115, 5,342 ft. 10-24 in. in Alley 4116, 5,477 ft. 12-20 in. in Alley 4117, 1,056 ft. 10-24 in. in Alley 4118, 1,056 ft. 10-24 in. in Alley 4120, 613 ft. 15 and 18 in. in Alley 4130, 7,752 ft. 10-15 in. in Alley 4132, 3,376 ft. 3 ft. cylinder and 12 in. crock in Alley 4133, all 2 ring brick and vitr. crock. G. Jerome, city engr.

Ark., Little Rock—Dist. 94 soon takes bids 2.25 mi. trunk line sewer in western and northwestern parts of town. $211,498. H. R. Carter, Exch. Bank Bldg., engr.

Tex., Blooming Grove — Voted $28,000 bonds sewers. Elrod Eng. Co., 3124 Elm St., Dallas, engrs.

Calif., Martinez — Had plans prepared and soon takes bids 5.5 mi. 6 in. lateral sewers. R. L. Calfee, 221 South 22nd St., Richmond, engr.

Calif., Oakland—Plans to complete Piedmont sanitary system and construct sewers in West Oakland Dist., $60,000 and $150,000 respectively. W. W. Harmon, city engr.

Que., Montreal—Plans 5,272 ft. 2 x 3 brick sewers in 1st Ave., Benomi, Trinidad, and Christophe Colomb Sts. $32,819. H. Terreault, city engr.

Que., Quebec—Having plans prepared sewer in St. Olivier St. Election in June to vote on $100,000 bonds for project. T. L. Tremblay, city engr.

BIDS DESIRED

Me., Portland—June 6, by E. M. Hunt, comr. pub. wks., City Hall, sewer in Forest Ave.; adv. E. N.-R. May 15.

N. Y., New York — See "Streets and Roads."

N. J., Orange—May 20, by G. C. Bergen, purch. agt. Essex Co., Court House, Newark, 12- to 18-in. concrete pipe in Scotland St., here. $27,000. W. A. Stickel, Court House, Newark, engr.

Fla., Jacksonville — May 21, by City Comn. 9,820 ft. 15- to 42-in. rein.-con. storm sewers and 9,058 ft. 4 in. sub-drain tile in Broad, 15th, Main, Post, Victoria and Laura Sts., Edgewood and Belvedere Aves. $61,325. W. E. Sheddan, Engineers Bldg., engr.

Sewers (Continued)

Ala., **Birmingham** — May 20, by City Comn., 20 blocks sewers, sanitary sewers $300,000, storm sewers $15,000. A. W. Hawkins, city engr. Noted Jan. 24.

Miss., **Hollandale**—May 22, by C. Hollingsworth, mayor and Bd. Aldermen, sanitary sewerage system, incl. 8,300 ft. 8 in. and 6,100 ft. 10 in. vitr. pipe, 45 manholes, 3 flush tanks, etc. Bobo & Collier, Clarksdale, engrs.

Tenn., Union City—June 18, by Mayor and Aldermen, sanitary sewerage system. W. D. Keiser, recdr.; adv. E. N.-R. May 15.

O., Cleveland—May 21, sewers in Broadview Rd., Clark Ave. S. W., Denley Ave. S. W., Granby Ave. S. W., Breton Dr. S. W., East Blvd., East 130th, East 143rd, East 146th, West 116th, West 117th and West 130th Sts., West 15th Pl., Grand Division Ave. S. E. from Warner Rd. S. E. to Turner Rd. S. E., Grand Division Ave. S. E. from Warner Rd. S. E. to city limits west, East 144th St. from Miles Ave. S. E. to Benwood Ave. S. E., East 144th St. from Kinsman Rd. S. E. to Glendale Ave. S. E.; storm sewer in Lake Shore Blvd. N. E. To exceed $100,000. R. Hoffman, City Hall, engr.

O., Columbus—See "Streets and Roads."

Michigan—See "Streets and Roads."

Wis., Horicon—See "Streets and Roads."

Ark., Pine Bluff — May 29, by Comrs. Dist. 1, Jefferson Co., in Assembly Room of Chamber of Commerce, 63,962 lin.ft. 6- to 15-in. clay pipe sewer, 204 manholes, 8 flush tanks and one disposal plant. $130,000. Parkes Eng. Co., 202 Citizens Bank Bldg., engr.

Tex., Marshall — Taking bids sanitary sewers in various streets. $25,000. M. Ransey, city engr.

Calif., Irvington—May 26, by Trustees Irvington Sanitary Dist., 7½ mi. 6 to 12 in. sanitary sewers. G. A. Posey, Courthouse, Oakland, engr. Noted June 7.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, May 7, sewers in 71st St., from S. Coenzo, 678 Glenmore Ave., 86⅞% of engrs. est ($19,571); Brooklyn Ave., from C. F. Vacharas, 645 40th St., 89% ($4,243); 45th St., from B. Peconi & Son, 570 18th St., 90% ($3,776); 80th St., from R. Iovino, 77% ($400); West 37th St. and 11th Ave., from Tozzi Contg. Co., 136 63rd St., 89.44% ($900) and 95.24% ($1,465) respectively. Noted May 1.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., May 5, from Kennedy & Smith, Inc., 93 Amity St., Flushing, sewers in 7th Ave. $2,163; from J. Gallo, 293 Division St., Brooklyn, sewer in Clermont Ave. 'A" $8,848 "B" $7,830, in Sandol St. "A" $59,929, "B" $67,135; from J. F. Clancy, 460 Lockwood St., Astoria, in Justice St. $5,251, Lake St. $1,756, 91st Ave. $1,193. Noted May 1.

N. J., Sayreville—Vitr. tile and c.i. outfall sewers, etc., from Hammen & Co., 4612 Woodward St., Detroit, Mich., $114,000. Noted Apr. 17.

Pa., Phila. — Dept. Pub. Wks., Bureau Surveys, May 1, main sewer in Cottman St., from Pacifico Ventresco Co., 6325 Chew St., $27,501; completing Rock Run Main Sewer in Ogontz Ave., from E. F. Bennis, 641 East Chelten Ave., $38,516; main sewer in Venango St., from C. A. Conan, 133 North Vodges St., $88,218; removal of old sewer and constructing new sewer in Courtland St., and main sewer in Oakland St., from Ryan Constr. Co., 735 Real Estate Trust Bldg., $347,110 and $74,519 respectively; main sewer in Mifflin and Sanger Sts., from J. Lombardi, 601 Lincoln St., $76,112 and $22,782 respectively.

O., Ironton — Bd. Control, South Side sewerage system. from Reed & Lapsley, South Charleston, W. Va., $47,986.

Calif., Los Angeles — Los Angeles Co., Imhoff tank, sump and sludge bed, pump house, new sewer lines, etc., at county farm, from M. Matich, 1436 West 51st St., $38,500.

Calif., Los Angeles — Bd. Pub. Wks., Main St. storm and sanitary sewer, incl. 9,000 lin.ft. double barrel rein.-con. rectangular section 6 ft. 9 in. high and width varying from 6 ft. 5 in. to 9 ft. 7 in. for each section, 8,000 ft. rectangular rein.-con. section from 5 ft. high by 6 ft 7 in. wide to 6 ft. 9 in. high by 8 ft. 4 in wide, 12,500 ft. rein.-con. rectangular section from 3 ft 5 in. by 5 ft. wide to 5 ft. high by 5 ft. 3 in. wide, 9,800 ft. non-reinforced arch section from 5 ft. 11 in. high by 7 ft. wide to 6 ft. 6 in. high by 7 ft. wide, 11,100 ft. circular non-reinforced concrete pipe from 60 to 70 in. diam., 59,000 ft. rein.-con. pipe from 24 to 66 in., 23,000 ft. cement pipe from 12 to 21 in., 20,000 ft. cement pipe sanitary sewer from 6 to 12 in., 787 catchbasins, 179 manholes, from P. R. Gadd, 1232 41st St., Sacramento, $2,706,000. Noted Apr. 10.

CONTRACTS AWARDED

Mass., Boston—Pub. Wks. Dept., sewerage works in Germantown Dist., West Roxbury, and main outlet to state metropolitan sewer in Dedham, to C. & R. Constr. Co., 3 Tremont Row, $165,742. Noted May 8.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., sewers in Hunt St., to Peace Bros., Inc., 57 North Laurence St., Flushing, $5,029; California Ave., to Seaside Contg. Co., 193 Beach 108th St., Rockaway Beach, $5,493; 95th Ave., to P. J. Greenough Eng. Co., $705. Noted Apr. 24.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., sewers in Pelham Parkway, to C. Petrillo Co., $45,882; Waring Ave., to F. Gabrielle, $26,897; rebuilding sewer in East 153rd St., to McLaughlin & Buckley, 337 East 134th St., $7,665. Noted May 1.

Md., Baltimore—Bd. Awards, furnishing and delivering special 30-in. Poppet valves for additions to Montebello Filters, Water Contr. 73, to Ellicott Machine Corp., Bush and Severn Sts., $5,186. Noted May 8.

O., Ashtabula—Sewage treatment works, to Rice-Jones Co., 1836 Euclid Ave., Cleveland, $135,000.

O., Cleveland—For 90 ft. of 6 ft. 3 in., 290 ft. 6 ft. and 290 ft. 5 ft. 9 in. concrete sewer in Kensington Rd., to Graham & Henderson, 1274 West 108th St., $47,410; 670 ft. 12- to 24-in. vitr. tile in Berdelle Ave., 530 ft. 12- to 24-in. vitr. tile in Krakow Ave. and 620 ft. 12- to 24-in. tile in Rathbun Ave., to Shannon & O'Shea, 3380 West 135th St., $2,603, $2,253 and $2,658 respectively; 1,090 ft. 12- to 24-in. vitr. tile pipe in Thrush Ave., to Yahya Bros., 3196 West 25th St., $7,825; 270 ft. 2 "C," 270 ft. 24-in. and 270 ft. 14-in. vitr. tile in East 68th St., to Donnelly & Miller, 1251 East 84th St., $8,361. Noted May 8.

O., Cleveland—For 4,220 ft. 24 in. vitr. clay sewer in Marcelle Rd., to Joseph Co., Prospect-4th Bldg., $34,953.

O., Cleveland—Cuyahoga Co., 9,150 ft., 8- to 18-in. vitr. clay sewers, Impvt. 51, to Salem & George Bros., Erie Bldg., $44,260. Noted May 8.

O., Massillon — Director Pub. Serv., Tuscarawas, North End, Wooster, Sippo and Wetmore trunk sewers, to United Eng. & Constr. Co., Sandusky, $228,000. Noted May 8.

O., Youngstown—Mahoning Co., sewers in Sect. 1 and about 7 mi. Sect. 2 Coitsville Sewer Dist., to F. George, Youngstown, $107,343 and $73,346 respectively.

Mich., Detroit—Dept. Pub. Wks., lateral sewer 4097 between Outer Dr., City Line, Peters and Beatrice Aves., to Rennie & Dibble Constr. Co., 11565 Oakwood Blvd., $20,780, also lateral 3939 between Dexter Blvd., Dorris, Livernois and LaBelle Aves., to Detroit Drainage Constr. Co., 400 Penobscot Bldg., $33,730. Noted May 1.

Mich., Detroit—Dept. Pub. Wks., Swain Ave. Outlet Sewer, to Greiling Bros. Co., Morell St., $58,930; Wyoming Ave. Sewer, Sect. 6, to R. A. Mercief, 5435 Wesson Ave., $124,626; also lateral sewers to Cousino Mercier Co., 13183 Wark St., lateral 4094 $10,364, 4103 $4,134, 4104 $8,065, 4112 $1,384, 3854 $7,286, 3855 $6,940; to W. Porath 1410 West Grand Blvd., Lateral 4105 $744; to Central Constr. & Eng. Co., Detroit, Lateral 4113 $1,884; to H. Ponterelli & Co., Wolverine Hotel, Lateral 4102 $13,278. Noted May 8.

Mich., Royal Oak—Oakland Co., deepening and widening 13,600 ft. Red Run Drain, Sect. 1, and constructing bridges, to Davis & Paupore, 3151 Leland Ave., Detroit, $39,169; 10,371 ft. Campbell Ave. Drain Sect. 2, 9 ft. 6 in. to 10 ft. diam., monolithic concrete, to R. A. Mercier, 5435 Wesson Ave., Detroit, $480,000; 17,865 ft. Campbell Ave. Drain, Sect. 3, 24 in. to 9 ft. diam., vitr. and monolithic concrete, to S. Healy, 6466 Epworth Blvd., Detroit, $439,677, furnishing 70 tons structural steel for bridge work to Beach Mfg. Co., Charlotte, $3,072. Noted May 8.

Wis., North Milwaukee—For 10,380 lin. ft. 8 in. vitr. clay sewers in 12 streets, to G. W. Mulholland, 2025 Oxford St., Rockford, Ill., $2 to $2.30 per lin.ft. Noted May 1.

Neb., Fremont—Laying 8.25 mi. sewers: to Wright Bros. Constr. Co., Fremont, c.i. pipe $25,064, Arthur A. Dobson Constr. Co., 1st Natl. Bank Bldg., Lincoln, concrete pipe $29,268.

Mo., Wellston (St. Louis, P. O.)—St. Louis Co. Sewer Dist. 3, 8 and 36 in. sewers, etc., here and vicinity, to W. F. Riley & Son, Pontiac Bldg., St. Louis, $67,000.

Calif., Los Angeles—See "Streets and Roads."

Calif., Los Angeles—Sect. 7, North Outfall Sewer, incl. 1,770 lin.ft. inverted rein.-con. syphon in 3 lines on concrete cradles, 1,714 lin.ft. double concrete pipe, etc., to G. Thompson, Brockman Bldg., $93,000. Noted Apr. 24.

Waste Disposal

PROPOSED WORK

N. Y., Eastchester (Greycourt, P. O.)—E. A. Mathews, clk. Town Bd., Village Hall, Tuckahoe, rejected bids May 7, incinerator plant, chimney and building on White Plains Rd., here. Will readvertise. J. F. Musselman, 101 Park Ave., New York City, consult. engr. Noted Apr. 24.

Fla., Miami—Election May 21, $75,000 bonds, incinerators. C. W. Murray, city engr.

Fla., Lakeland—Election June 10, $20,000 bonds, incinerator. C. C. Brown, Lakeland, engr.

BIDS RECEIVED

O., Euclid—For 1 story, brick and steel incinerator, from H. C. Masters Constr. Co., 2020 East 102nd St., Cleveland, $29,400. Noted May 1.

Pa., Connellsville — General contract 1 story, 40 x 50 ft. garbage disposal plant. 40 tons, brick, to Universal Destructor Co., Fulton Bldg., Pittsburgh. Engrs. est. $25,000.

Ont., Toronto—City, 2 and 3 story and basement, rein.-con., brick and steel garbage destructor, plain foundation, Wellington St. W., general contract to Wells & Gray, Confederation Life Bldg., $159,987, structural steel, to McGregor & McIntyre, 1139 Shaw St., $83,689.

Bridges

PROPOSED WORK

N. C., Fayetteville—City plans deck girder bridges over Ann St., Hawley Lane and Cool Spring St., also 2 large rein.-con. culverts over Blount Creek at Cool Spring St. $35,000. W. C. Olsen, c/o State Hy. Dept., Raleigh, engr.

Fla., Fort Myers — See "Streets and Roads."

Fla., Miami—Election May 21, $200,000 bonds, bridge over Miami River, North West 4th St. C. W. Murray, city engr.

Kentucky — State and Illinois Central R.R., 108 South 4th St., Louisville, plan overhead crossing over railroad on Earlington-Dawson Springs Rd., $60,000. W. S. Keller, highway engr.

S. D., Belle Fourche—Butte Co. plans concrete and steel bridge over Belle Fourche River. $36,000. C. A. Fry, aud.

Mo., Kansas City — Bd. Park Comrs. making plans steel and rein.-con. viaduct from 9th to Hardesty Sts. to east bluff of Blue River. $1,000,000. Harrington, Howard & Ash, Orear-Leslie Bldg., engrs.

Ont., London—Canadian Natl. Rys., New Union Sta., Toronto, having plans prepared replacing bridges on Wortley and Wharncliffe Rds., with heavier structures. $50,000. R. H. Fish, c/o owner, engr.

BIDS DESIRED

Maine—May 21, by State Hy. Comn., Augusta, Emerson Bridge over Wassalonsku River, 1 concrete clear span, 60 ft. in Waterville; Thomas Pond Bridge over outlet of Thomas Pond, one 15 ft. 3 in. concrete slab, concrete abutment, in Casco and Raymond; Jordan River Bridge, one 14 ft. concrete span, in Raymond. P. D. Sargent, ch. engr.

New Jersey—May 26, by State Hy. Dept., Trenton, two 61 ft. concrete encased plate girder spans, plain concrete pier and abutments for 30 ft. roadway, removing existing bridge, and constructing temporary bridge, etc. over Musconetcong River, Warren and Morris Counties; two 95 ft. concrete encased plate girder spans, one 34 ft. encased I-beam, eighteen 20 ft. rein.-con. approach spans, and 4 rein.-con. approach slabs, all supported on concrete piers and abutments for 30 ft. roadway, rein.-con. and asphalt paving, constructing temporary bridge and removing existing bridge, etc. over north branch of Raritan River and creek, Somerset Co. A. L. Grover, secy.

Pa., Tipton—May 19, by Comrs. Blair Co. (Hollidaysburg) four 46 ft. spans, rein.-con. and steel girder bridge over Little Juniata River, near here. D. N. McCloskey, Hollidaysburg, engr.

Md., Orange Grove (Mail Ilchester)—May 22, by Comrs. Baltimore Co., (Towson), suspension bridge over Patasco River, here. S. A. Green, Towson, road engr.

Alabama—June 9, by State Hy. Dept., Montgomery, 80 ft. steel span, 144 cu.yd. concrete, 5,100 lb. reinforcing, 150,000 ft. treated timber, 6,360 lin.ft. treated timber piles, 720 lin.ft. untreated timber piles, 5 test piles, Federal Aid Project 143, Butler Co. W. S. Keller, highway engr. Noted Sept. 27.

Bridges (Continued)

Tenn., Nashville—May 20, by Bd. Pub. Wks., cement, sand, reinforcing steel for repair of Sparkman and Jefferson St. bridges. Total incl. labor $300,000. Freeland, Roberts Co., Independent Life Bldg., consult. engrs. Noted Apr. 10.

Ohio—See "Streets and Roads."

Ohio—May 23, by Dept. Highways and Pub. Wks., Columbus, bridge approaches on 0.121 mi. road Lake Co., $22,284; 2 bridges, Jackson Co., $9,181; bridge in Morrow Co., $9,431. A. V. Donaheys, dir. highways.

O., Milford—June 6, by Hamilton Co., (Cincinnati), substructure and superstructure for 260 ft. steel truss bridge, incl. 470 tons steel, 800 cu.yd. 1:2:4 concrete, concrete piling, etc., $98,800. Former bids rejected. E. A. Gast, Court House, Cincinnati, engr. Noted Apr. 24.

Michigan—May 19, by State Hy. Dept. at office Comrs. Chippewa Co., Saulte Ste. Marie, Bridge 171601, one 28 ft. T-beam, Bridge 171602, 60 ft. concrete girder, 202.9 cu.yd. Class A concrete, 345.2 cu.yd. Class C concrete, 42,689 lb. steel.

Minnesota—See "Streets and Roads."

Missouri—May 20, by State Hy. Dept., Jefferson City, one 50 ft. and two 20 ft. I-beam spans, etc., Bollinger Co.; two 24 ft. rein.-con. deck girder spans, etc., Carter Co.; fifteen 20 ft. rein.-con. slabs two 45 ft. and one 25 ft. rein.-con. deck girder spans, etc. Chariton Co.; three 40 ft. rein.-con. deck girder spans, etc., Perry Co.; eight 20 ft. rein.-con. slab spans, etc., Cooper Co.; two 12 ft. rein.-con. slab spans, etc., Scotland Co.; one 40 ft. and two 30 ft. rein.-con. deck girder, four 10 ft. and three 12 ft. rein.-con. slab spans, etc., Wayne Co. B. H. Piepmeier, state highway engr.

Calif., Pasadena—Taking bids rein.-con. bridge, single arch span with 2 approach spans at each end, total length 423 ft., main arch 240 ft., Linda Vista Ave. From $95,000 to $100,000. W. C. Earle, city engr.

Wash., Seattle—June 27, by Bd. Pub. Wks., superstructure of steel bascule bridge over Lake Washington Canal at Montlake Blvd. J. D. Blackwell, city engr.; adv. E. N.-R. May 15. Noted Jan. 31.

Ore., Albany — June 12, by State Hy. Dept., Court House, Portland, bridge over Willamette River, here. R. A. Klein, Salem, state highway engr.; adv. E. N.-R. May 15.

Ore., Harrisburg—May 29, by State Hy. Dept., Court House, Portland, bridge over Willamette River, here. R. A. Klein, Salem, state highway engr.; adv. E. N.-R. May 15.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, May 5, concrete encased plate girder bridge, 67 ft. clear span with rein.-con. abutments, etc., over Beaver Brook, Sect. 11, Route 5, municipality of White Twp., Warren Co., from T. M. Gibbs Constr. Co., 215 South Broad St., Phila., Pa., $31,953. Noted Apr. 24.

N. J., Asbury Park — Monmouth Co. (Freehold), May 7, Bridge No. 0-10 over Deal Lake, on Sunset Ave., here, from Dover Boiler Wks., 90 East Dickerson St., Dover, $100,772. Noted Apr. 24.

Tennessee—See "Streets and Roads."

Ia., Des Moines—City, 84 ft. bridge, two 42 ft. spans, at Keosanqua and University Aves., 1,550 cu.yd. concrete girders, 239,600 lb. reinforcing, from O'Rourke Eng. & Constr. Co., 1215 Mulberry St., $52,100.

Montana—See "Streets and Roads."

Tex., Memphis—See "Streets and Roads."

Missouri — State Hy. Dept., Jefferson City, May 6, from Springfield Constr. Co., Springfield, 20 ft. rein.-con. slab span over stream, $13,319, 25 ft. rein.-con. deck girder span over creek, $1,966, 25 ft. rein.-con. deck girder span, etc., over creek, $1,938, all Barton Co.; from Pub. Wks. Constr. Co., Century Bldg., St. Louis, 20 ft. rein.-con. slab span over Fenton Creek branch, $5,234, thirteen 20 ft. rein.-con. slab spans over overflow of Merramec River, $18,935, 30 ft. I-beam span over drainage ditch, $2,300, 50 ft. steel truss span over Fenton Creek, $9.485, all St. Louis Co.; from Jones & Harlan, West Plains, four 20 ft. rein.-con. slab spans over creek, Texas Co., $5,198; from Republic Concrete Constr. Co., Republic, three 20 ft. rein.-con. slab spans over creek, Texas Co., $3,713; from Winstead & Gunter, Siloam Springs, Ark., 25 ft. rein.-con. deck girder span ove; stream, Barton Co., $2,103; Woods Bros. Constr. Co., Lincoln, Neb., two 200 ft. and two 120 ft. steel truss spans, etc., over Merramec River, St. Louis Co., $89,176; from Tibbetts & Tibbetts, Olathe, Kan., 30 ft. rein.-con. deck girder span over Whetstone Creek, Callaway Co., $9,852.

Tex., Austin — Travis Co. rein.-con. bridges and culverts (a) Oak Hill (b) South Burnet (c) Manor-Webberville and (c) Gregg-Manor Rds., from Evans & Greathouse, c/o J. A. Greathouse, 1706 West 6th St., (a, b, c and d) $31,434, K. T. Johnson, 500 West 15th St., (a and b) $14,702; bridges and culverts on (a) Govalle (b) Dickerson (c) Colton (d) Dessan-Cameron Rds., from R. G. Buckner & Sons, Round Rock (a, b, c and d) $33,865, J. F. Peterson, Bastrop, (a, c and d) $29,720, Austin Bridge Co., Coombs St., Dallas, (c) $13,537.

Tex., San Angelo—Tom Green Co. 340 ft. bridge over Middle Concho River, 12 mi. west of here, steel span concrete girder, masonry substructure, concrete piers, from Austin Bridge Co., Coombs St., Dallas, $29.108. Noted Apr. 17.

Calif., Los Angeles—Los Angeles Co., bridge over Rio Honda on Telegraph-Anaheim Rd., incl. 860 ft. wooden trusses on creosoted piles with wooden floor beams, 27 ft. roadway, (piles and floor beams furnished by county), from E. G. Perham, 725 North Ardmore Ave., $26,600. Noted Apr. 17.

Calif., San Francisco—City and San Francisco Co., timber trestle bridge for Bay Crossing pipe line of Hetch Hetchy project, from L. F. Youdall, Commercial and Savings Bank Bldg., Stockton, $167,645. Noted May 8.

CONTRACTS AWARDED

W. Va., Williamson—Mingo Co., Bridge 106: two 65 ft. rein.-con. arches, Bridge 108: one 40 ft. rein.-con. deck girder on masonry abutments, Bridge 109: 50 ft. rein.-con. through girder, masonry abutments, Bridge 110: 50 ft. rein.-con. through girder, masonry abutments, to Hatfield Constr. Co., 418½ 10th Ave., Huntington, $24,802. Noted Apr. 17.

North Carolina—See "Streets and Roads."

Georgia — State Hy. Dept., East Point, new bridge for Upson Co., to Bender & Duggan, Hawkinsville, $27,370. Noted Apr. 10.

Fla., Jacksonville—Duval Co., to Amer. Bascule Bridge Corp., Pensacola, draw bridge over Trout Creek, Scherzer bascule, 53 ft. clear span, $27,475, bridge over McGirts Creek, concrete girder slab on concrete piers, 37 ft. wide, 53 ft. clear span, $37,235; to A. B. Bentley & Sons, Atlantic Natl. Bank, bridge over Trout Creek, 1,133 ft. long, 23 spans, concrete girder, concrete piers, $179,244, bridge over McGirts Creek, 978 ft. long, 22 spans, $19,068. Noted Apr. 17.

La., New Orleans—Comn. Council, City Hall, general contract for overhead viaduct foot of Canal St., to O'Brien Constr. Co., Board Trade Bldg., $26,600, 112 tons steel and ornamental iron to Lukens Steel Co., 626 South Peters St., $12,267. Noted May 1.

Ohio—See "Streets and Roads."

Michigan — State Hy. Dept., Lansing, Bridge 500401, two 90 ft. through concrete girder spans, 498.4 cu.yd. Class A, 557.4 cu.yd. Class B and 191.2 cu.yd. Class C concrete, 184,240 lb. steel, to Swingle & Robinson, Dearborn, $37,091.

Mich., Royal Oak—See "Sewers."

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, bridges (**36-12B Adams means Route 36 Sect. 12B, Adams Co.**) on 36-12 B and 36-13B, Adams, to Herrick Constr. Co., Carlinville, $65,332; on 3-33B Warren, to Huff & Gaines, Logan, Ia., $4,643; on 9-45B Peoria, to R. A. Cullinam, Tremont, $18,682; on 27-4B Carroll, to W. H. Shons Co., 109-111 Spring St., Freeport, $28,477; on 36-10B Adams, to Barker & Lively, Oblong, $12,844; on 43A-1B Menard, to H. C. Nieland, Monee, $10,647. Noted Mar. 13 and Apr. 10.

Wis., Tomahawk — Tomahawk Ave. Bridge, to Wausau Iron Wks., Wausau, additional concrete masonry in substructure of same classification at no greater depth than shown on plans $30, additional concrete masonry in substructure same classification at greater depth than shown on plans $45, concrete masonry in substructure reduced from that shown on plant $12, additional piling not shown on plant delivered $0.45, driven $1, total $78,347. Noted Apr. 24.

Wis., Wausau — Rein.-con. bridge over slough, West Washington St., to Wausau Iron Wks., 738 South 10th Ave., $34,000. Noted Mar. 6.

Ia., Bedford—Taylor Co., 3 pony truss spans, to Wickham Bridge & Pipe Co., 27 South 19th St., Council Bluffs, $34,100; 1 pony truss span and 41 box culverts, to Wilson Concrete Co., Red Oak, $36,410.

Ia., Harlan—Shelby Co., 3 I-beam spans, 1 pony truss span, 1 deck girder span and 18 concrete culverts on Project 269, to G. W. Condon, 510 Federal Reserve Bank Bldg., Omaha, $79,696. Concrete $21.88 per cu.yd., structural steel erected $0.085 per lb.

N. D., New England—Hettinger Co. (Mott), bridge over Cannon Ball River here, to W. W. Moyer, Bismarck, $30,799.

Wyoming—State Highway Comn., Cheyenne, steel superstructure, eight 80 ft. 8 in. spans, over Wind River near Riverton, Fremont Co., to Peppard & Fulton, 324 Midwest Bldg., Casper, $56,787. Noted Apr. 24.

Tex., Sanderson — See "Streets and Roads."

Wash., Everett—Comrs. Snohomish Co., 200 ft. steel superstructure over Hatt Slough, to Everett Constr. Co., Everett, $50,626. Noted April 24.

Que., Honfleur—Lake St. John Co. Council, concrete and steel bridge, to Emile Plourde, St. Prime, $48,000.

Que., Three Rivers — City, top flooring creosoted lumber for 1,200 ft. bridge over St. Maurice River, to B. J. Trepanier, St. Antoine St., $26,000.

Dams

PROPOSED WORK

Alabama—Columbus Electric Power Co., 1151 Broad St., Columbus, Ga., plans dam and other power facilities on Chattahoochee River at Bartletts Ferry. Plans provide for power station ultimate capacity 60,000 kw. and initial installment of 24,000 kw., to be connected with existing power system by 2.5 mi. transmission line. Will also make extensive developments on Georgia side of river at same place. $5,000,000.

Tex., Uvalde—Uvalde Co. and State had preliminary plans prepared dam across Frio River, for irrigation purposes, to affect 35,000 acres. $2,000,000. Terrell Bartlett, Calcasieu Bldg., San Antonio, engrs.

Railways

PROPOSED WORK

Florida—City of Miami, election May 21, $100,000 bonds, extending street railway. C. W. Murray, city engr.

Indiana—Southern Indiana Gas & Electric Co., Evansville, plans 1,200 lin.ft. double track and 1,700 ft. single track on Washington Ave. To exceed $25,000. F. J. Haas, vice-pres.

Oklahoma—Atchison, Topeka & Santa Fe R.R. Co., Arkansas City, Kan., making plans relaying rails in eastern Oklahoma line from Guthrie to Kansas City, in preparation for new cut off line to Kansas City. $250,000 or more. F. H. Frailey, Arkansas City, Kan., dir. engr.

CONTRACTS AWARDED

Missouri—Way & Structures Dept. of Receiver for Kansas City Railways Co., 1500 Grand Ave., Kansas City, will build unloading area at Fairyland Park, incl. wye tracks, iron fence, turnstiles, etc., $61,000, also at Kansas City Baseball Park, incl. 2 blocks double wye tracks, $33,000; reconstructing 13,516 ft. single track on Troost Ave., $121,000, 2,230 ft. double tracks on Grand Ave., $61,000, 9,960 ft. single track on Lexington Ave., (in Independence) $91,000, etc., by day labor.

Oregon—Southern Pacific R.R. Co., 65 Market St., San Francisco, Calif., 15.031 mi. Natron-cutoff from Kirk to Oakridge, to Henry & McFee, Northern Life Bldg., Seattle, Wash.

Excavation, Drainage, Irrigation

PROPOSED WORK

Tex., Crockett—Levee Dist. 2, Houston Co., voted $300,000 bonds, levee construction Trinity River. C. H. Milburn, Crockett, engr.

Tex., Uvalde—See "Dams."

Tex., Wharton — Wharton Co. voted $600,000 bonds conservation and reclamation work. B. M. Griffith, Wharton, temporary engr. Noted Apr. 17.

Oklahoma—Walnut D. D. 1, Cole, having surveys made 16 mi. drainage district to serve Walnut Creek Valley from Cole to South Canadian River. $200,000. R. J. Wheeler, Wynne Wood, engr.

Calif., Patterson—West Stanislaus Irrigation Dist., c/o E. N. Bryan, engr., Forum Bldg., Sacramento, plans to vote on bonds for pumps, canals, etc., to irrigate 36,000 acres, here.

BIDS DESIRED

Calif., Westley — J. E. Little, consult. engr., Westley, taking bids 3½ mi. levee, main canals, laterals, in connection with irrigation system, incl. 350,000 cu.yd. earthwork of which 100,000 to 125,000 cu.

Excavation, Drainage, Irrigation (Continued)

yd. is scraper work and 200,000 to 225,000 cu.yd. dragline work, here, for Burkhard Investment Co., Los Angeles.

Quebec—May 19, by N. Desjardins, acting secy. Dept. Pub. Wks., Ottawa, Ont., dredging at Cross Point, Louisville, (River du Loup en haut) and Nicolet River. $25,000.

BIDS RECEIVED

Minn., Minneapolis — Bd. Park Comrs., City Hall, May 6, dredging in Powderhorn Lake, 15th Ave. S. and 34th Sts., 140,000 cu.yd. excav., from Minneapolis Dredging Co., 2429 University Ave. S. E., $0.305 per cu.yd. Noted Mar. 20.

Calif., Blythe — Palo Verde Irrigation Dist., 36 mi. open drain, 1,450,000 cu.yd. excav., clearing 385 acres, 10,500 lin.ft. piling, 293,000 ft. lumber, 9,000 lb. reinforcing, 975 lin.ft. metal flume, 1,080 lin.ft. metal culverts, from L. D. Crawford, c/o Directors of Dist., Blythe, $323,000. Noted Apr. 24.

Calif., Santa Ana—Newhope D. D. 5,150 ft. 30 in., 9,058 ft. 24 in., 2,770 ft. 21 in., 3,080 ft. 18 in., 15,292 ft. 15 in., 3308 ft. 14 in. 7799 ft 12 in. 26,207 ft. 10 in. and 42,626 ft. 8 in. drain pipe and fittings, from Stanley Constr. Co., c/o owner, $40,229.

CONTRACTS AWARDED

Md., Baltimore — Bd. Awards, trench excav. for Water Dept., to M. and J. B. McHugh, 829 North Markoe St., Phila., Pa., $36,420. Noted May 8.

Ill., Rogers Park (Chicago P. O.)—St. Scholastica Academy, 7430 Ridge Blvd., excavation for 3 story and basement, brick, tile and concrete school, Ridge Blvd., to S. Schoen, 260 Chase Ave., Chicago. Archts. total est. $450,000. Noted Apr. 10, under "Buildings."

Neb., Norfolk—Sanitary Dist., 80,000 cu. yd. dragline grading and excav., to Morrow & Son, 430 Brandeis Theatre Bldg., Omaha, $0,124 per cu.yd. Noted May 1.

Streets and Roads

PROPOSED WORK

N. J., Orange—Essex Co. (Newark) plans grading and paving 1 mi. Scotland Ave., here, sheet asphalt on 6 in. concrete. $79,000. W. A. Stickel, co. engr.

N. J., Trenton—Mercer Co. plans paving 7 mi. Edinburg-Cranbury Rd. H. F. Harris, Court House, engr.

Pa., Pittsburgh—Soon takes bids grading, paving and curbing Allison St., $50,000; Middletown Rd., $65,000; Rossmore Ave., $54,000. Dept. Pub. Wks., City County Bldg., engrs.

W. Va., Clarksburg — Harrison Co. Sardia Dist., election May 27, $380,000 bonds for roads. C. N. Parrish, clk.

Fla., Daytona Beach — Voted $75,000 bonds for paving. E. A. Donovan, clk.

Fla., Fort Myers—Lee Co., election May 20, $1,250,000 bonds, constructing roads and bridges.

Fla., Fort Pierce—Election July 1, $70,000 bonds paving street intersections; $35,000, streets and viaducts under and over railroad tracks. M. Hallowes, Fort Pierce, engr.

Fla., Miami—Election May 21, $125,000 bonds, improving various streets. C. W. Murray, city engr.

Ala., Birmingham — See "Contracts Awarded."

La., Farmersville—Union Parish election May 20 $400,000 bonds, road work.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, plans grading, etc., 6 mi. Mont Eagle-Battle Creek Rd., 16 ft., Marion Co. J. G. Creveling, highway comr.

Tenn., Jackson—Voted $500,000 bonds, paving streets. E. R. Dike, city engr. Noted Mar. 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened May 2, grading and paving 1.1 mi. Sect. "G-2" Bucyrus-Crestline Rd., Crawford Co., $31,712; also no bids May 2 bridge and approaches on Sect. "D-1" Pipe Co. Noted May 1.

O., Columbus — Making plans grading, laying necessary water services, sewer connections and paving 1,993 ft. alley west of 6th St. (Purdy alley), 20 ft., brick $13,078, concrete $11,506; 1,830 ft. Clinton Heights Ave., 24 and 26 ft., brick $47,489, asphalt $40,601. R. H. Simpson, city engr.

O., Dayton—Plans paving Wabash St., asphalt or rein.-con., $13,000; Victory St., Kentucky rock asphalt or concrete, $21,200; West [illegible]th St., brick, $88,600; Leo St., brick, asphalt or concrete, $8,000. Work involves 10,000 sq.yd. new paving and 25,000 sq.yd. repaving. J. F. Hale, city engr.

O., Dennison—Bd. Control soon takes bids paving and laying sewers in North 3rd St., $35,000; paving ¾ mi. 6th St., 35 ft., $40,000. W. E. Arnold, City Hall, engr.

O., Lisbon—Columbiana Co. improving with (a) concrete (b) brick (1) 1.138 mi. Wellsville-Salineville Rd., 20 ft. (2) 1.095 mi. St. Clair-Liverpool Twp. Rd., 20 ft., (3) 1.351 mi. Petersburg-Unity Rd., 20 ft. (4) 0.939 mi. Intercounty Highway, 20 ft. in Elkrun Twp. (5) 2.2992 mi. Intercounty Highway, 20 ft., in Fairfield and Elkrun Twps., from R. Stone Constr. Co., 433 Amer. Bank Bldg., Lima, (a1) $40,823 (b1) $55,861; J. D. Paxon, 119 West Main St., Salem, (a2) $39,111 (a4) $37,392 (a5) $81,659; Russel Bros. Co., Youngstown, (b3) $54,035; G. W. Hadley, Goldberg Bldg., Canton, (b4) $47,946 (b5) $110,485. Noted Apr. 10.

O., Steubenville—Soon takes bids paving and resurfacing Commercial and 50th Sts., vitr. brick. $28,948. C. N. Teaff, Steubenville, engr.

O., Wellsville — Plans repaving 1 mi. Lisbon St., 30 ft., brick on concrete. $45,000.

Ind., Crown Point—Lake Co. plans grading and graveling 5.5 mi. Carl E. Nelson Rd., 24 ft. $63,173. C. K. Wallace, Crown Point, engr.

Ind., Noblesville — Hamilton Co. plans concrete paving 24,288 sq.yd. Crum Rd. $58,414. J. S. Shannon, Noblesville, engr.

Michigan — State Hy. Dept., at office Comrs. Lenawee Co., Adrian, takes bids about June 2, grading and surfacing 5.737 mi. Federal Aid Project 95, 35,137 cu.yd. excav., 66,111 sq.yd. concrete.

Michigan — State Hy. Dept. at office Comrs. Washtenaw Co., Ann Arbor, takes bids about June 2, grading 3.578 mi. Federal Aid Project 78 A 1 and 2, 86,549 cu. yd. excav.

Michigan — State Hy. Dept. at office Comrs. Huron Co., Bad Axe, grading and surfacing 4.038 mi. State Trunk Line Rd. 27-19, Huron Co., 38,527 sq.yd. 2 course gravel, from Harbor Beach Constr. Co., Harbor Beach, $58,794. Noted Apr. 17.

Michigan — State Hy. Dept. at office Comrs. Wexford Co., Cadillac, grading and surfacing to 16 ft. 2.856 mi. State Trunk Line Rd. 42-1, Sects. A and B, 26,805 sq.yd. gravel, from J. A. Swanson, LeRoy, $30,354; grading and surfacing to 20 ft. 0.492 mi. State Trunk Line Rd. 55-4, Sect. B. 5,774 sq.yd. concrete, (1,750 bbl. cement furnished by state) from Wexford County Rd. Comn., Cadillac, $15,092. Noted Apr. 17.

Michigan — State Hy. Dept. at office Comrs. Iron Co., Crystal Falls, grading and surfacing to 18 ft. width, 1.932 mi. State Trunk Line Rd. 12-42, Sect. B, Iron Co., 20,712 sq.ft. bituminous macadam, from Iron County Rd. Comn., Crystal Falls. $39,513. Noted Apr. 17.

Michigan — State Hy. Dept., Lansing, grading and surfacing 0.993 mi. State Trunk Line Rd. 11-37, and 20-22, Mason Co., from L. I. Goldberg, Scottville, $31,780.

Michigan — State Hy. Dept., Lansing, takes bids about May 20, grading and surfacing 1.1 mi. State Trunk Line Rd. 10-28, Saginaw Co., concrete, (City widening to 54 ft. with sheet asphalt on 7 in. concrete), 8,507 cu.yd. excav., 12,904 sq.yd. concrete base, (foregoing quantities states share only), also 1.893 mi. State Trunk Line Rd. 24-27, B, Saginaw Co., concrete, (City widening to 54 ft. with sheet asphalt on 7 in. concrete), 13,660 cu.yd. excav., 22,215 sq.yd. concrete pavement, (foregoing quantities states share only). G. C. Dillman, ch. engr.

Michigan — State Hy. Dept. at office Comrs. Calhoun Co., Marshall, grading and surfacing to 20 ft., 2.072 mi. State Truck Line Rd. 29-12 Calhoun Co., 22,235 sq.yd. concrete, from Rockford Constr. Co., Rockford, O., $34,757. Noted Apr. 17.

Michigan — State Hy. Dept. at office Comrs. Ontonagon Co., Ontonagon, grading and surfacing to 16 ft., 7.34 mi. State Trunk Line Rd. 26-12, 19,933 tons stamp sand, etc., from Smith-Sparks Constr. Co., Box 184, Houghton, $115,446. Noted Apr. 17.

Illinois—Dept. Pub. Wks. & Buildings, Div. Highways, Springfield, rejected bids paving 0.96 mi. Route 7, Sect. X, LaSalle Co.; 6.39 mi. Route 46, Sect. 461, 3 mi. Route 46, Sect. 463 and 4.97 mi. Route 46, Sect. 464, Cook Co. Noted Mar. 27 and Apr. 10.

S. D., Sioux Falls—Plans paving 32 blocks 18th St. between 4th and Harvard Aves. $100,000. W. C. Leyse, city aud.

Mo., Independence — Takes bids about June 1 concrete paving 1½ mi. around city square and to west city limits. R. H. Jones, Independence, engr.

Tex., Anson—Jones Co. Special Rd. Dist. voted $500,000 bonds constructing roads. $750,000 State and Federal aid granted. J. F. Lindsey, co. judge. Noted Apr. 24.

Tex., Baird—Callahan Co. (a) grading (b) concrete bridges (c) bituminous macadam surfacing 9.62 mi. Bankhead Highway, Sect. A, Federal Aid Project 52-A, from Womack Constr. Co., Sherman, (a, b and c) $218,881; Tibbets Constr. Co., 209½ West 8th St., Ft. Worth, (a and c) $159,436; McCall Eng. Co., Amicable Bldg., Waco, (b) $55,683. Noted Apr. 17.

Tex., Cameron—Milam Co. voted $75,000 bonds, Farrier Highway in Rd. Dist. 10. A. F. Mitchell, co. engr. Noted Apr. 3.

Tex., Del Rio—Val Verde Co. making plans grading and gravel surfacing 8.4 mi. State Highway 41, Carter Valley Rd., 16 ft. $81,400. G. M. Jowers, co. engr.

Tex., Waco—Election May 31, $250,000 bonds, permanent paving various streets. V. G. Koch, city engr.

Tex., Wichita Falls—Wichita Co. Rd. Dist. 1 voted $500,000 bonds, roads radiating from Electra. J. M. Isbell, co. engr. Noted Apr. 24.

Okla., El Reno — Canadian Co. plans grading and paving 6 mi. Meridian Highway, 61,000 sq.yd. concrete, 42,000 cu.yd. excav. $175,000. F. D. Powell, El Reno, engr.

Okla., Grandfield — Plans grading and paving 9 blocks Simpson and 6th Sts., 13,700 sq.yd. concrete, 5,700 lin.ft. curbing, 4,000 cu.yd. earth and 1,500 cu.yd. rock excav. $45,000. V. V. Long, 1300 Colcord Bldg., Oklahoma City, engrs.

Okla., Tecumseh — Pottawatomie Co. plans grading and gravel surfacing 9 mi. Tecumseh-Shawnee Rd., 18 ft., 90,000 sq. yd. gravel and 56,000 cu.yd. excav. $75,000. F. D. Brown, Shawnee, engr.

Nev., Reno—Washoe Co. plans widening from 9 to 19 ft. and concrete paving 3.67 mi. road between cemetery and Lawtons.

Wash., Chehalis—City Clerk takes bids June 1, 6 in. concrete paving, curbing, etc., 20 blocks Alfred St. et al., 24 ft. wide. $80,000. W. C. Sturdevant, city engr.

California—Having plans prepared surfacing 2 mi. Chico-Orland Highway, Butte Co., asphaltic concrete. To exceed $25,000. R. M. Morton, c/o State Highway Dept., Sacramento, engr.

California—State Highway Comn., Sacramento, having plans prepared coast highway link across Rindge Estate, Los Angeles Co. To exceed $25,000. R. M. Morton, state highway engr.

California — Orange Co. (Santa Ana), and Riverside Co. (Riverside), plan highway over mountains from Elsinore to San Juan Capistrano via Sievers Canyon. To exceed $100,000.

Calif., Alturas — Modoc Co. had plans prepared improving 5½ mi. Fandango unit of Willow Ranch-Fort Bidwell Highway, 5,000 cu.yd. excav., 2,000 cu.yd. gravel surfacing. L. S. Smith, clk.

Calif., Glendale — Had plans prepared improving Monterey Rd., 85,400 sq.ft. grading, 55,150 sq.ft. 3 in. oil macadam, 12,500 sq.ft. cement walks, 3,300 lin.ft. concrete curb, ornamental lighting system, etc.; Cleveland Rd., 90,900 sq.ft. grading, 47,410 sq.ft. 3 in. macadam, 10,060 sq.ft. cement walks, 7150 sq.ft. concrete gutter, 3,650 lin.ft. concrete curb, etc. B. F. Dupy, city engr.

Calif., Inglewood—Had plans prepared improving Nectarine St. between Cedar and Nash Aves., 75,375 sq.ft. grading, 2,473 lin.ft. curb, 12,326 sq.ft. walks, 46,126 sq. ft. 5 in. asphaltic concrete. A. W. Cory, city engr.

Calif., Madera — Madera Co. plans to vote on $150,000 to $500,000 bonds, highways.

Calif., Martinez—Contra Costa Co. having plans prepared paving 6 mi. highway in town of San Pablo, Rd. Dist. 3, 2½ in and 3½ in. asphaltic concrete with 1½ in. Warrenite bituminous surface. To exceed $150,000. R. L. Calfee, 221 South 22nd St., Richmond, engr.

Calif., Oakland — Plans to extend and improve 14th St. $40,000. W. W. Harmon, city engr.

Calif., Orange—Had plans prepared improving Maple, Almond, Washington Sts., etc., 5 and 6 in. concrete pavement, concrete curbs and walks, vitr. sewers. To exceed $25,000. C. D. Lester, clk.

Calif., Pasadena—Having plans prepared grading and paving Green St., asphalt on concrete, curbs, gutters, walks, street lighting system, etc. $350,000. W. C. Earle, city engr.

Calif., Richmond — Had plans prepared grading and paving portion McLaughlin and Lassen Sts., etc., 8 in. standard macadam, concrete curbs, gutters, walks, etc. H. D. Chapman, city engr.

Calif., Riverside—Having plans prepared improving portion Victoria Ave. To exceed $25,000. L. Nafzgar, city engr.

Calif., San Francisco—Improving Palou Ave., between Phelps and Rankin Sts., 5,300 cu.yd cut, 2,700 lin.ft. concrete, curb, 2,375 sq.ft. artificial stone walks, 72,900 sq.ft. concrete, from Raisch Impvt. Co., 46 Kearny St., $30,972. Noted Apr. 24.

Streets and Roads (Continued)

Calif., Santa Cruz—Had plans prepared improving Pacheco Ave. between Soquel and Martin Sts., 87,500 sq.ft. grading to subgrade, 87,500 sq.ft. 5 in. concrete, 4,900 lin.ft. detached curb. H. S. Williams, city engr.

Quebec—Dept. Pub. Highways, Quebec, soon takes bids 8 mi. highway from Hull to Aylmer asphalt. $60,000.

Que., Montreal — Plans asphalt paving Iberville St. from Masson St. to limits, 30,168 sq.yd. asphalt on concrete, 11,850 lin.ft. straight curbstone, 800 lin.ft. circular curb, 30,168 sq.yd. grading. $193,414. H. Terreoult, City Hall, engr.

Ont., Blythe — Having plans prepared 20,000 sq.yd. concrete pavement. $50,000. T. R. Patterson, Goderich, engr.

BIDS DESIRED

Massachusetts—May 20, by Dept. Pub. Wks., Div. Highways, Boston, rein.-con. and bituminous macadam on 25,300 ft. highway in Lakeville; bituminous macadam paving 26,000 ft. highway in Essex and Ipswich, and 13,000 ft. highway in Southampton. W. F. Williams, state highway comr.

N. Y., Brooklyn—May 21, by E. Riegelmann, boro pres., Boro Hall, repaving portion of 15th and Lafayette Aves., East 14th and Cumberland Sts., paving Kingston Ave., all asphalt on concrete; curbing and asphalt paving 41st St.; timber pile jetty adjacent to Groyne 12 near foot of West 10th St., Coney Island.

N. Y., Highland Falls—June 2, by Bd. Village Trustees, rein.-con. pavement; adv. E. N.-R. May 15.

N. Y., New York—May 23, by J. Miller, pres. Manhattan Boro, Municipal Bldg., curbing, flagging, reflagging and asphalt paving West 177th St., Payson Ave., West 176th St. from Haven to Fort Washington Aves., West 176th St. from Bway. to Fort Washington Ave.; altering and improving sewer in Beaver St.

N. J., Audubon—May 20, by Boro Comrs improving alleys north of Merchant St., Edgewood, Audubon, 4th, Hampshire, West Atlantic, and East Atlantic Aves., Pine, Oak and Chestnut Sts., Princeton, Cornell, Yale and Lafayette Rds. J. J. Albertson, Court House, Camden, boro engr.; adv. E. N.-R. May 15.

N. J., Orange—May 20, by G. C. Bergen, purch. agt. Essex Co., Court House, Newark, paving 10,500 sq.yd. Scotland St., here, 3 in. sheet asphalt on 6 in. concrete. $79,000. W. A. Stickel, Court House, Newark, engr.

N. J., Plainfield—May 26, by State Hy. Dept., Trenton, constructing Route 9, Sect. 11, Lincoln Ave., here, Middlesex Co. A. L. Grover, secy.; adv. E. N.-R. May 15. Noted Apr. 24 under "New Jersey."

Pennsylvania — June 3, by State Hy. Dept., Harrisburg, 58 mi. road on 19 Projects in 13 counties; adv. E. N.-R. May 15.

Pa., Eldersville — May 20, by Supervs. Jefferson Twp., c/o M. D. Ridgeway, reconstructing 16,158 lin.ft. one course rein.-con. from West Virginia State line to intersection of road to Hanlen Sta., 16 ft. $100,000.

Delaware—June 4, by State Hy. Dept., Dover, 4.05 mi. Basin Cor.-New Port-Lincoln Highway, Contr. CN-20; 5.39 mi. Willow Grove-Wyoming Rd., Contr. CK-22; 3.24 mi. Mission-Gumboro Rd., Contr. CS-33; adv. E. N.-R. May 15.

Maryland—May 27, by State Rd. Comn., Baltimore, concrete paving highways in Frederick, Montgomery, Anne Arundel and Caroline Counties, Contrs. F-75, M-50, AA-40 and Co-23; gravel surfacing in St. Marys Co., Contr. SM-27. J. N. Mackall, chn.; adv. E. N.-R. May 15.

Md., Baltimore—May 21, by Bd. Awards, paving, Footway Contr. 78, 4,900 sq.yd. concrete, 1,400 cu.yd. grading; paving 5th Ave., 15,000 sq.yd. asphalt. Jackson St., 1,000 sq.yd. asphalt. Gay St., 4,000 sq.yd asphalt; Spring St., 800 sq.yd. asphalt. B. L. Crozier, City Hall, highways engr.

Md., Baltimore—May 21, by Bd. Awards, grading, surfacing, etc., area around Guilford St., York and Cold Spring Lane, 8,391 cu.yd. excav., 15,334 sq.yd. surfacing, $26,000; at Montebello School, Harford Rd. and 32nd Sts., 10,000 cu.yd. earth fill, 3,500 sq.yd. surfacing macadam, etc., $38,000; playground at school 65, Poplar Grove St. and Lanvale St., 6,000 cu.yd. earth excav., 800 lin.ft. vitr. brick edging, etc., $20,000. H. G. Perring, Hearst Tower, superv. engr. Public Impvt. Comn.

Md., Towson—May 22, by Comrs. Baltimore Co., concrete paving 0.9 mi. road, Group 13, Caves Rd. from Park Heights Ave. to Dover Rd. $25,000. S. A. Green, road engr.

W. Va., Beckley—May 29, by Raleigh Co., constructing roads in Slab Fork Dist: grading Amigo-Egeria and Rools Gap-Pemberton Rds., hardsurfacing Besoco-Odd Rd., Besoco-Amigo Rd., McAlpin-Sophia Rd. and road from Slab Fork to State Route on Tams Mt.; Shady Springs Dist: hardsurfacing road from Low Gap School toward Ghent Rd. J. Smith, clk.

Fla., Tampa—May 20, by B. G. Wall, mayor, grading and paving Harbor and McKay Sts., 8,000 sq.yd. vitr. brick and 3,600 lin.ft. granite curbing R. D. Martin, city engr.

Fla., Tavares—May 20, by City Council, paving Barrow, Sinclair, Texas and Joanna Sts., $37,990, New Hampshire, Rockingham and Distow Sts., etc., $37,990, foregoing 30 ft.; Irma, Ruby, Maud and Alford Sts., 24 and 47 ft., $40,000; Tavares Blvd., Caroline and Ianthe Sts., 24 ft., $38,000; Lakeshores, Rockingham, St. Clair, Givens and Clifford Sts., 16 and 24 ft., $35,981. H. S. Jandon Eng. Co., Leesburg, engrs.

Alabama—June 9, by State Hy. Dept., Montgomery, 11.729 mi. Louisville-Clayton Rd., 18 and 26 ft., Federal Aid Project 114-B, Barbour Co., 15.43 acres clearing, 121,992 cu.yd. excav., 27,896 sta.yd. overhaul, 474.76 cu.yd. Class B concrete, 4,800 cu.yd. gravel, 500 half-mile units overhaul on gravel, 32,500 cu.yd. sand clay, 20,000 half-mile units overhaul on sand clay, 30,000 sq.yd. mixing sand and clay, overhead crossing at Louisville involves 42,711 ft. treated timber; 9.487 mi. Georgiana-Conecuh Co. line Rd., 18 and 26 ft., Federal Aid Project 143, Butler Co., 50.46 acres clearing, 101,404 cu.yd. earth and 5,992 cu.yd. rock excav., 13,346 sta.yds. overhaul, 25,168 cu.yd. sand clay surfacing, 1 mi. haul, 23,400 half-mile units additional haul on sand clay, 22,500 half-mile units additional haul on gravel, 5,277 cu.yd. gravel surfacing, 1 mi. haul, 104.04 cu.yd. Class B and 382.5 cu.yd. Class A concrete, 46,869 sq.yd. mixing sand and clay. W. S. Keller, highway engr.

Ala., Decatur—May 26, by Bd. Revenue Morgan Co., surface treating and asphalt bituminous surfacing 75 mi. hard surfaced roads. M. S. Bingham, co. engr.

Ala., Huntsville — June 2, by Comrs. Madison Co. paving 2.25 mi. West Clinton St. and Triana Pike, 23,480 sq.yd. cement concrete (base course and leader curbing), 22,145 sq.yd. sheet asphalt, warrenite bitulithic, Travis double seal or bituminous concrete (modified Topeka type) or Portland cement concrete. Bridges and culverts on above roads, involve 246 cu.yd. 1:2:4 concrete, etc. S. W. Fleming, ch.

Louisiana—May 24, by State Hy. Comn., Reymond Bldg., Baton Rouge, 8.59 mi. State Project 324, Sect. B, Chef Menteur-Rigolets Highway, Orleans Parish, incl. dredging canal along west side of highway. J. M. Fourmy, ch. engr.

Louisiana—May 27, by State Hy. Comn., Reymond Bldg., Baton Rouge, 4.55 mi. Federal Aid Project 146 B, Ruston-Arkansas Highway, Lincoln Parish, also furnishing gravel for project; 7.94 mi. State Project 89, Sect. B, New Roads-Simmesport Highway, Pointe Coupee Parish, and 1.44 mi. State Project 89, Sect. D-1, Morganza-Ravenwood Highway, Point Coupee Parish; 5.23 mi. Federal Aid Project 147, Ruston-Arkansas Highway, Union Parish, also furnishing gravel for project. J. M. Fourmy, ch. engr.

La., Bastrop—May 27, by Police Jury Morehouse Parish, 7.7 mi. Route 15, and 7.7 mi. Route 16. J. L. White, parish engr.

Ohio—May 23, by Dept. Highways and Pub. Wks., Columbus, concrete widening 6.752 mi. roads in Huron Co.; resurfacing with asphalt or tar 1.989 mi. Portage Co., with bituminous concrete 1.536 mi. Richland Co.; surface treating 20.03 mil. roads in Lucas Co.; grading and building bridges on 13.666 mi. roads in Meigs and Portage Counties; grading, bridging and paving 104.5216 mi. roads in Athens, Butler, Crawford, Darke, Hancock, Hardin, Harrison, Hocking, Guernsey, Lake, Logan, Lorain, Mahoning, Medina, Miami, Morrow, Shelby, Stark, Trumbull, Wayne, Williams and Wyandotte Counties. A. V. Donaheys, dir. highways.

O., Cleveland—May 21, paving Edgewater Blvd., asphalt macadam. $40,000. S. Newman, City Hall, engr.

O., Cleveland—May 21, by Cuyahoga Co., paving Fitzwater-River Rd. $114,750. F. Lander, Court House, engr.

O., Cleveland — May 26, by Bd. Educ., grading, resurfacing, masonry, etc., Bolton School grounds. $25,000. W. R. McCormack, East 6th St. and St. Clair Ave., engr.

O., Columbus—May 20, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services, sewers and paving 3,160 ft. Manhattan Ave. and Hanford St., 26 ft., brick $66,757, asphalt $55,552; [illegible] ft. Pomola Ave., 24 ft., brick $6,092, asphalt $4,761.

O., Lisbon—July 1, by Columbiana Co., grading 3.2 mi. Wellsville-Salineville Rd., 18 ft., Yellow Creek Twp. $39,000. L. C. Kirk, Lisbon, engr.

O., Massillon—May 20, by Bd. Control, paving Wallace, High, Commonwealth and Jarvis Sts., 15,394 sq.yd. brick, sheet asphalt, asphaltic concrete, warrenite, bitulithic, willite or rein.-con. C. E. Rice, city engr. Noted Jan. 10 and May 8.

Ind., Crown Point—May 19, by Comrs. Lake Co., grading and gravel surfacing 11 mi. W. J. Fulton Rd., 30 ft. $170,000. Noted May 8.

Ind., Indianapolis—May 17, by Comrs. Marion Co., paving W. O. Lee Rd., 30,624 sq.yd. concrete on concrete. $78,200. Noted May 8.

Ind., Rushville—June 3, by City Council, paving 0.5 mi. Park Blvd., alternate bids on penetration, asphalt, brick and wood block. A. L. Stewart, Rushville, engr

Michigan—May 20, by State Hy. Dept., at office Comrs. Kent Co., Grand Rapids, grading 4.836 mi. State Trunk Line Rd. 13-50, Sect. C, 55,988 cu.yd. excav., etc.

Michigan—May 20, by State Highway Dept. at office of Comrs., Schoolcraft Co., (Manistique), State Trunk Line Rd. 27-2 Sect. A, 17,166 cu.yd. earth excav., 3,31[illegible] lb. steel, 32,698 sq.yd. 2 course gravel. G. C. Dillman, ch. engr.

Michigan—May 20, by State Highway Dept., at office Comrs. Saginaw Co., Saginaw, widening State Trunk Line Rd. 24-27 Sect. B, 22,215 sq.yd. 2½ sheet asphalt on 7 in. concrete, 13,660 cu.yd. earth excav., (5,168 bbl. cement furnished by state); State Trunk Line Rd. 10-28, 12,904 sq.yd. asphalt on concrete, 8,507 cu.yd. earth excav. (2,991 bbl. cement furnished by state). G. C. Dillman, ch. engr.

Michigan—May 21, by State Hy. Dept. at office Comrs. Hillsdale Co., grading and surfacing 3.174 mi. State Trunk Line Rd. 34-2, Sects. B, C, D and E, 17,243 cu.yd. excav., 34,746 sq.yd. concrete pavement, etc.

Michigan—May 21, by State Hy. Dept. at office Comrs. Muskegon Co., grading and surfacing 1.045 mi. State Trunk Line Rd. 11-19, 6,916 cu.yd. excav., 21,486 sq. yd. concrete pavement.

Michigan—State Highway Dept., at office of Comrs. St. Joseph Co., (Centerville), taking bids and opens same about May 22. State Trunk Line Rd. 60-3, 51,826 cu.yd. excav., 93,717 sq.yd. concrete or bituminous macadam. Cement furnished by state if concrete. G. C. Dillman, ch. engr.

Michigan—May 22, by State Hy. Dept. at office Comrs. Lapeer Co., Lapeer, grading and surfacing 0.68 mi. State Trunk Line Rd. 36-5, Lapeer Co., 5,667 cu.yd. excav., 12,448 sq.yd. asphalt, concrete or bituminous concrete, 786 lin.ft. 8 in. and 1,606 ft. 10 in. storm sewer.

Michigan—May 23, by State Hy. Dept. at office Comrs. Huron Co., Bad Axe, grading and surfacing 0.41 mi. State Trunk Line Rd. 19-8, Sect. B, concrete, bituminous concrete or sheet asphalt.

Michigan—May 23, by State Hy. Dept., at office Comrs. St. Joseph Co., Centreville, grading and surfacing 8.746 mi. State Trunk Line Rd. 60-3, 51,826 cu.yd. excav., 93,717 sq.yd. bituminous macadam or 7 in. concrete surface. G. C. Dillman, Lansing, ch. engr.

Michigan—May 26, by State Hy. Dept. at office Comrs. Washtenaw Co., Ann Arbor, grading and surfacing 5.2 mi. State Trunk Line Rd. 92-2, 3,763 cu.yd. excav., 6,892 sq.yd. concrete pavement, 2,162 lin.ft. storm sewer. G. C. Dillman, Lansing, ch. engr.

Michigan—May 26, by State Hy. Dept. at office Comrs. Van Buren Co., Paw Paw, grading and surfacing to 20 ft. 2.628 mi. Federal Aid Project 101, Sec. C, Van Buren Co., 31,410 sq.yd. concrete, bituminous concrete, or sheet asphalt, also 3.187 mi. State Trunk Line Rd. 17-14, 37,400 sq.yd. concrete, bituminous concrete or sheet asphalt, G. C. Dillman, ch.engr.

Michigan—May 27, by State Hy. Dept. at office Comrs. Otsego Co., Gaylord, grading and gravel surfacing 4.276 mi. State Trunk Line Rd. 32-7, Sect. B, 24,794 cu.yd. excav., 40,572 sq.yd. gravel. G. C. Dillman, Lansing, ch. engr.

Ill., Galesburg—May 20, by Bd. Local Impvts., grading, paving, etc., West North

Streets and Roads (Continued)

St., 5,034 sq.yd. vitr. brick, 3,462 lin.ft. combined curb and gutter, 2,400 cu.yd. excav., etc. A. L Richey, City Hall, engr. Noted Apr. 17.

Ill., Quincy — May 20, by Bd. Local Impvts., asphalt paving. W. P. Bushnell, city engr.; adv. E. N.-R. May 15.

Ill., Vandalia—May 29, by City Clerk, paving 5th St., 1,938 cu.yd. excav., 11,432 cu.yd. brick, concrete, rock asphalt or Warrenite, 6,870 lin.ft. concrete curb, etc. $46,865. A. H. Beard Eng. Co., 616 Title Guaranty Bldg., St. Louis, Mo., engrs.

Wis., Horicon—May 27, by E. H. Higbee, city clk., concrete paving, etc., Classon, East Lake, Main Highway, Bridge and Barstow Sts., 18,300 sq.yd. concrete with or without reinforcement, 8,600 cu.yd. earth excav., 11,260 lin.ft. concrete curb and gutter, also 3,950 ft. 10- to 15-in. storm sewers. E. B. Parsons, Jefferson, engr.

Wis., North Milwaukee—May 20, by W. E. Chase, city clk., paving 22,661 sq.yd. with one course concrete, vibrolithic concrete, bituminous concrete or sheet asphalt, grading 15,102 cu.yd. on Webster Blvd., 34th, 33rd, 32nd and 38th Sts., from Hampton Rd. to Highland and from Adams to Ruby Sts. H. C. Webster, 216 West Water St., Milwaukee, engrs.

Wis., Waukesha—May 26, by Bd. Pub. Wks. paving Madison St. and Bway., 8,750 sq.yd. one course concrete alternate bid with and without reinforcing, 1,290 lin.ft. concrete curb and gutter, 8,200 cu.yd. earth excav., etc. $25,000. W. G. Caldwell, 735 Grand Ave., engr.

Wis., Waupaca—May 31, by F. A. Houseman, city clk., paving 23,000 sq.yd. various streets, one course concrete, brick, asphalt on concrete or asphalt on macadam. Private plans.

Ia., Des Moines — May 19, by auditor Polk Co., gravel surfacing 17 mi. highways, 26 ft., 17,000 cu.yd. gravel. To exceed $25,000. F. O. Laing, co. engr.

Minnesota—May 27, by State Hy. Dept., St. Paul, 5.4 mi. State Project 1-26, Federal Aid Project 321, south of Owatonna, 57,444 sq.yd. concrete paving; 5.5 mi. State Project 8-42, Federal Aid Project 302, between Lengby and east Polk Co. line, 132,611 cu.yd. excav.; 13 mi. State Project 14-23 Federal Aid Project 355, between Winthrop and West Sibley Co. line, 141,000 cu.yd. excav.; 6 mi. State Project 15-30, Div. C, Federal Aid Project 341, between Winthrop and south Sibley Co. line, 88,000 cu.yd. excav., Bridge 4181, 23 ft., and Bridge 4182, 30 ft., concrete; 14.7 mi. State Project 64-22, Federal Aid Project 353, between Rothsay and Barnesville, 194,000 cu.yd. excav., 6 concrete bridges from 30 ft. to 46 ft. State Highway Dept., St. Paul, engrs.

Minn., Duluth—May 25, by H. Fischer, city comr., paving Gladstone St., 11,260 sq.yd. concrete, 7,370 ft. concrete curb, etc., $64,860; 1.5 mi. East 4th St., 62 ft., grading for street railway track extension, 32,700 cu.yd. earth and 6,400 cu.yd. rock excav. J. Wilson, city engr.

Minn., Grand Rapids—May 20, by T. Erskine, aud. Itasca Co., improving 18 mi. Cut Foot Sioux Forestry Project, gravel surface, 3,620 cu.yd. stripping, load and haul to mile point 7,996 cu.yd., beyond mile point 47,578 cu.yd. $26,000. H. A. LeSueur, Grand Rapids, engr.

Minn., Le Sueur Center—May 20, by S. McMillan aud. Le Sueur Co., Job 2304, State Rd. 13, 49,329 cu.yd. excav., 47,515 cu.yd. overhaul, etc.; Job 2305, State Rd. 20, 42,340 cu.yd. excav., 70,100 cu.yd. overhaul, etc. $34,000. R. F. Nichols, Le Sueur Center, engr.

Minn., St. Paul—May 20, by H. W. Austin, city purch. agt., paving East 7th St. between Hope St. and Phalen Ave., 18,412 sq.yd. resurfacing with 3-in. sheet asphalt, 850 sq.yd. 3-in. sheet asphalt with new 6-in. concrete base; curbing various streets, 26,972 lin.ft. straight concrete curb and 1,924 lin.ft. radius curb. G. M. Shepard, city engr.

Missouri—May 20, by State Hy. Dept., Jefferson City, grading and graveling 284,318 sq.yd. roads in Mississippi, Scotland, Crawford, Morgan, Cooper, Cedar, St. Charles, Wayne and Perry Counties; concrete surfacing 50,017 sq.yd. road, Platte Co.; grading and chat surfacing 5,738 sq.yd. road, Dade Co.; grading roads in Platte, Wayne, Bollinger, Carter, Chariton, Putnam and Sullivan Counties, 210,774 cu.yd. earth and 2,669 cu.yd. rock excav. B. H. Piepmeier, state highway engr.

Tex., Bay City—May 23, by W. C. McNabb, judge Matagorda Co., grading and shell surfacing 4.89 mi. State Highway 60, Federal Aid Project 428, 15 ft. $44,760. Noted Apr. 24.

Tex., Carrizo Springs—June 3, by W. H. Davis, judge Dimmitt Co., grading and surfacing with shell and gravel 12.58 mi. State Highway 85, State Aid Project 483, 16 ft. $76,011. J. G. Lott, co. engr. Noted May 8.

Tex., Marshall—Taking bids permanent paving various streets. $200,000. M. Ransey, city engr.

Colo., Denver—May 22, by Dept. Impvts. and Parks, paving 20 mi. North Denver Surfacing Dist. 7, gravel loam and sand. $118,953.

Utah—May 20, by State Bd. Comrs., Salt Lake City, grading and gravel surfacing 12.04 mi. highway in Millard Co. between Scipio and Holden, Federal Aid Project 67, 24,400 cu.yd. excav., 24,380 cu.yd. gravel, etc. H. G. Means, ch. engr.

Wash., Everett—May 19, by Comrs. Snohomish Co., grading and graveling 6.9 mi. Woodinville Cut-off. $67,000. R. D. Alverson, Everett, engr.

California — June 2, by State Highway Comn., Sacramento, improving 8 mi. highway, between point ¾ mi. north of Colfax and Gold Run, Placer Co., 336,200 cu.yd. excav., 640,850 sq.yd. overhaul, 1,530 cu.yd. structure excav., 1,260 ft. 18 in. and 3,050 ft. 24 in. corrugated metal pipe; 4.3 mi. from Greenville to Livermore, Alameda Co., 12,000 cu.yd. roadway embankment, 8,000 sta.yd. overhaul, 3,000 yd. mi. overhaul, 2,910 cu.yd. concrete shoulders, etc. R. M. Morton, state highway engr. Noted May 1.

Calif., Salinas—City Council taking bids improving San Luis St., 82,558 sq.ft. grading, 82,558 sq.ft. 5 in. concrete, 3,667 lin.ft. concrete curb, etc. H. Cozzens, city engr. Noted May 1.

Calif., San Jose — June 2, by Supervs. Santa Clara Co. grading and graveling 6,400 lin.ft. Bodfish Mill Rd., 20 ft., 6 in. gravel, 53,600 cu.yd. excav. Former bids rejected. R. Chandler, co. surv. Noted Apr. 24.

Quebec—May 17, by J. L. Boulanger, deputy minister highways, Parliament Bldg., Quebec, 44,282 ft. Main Rd., 4,900 ft. St. Charles Montee Rd., 10,146 ft. St. Jean Montee Rd., 11,655 ft. Cote St. Remi Rd., St. Genevieve Parish, Jacques Cartier Co. A. Gratton, 6 St. James St., Montreal, div. engr.

Quebec — May 23, by J. L. Boulanger, deputy minister Dept. Pub. Highways, Quebec, 12.125 mi. St. Bruno-Robertval-St. Bruno Rd. in villages of St. Bruno and Herbertville, $35,000, graveling 36,600 ft. Levis-Rimouski Rd., in Notre Dame du Portage, $80,000. A. Fraser, Quebec, engr.

Ont., Ottawa — May 27, by Ottawa Suburban Rds. Comn., Carling Ave., 1½ mi. asphalt on Bowesville Rd. $35,000. A. K. Hay, c/o owner, engr.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, May 7, asphalt paving Lott Ave., from Borough Asphalt Co., 1301 Metropolitan Ave., $3,587, 48th St., from M. J. O'Hara Contg. Co., 717 65th St., $3,420, 64th and 81st Sts., from Cranford Co., 52 9th St., $8,956 and $9,616 respectively; grading, curbing and flagging New York Ave., from F. Persicano, 350 Fulton St., $1.802, Rockaway Parkway, etc., from Harrison & Bernhardt, Central Ave., $11,043, 16th Ave., from Gallo Contg., 745 Dean St., $6,892, 46th St., from C. Bennett Contg. Co., 44 Rutland St., $15,054. Noted May 1.

N. Y., Buffalo—Commissioner Pub. Wks., May 1, paving with **(a)** asphalt **(b)** brick **(1)** West Utica St., 5 ft. wider on each side **(2)** Trenton Ave. **(3)** Castle Pl. **(4)** East Amherst St. **(5)** Hastings St. **(6)** Iowa Ave. **(7)** Kirkpatrick St. **(8)** Melrose St. **(9)** Sheffield Ave. **(10)** Theodore St. **(11)** Woodside Ave., from H. P. Burgard Co., Fillmore Ave., **(a1)** $7,885 **(a4)** $44,121 **(a5)** $35,071 **(a10)** $33,551; Rock Asphalt & Constr. Corp., Morgan Bldg., **(a2)** $12,744 **(a3)** $13,246 **(a6)** $14,856 **(a7)** $9,440 **(a8)** $11,055 **(a9)** $41,852 **(a11)** $18,926; B. F. Spire 24 Colonial Circle, **(b7)** $10,500; Erie Contg. Co., Morgan Bldg., **(b8)** $12,287. Noted Apr. 24.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., May 5, from Peace Bros. Inc., 57 North Laurence St., Flushing, grading, curbing and laying sidewalks, etc. on Lewis Ave. $8,940, 55th Ave. $5,770, grading sidewalk space, setting curb, etc. on 58th St. $1,577; from Kennedy & Smith, 93 Amity St., Flushing, grading, curbing and laying sidewalks, etc. on Merritt St. $11,914, 89th Ave. $11,916; from J. J. O'Brien, Jr., William St., Jamaica, grading sidewalk space in 101st St. $1,488; from Highway Impvt. & Repair Co., 501 Bloomfield Ave., Montclair, N. J., grading, laying sidewalks and asphalt paving Edgemere Ave. $70,475, Hancock St. $6,875; from J. Condon, 341 Cornelia St., Brooklyn, grading, etc. 4th Ave. from Astoria to Vandeventer Aves. $2,182, grading and curbing 4th Ave. from Vandeventer to Grand Aves. $7,810. Noted May 1.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., May 9, granite block repaving 10th Ave., from J. Meehan & Son, 74 Cortlandt St., $274,548, West 180th St., from Asphalt Constr. Co., 208 Bway., $26,606; grading, curbing and flagging West 184th St., etc., from J. McCarthy, 551 Exterior St., $4,164. Noted May 8.

New Jersey—State Hy. Dept., Trenton, May 5, concrete paving 5,222 sq.yd. Route 16, Sect. 8, Harlinger cut-off, Somerset Co., (includes small span bridge), from G. Van Keuren, 76 Montgomery St., Jersey City, $45,695. Noted Apr. 24.

Pa., Altoona—City Council, 35,121 sq.yd. pavement on 18 streets, from B. L. McKillip, 521 Pine St., Hollidaysburg, $117,607.

Pa., Phila. — Bureau Highways, Dept. Pub. Wks., City Hall, 10,800 sq.yd. redressed granite block on Frankford St., also furnishing 1,800 tons asphalt surface and 1,400 tons binder, from Union Paving Co., 30th and Lancaster Sts., $49,086 and $18,096 respectively; 17,499 tons crushed stone from Birdsboro Stone Co., Land Title Bldg., $49,436; 5,451 tons crushed slab from J. Meehan & Sons, 916 West Dakota Ave., $14,669.

Maryland—State Rds. Comn., Baltimore, May 6, paving with sheet asphalt 0.85 mi. highway in Frederick Co., Contr. F-78, from Amer. Paving & Contg. Co., Montebello Ave., Baltimore, $59,174; 2 mi. in Baltimore Co., Contr. B-61, from F. B. Carrozza, 412 Keyser Bldg., Baltimore, $61,843. Noted Apr. 24.

Md., Baltimore—Bd. Awards, May 7, grading and paving streets, 22,200 sq.yd. asphalt, Contr. 256-OANA, from Amer. Paving Co., Montebello Ave., $93,829. Noted May 1.

Alabama—State Hy. Dept., Montgomery, grading and gravel surfacing 4.989 mi. Alexander-Jackson Gap Rd., 18 and 26 ft., Federal Aid Project 78-B and C, Tallapoosa Co., from Stanley & Singer Constr. Co., Lafayette, $119,604. Noted Apr. 17.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, grading 5.23 mi. Lenoir-Knox Co. line Rd., 18 ft., Federal Aid Project 207, Loudon Co., from R. L. Peters Constr. Co., Holston Bank Bldg., Knoxville, $53,766; grading and bridging 5.75 mi. Bells-Madison Co. line Rd., 16 ft., Federal Aid Project 165, Crockett Co., from D. M. Sparkman & Co., Dyersburg, $47,048; concrete surfacing 5 mi. Manchester-Beech Grove Rd., 9 ft., State Aid Project 151-B, Coffee Co., from Citizens Eng. & Contg. Co., Savannah, Ga., $65,872; gravel surfacing 9.8 mi. Newport-North Carolina State line Rd., 16 ft., Federal Aid Project 23, Cocke Co., from Brown Constr. Co., Chattanooga, $33,992; bituminous macadam on limestone 5.35 mi. Cookeville-Overton Co. line Rd., 16 ft., Putman Co., from Foster Creighton Constr. Co., 4th and 1st Natl. Bank Bldg., Nashville, $165,710; one 100 ft., four 30 ft. and two 40 ft. steel spans over Collins River, one 26 ft. span over Mud Creek, Federal Aid Project 202, Warren Co., from Montgomery & Parker Constr. Co., Rockport, Ind., $47,112. J. G. Creveling, highway comr. Noted May 1.

O., Cleveland—Improving with **(a)** asphalt **(b)** brick **(1)** Hough Ave. **(2)** East 33rd St. **(3)** Angelus Ave. **(4)** East 112th St. (1 to 4 inclusive) involes 8,860 lin.ft. stone curb and 4 in. drain tile gutter, 13,370 sq.yd. vitr. brick, 16,670 sq.yd. asphalt, etc. **(5)** Folk Ave. **(6)** Huron Rd. **(7)** East 55th St. from Woodland to Grand Aves. **(8)** East 55th St. from Woodland to Scovill Aves. **(9)** Raymond and Heath Aves. (5 to 9 inclusive) involves 1,130 cu.yd. earth excav., 15,775 sq.yd. asphalt **(10)** Mapleside Ave. **(11)** East 137th St. **(12)** East 55th St. **(13)** East 135th St. (10 to 13 inclusive) involves 5,875 lin.ft. curb, 6,075 lin.ft. drain tile gutter, 19,450 sq.yd. vitr. brick, 13,350 sq.yd. asphalt, etc., from Bentley Bros., Union Bldg., **(a1)** $8,427; Baldwin Bros., 4500 Euclid Ave., **(2)** $7,799 **(b4)** $21,950 **(b5)** $7,800 **(11)** $7,449 **(13)** $43,224; Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, **(a3)** $43,664; Rieley Bros., The Arcade, **(b3)** $52,961; Enterprise Paving & Constr. Co., 8444 Bway., **(a4)** $18,174; Gould & Maybach, 16311 Saranec Rd., **(a5)** $6,477; Cleveland Trinidad Paving Co., The Arcade, **(a6)** $23,717 **(a7)** $28,538 **(a8)** $20,839 **(12)** $54,008; A. M. Pejsa Paving Co., Derbyshire Rd., **(a9)** $4,547; River Constr. Co., Mapleside Ave. **(10)** $2,373. Noted Apr. 24.

Streets and Roads (Continued)

Michigan — State Hy. Dept., Lansing, shaping and gravel surfacing 4.994 mi. State Trunk Line Rd. 25-12, B, Chippewa Co., and 13.284 mi. State Trunk Line Rd. 25-15, B and C, Chippewa Co., both 16 ft., from Hill & Belknap, East Tawas, $32,245 and $88,829 respectively; 1.060 mi. State Trunk Line Rd. 25-2, from M. J. Bacco, Iron Mountain, $6,660.

Michigan — State Hy. Dept., Lansing, from S. J. Groves & Sons Co., 120 Manhattan Bldg., Duluth, Minn., grading and gravel surfacing 5.01 mi. Federal Aid Project 109, Marquette Co., 18,176 cu.yd. excav., 47,177 sq.yd. gravel, $58,271; from Hill & Belknap, East Tawas, 12.912 mi. State Trunk Line Rd. 25-5, Sects. A and B, Alger Co., one course gravel, $86,391, 5.932 mi. State Trunk Line Rd. 25-7, Schoolcraft Co., one course gravel, $93,268, 14.185 mi. State Trunk Line Rd. 25-3, Schoolcraft Co., gravel $91,832, 4.002 mi. State Trunk Line Rd. 25-13, Schoolcraft Co., gravel $61,981. Noted Apr. 17.

Ind., Wabash — Wabash Co., May 6, hardsurfacing 18,078 ft. Lee Carr Rd., 18 ft., from Pike Constr. Co., Wabash, $88,560, engrs. est. $94,005; concrete surfacing 9,502 ft. Albert Betchold Rd., 18 ft., from Brumfield & Son, Wabash, $42,000, engrs. est. $49,412, 16,261 ft. Thomas Betchold Rd., 18 ft., from Kennedy Constr. Co., Wabash, $61,700, engrs. est. $74,557; 19,861 ft. Huffman Rd., 18 ft., from Northern Constr. Co., Wabash, $100,500, engrs. est. $103,379. Noted May 1.

Ind., Warsaw—Kosciusko Co. hardsurfacing 26,941 ft. Turner Rd., 18 ft., from E. A. Gast, Warsaw, $116,500. Noted Apr. 24.

Wisconsin — State Hy. Comn., Madison, grading, etc., Portage-Kilbourn Rd., Sect. B, from S. J. Groves, 303 Globe Bldg., Minneapolis, Minn., 17,999 cu.yd. earth excav. $0.40 114,165 cu.yd. marsh borrow $0.22, 15,345 cu.yd. top dressing $0.85, etc., total $60,628; Kilbourn-Portage Rd., Sect. C, Project 360, Columbia Co., from Monad Constr. Co., Wauwatosa, 37,939 cu. yd. earth excav. $0.35, 2,112 cu.yd. loose rock $1, 3,161 cu.yd. solid rock $1.75, 11,244 cu.yd. crushing gravel $1.10, 7,453 cu. yd. top dressing and 1,043 cu.yd. borrow top dressing, both $2.50, etc., total $49,377. Noted Apr. 24.

Montana—State Highway Comn., Helena, 5.6 mi. crushed stone surfacing, Project 191, section Pablo-Polson Rd., from Pioneer Constr. Co., Bozeman, $41,000; bridge over Pablo Canal, from J. Item, Helena, $6,600. Noted Apr. 24.

Missouri—State Hy. Dept., Jefferson City, May 6, from Springfield Constr. Co., Springfield, grading 3.463 mi. Lamar-Minden Mines Rd., $9,565, 4.006 mi. of above road, $8,866, both 26 ft., Barton Co.; from Thomas & Johnston, Doniphan, grading 2.37 mi. road from Fairdealing east and west, $8,662, 2,756 mi. Doniphan-Fairdealing Rd., $11,594, both 24 ft., Ripley Co.; from Jones & Harlan, West Plains, grading 3.625 mi. Fordland-Seymour Rd., 24 ft., Franklin Co. $9,134, 2.652 mi. Dunn-Cabool Rd., 30 ft., Texas Co. $20,900, 2,509 mi. Cabool-Houston Rd., 30 ft., Texas Co., $16,157; from Haller & Davis, Boonville, grading 1.25 mi. road from Washington east, Franklin Co. $11,011; from L. Rich Constr. Co., East St. Louis, Ill., grading 3.12 mi. St. Louis-Springfield Rd., St. Louis Co., $46,858, concrete paving 3.12 mi. St. Louis-Springfield Rd., 18 ft., St. Louis Co., $43,444; from Tibbetts & Tibbetts, Olathe, Kan., grading 4.297 mi. Kansas City-St. Louis Rd., $27,585, 4.981 mi. Kansas City-St. Louis Rd., $26,329, concrete surfacing 4.297 mi. Kansas City-St. Louis Rd., 18 ft., $133,862, 4.981 mi. Kansas City-St. Louis Rd., 18 ft., $155,170, all Callaway Co.; from E. C. Johnson, Carrollton, asphalt surfacing 1.25 mi. road from Washington east, 18 ft., Franklin Co., $15,576; from Reynolds-Blocker & Crews, Caruthersville, gravel surfacing 1.822 mi. road from Risco, east, 16 ft., New Madrid Co., $38,114; from F. Kersting, Jefferson City, graveling 2.835 mi. road from Rolla south, 12 ft., Phelps Co., $28,262; from Kiefner & Geile, Perryville, graveling 1.8 mi. road from St. Marys south, 16 ft., St. Genevieve Co., $27,738; from C. W. Knox, Jackson, graveling 1.268 mi. road from Gravel Hill west, 12 ft., Cape Girardeau Co., $10,485; from Easley Bros., Aurora, graveling 3.453 mi. road from Stockton east and west, $16,002, 1.074 mi. road from Stockton east, $14,530, both 12 ft., Cedar Co.

Mo., St. Louis — Bd. Pub. Serv., **(e. e. means engrs. est.)** from Trinidad Asphalt Mfg. Co., Title Guaranty Bldg., reconstructing 8,895 sq.yd. Bell Ave., asphalt on concrete, $37,086, e. e. $49,200; from Webb-Kunze Constr. Co., 5927 Fyler Ave., improving Sulphur Ave., 1,725 lin.ft. granite curb, 1,155 cu.yd. earth excav., 3,125 sq.yd. asphalt, $17,663, e. e. $18,500; Central Paving & Constr. Co., 6161 Maple Ave., grading, granite curbing and asphalt paving 2,435 sq.yd. Ohio St. $10,222, e. e. $14,000, 2,650 sq.yd. Beacon Ave., $10,864, e. e. $14,700, removing approximately 21,380 sq.yd. granite block and laying 21,455 sq.yd. asphalt on concrete, etc. on Chouteau and Manchester Sts., $50,961, e. e. $67,500; from Granite Bituminous Paving Co., Ry. Exch. Bldg., grading, granite curbing and warrenite paving San Francisco St. $25,889, e. e. $25,000, 4,885 sq.yd. Margaretta St. $26,384, e. e. $25,900, Arlington St. $15,325, e. e. $15,100, 1,785 sq.yd. Wyoming St. $9,908, e. e. $9,600. Noted Apr. 17.

Tex., Memphis—Hall Co. grading and bridging 5.5 mi. State Highway 18, State Aid Project 473-B, 557 cu.yd. concrete, 43,009 cu.yd. roadway and 8,755 cu.yd. borrow excav., 56,009 lb. reinforcing steel, from Smith Bros. Inc., Amer. Exch. Bank Bldg., Dallas, $37,820. Engrs. est. $41,390. Noted Apr. 17.

Colo., Denver—Grading, surfacing, concrete curbs and gutters in South Side Impvt. Dist. 17, from Monaghan & Cunningham, 1710 Market St., $81,288; in East Side Impvt. Dist. 10, from Western Constr. Corp., 33rd and Blake Sts., $45,785.

Wash., Seattle—Bd. Pub. Wks., May 2, paving East 40th St., et al., from J. B. Covello, 1510 16th St., S., 3,020 sq.yd. 7 in. concrete $1.85 per sq.yd., 19,860 sq.yd. 6 in. concrete $1.65, 7,400 ft. concrete curb $0.35, etc., total $44,758. Engrs. est. $48,830.

California—State Highway Comn., Sacramento, 9.4 mi. grade widening, Orange Co., from Williams & Singletary, Colton, $26,034; 8.3 mi. between Vacaville and Batavia, Solano Co., 0.4 mi. concrete and 7.9 mi. asphaltic concrete, from Force & Currigan, Sherlock Bldg., Portland, Ore., $218,345. Noted Apr. 17.

Calif., Bakersfield—Kern Co. improving Rd. 269, extension of 4th St. in Taft (1) contractor furnishing materials and labor, concrete (2) county furnishing paver, four 3½ ton trucks with driver, operator and self propelled roller (3) county providing all materials and delivering paving material from county plant to point of work (4) contractor furnishing material for asphaltic concrete base with asphalt surface, county to furnish roller (5) same as 4 except that surface be finished with Willite, from F. W. Nighbert, Bakersfield, (1) $36,669 (2) $32,795 (3) $9,000; California Constr. Co., 58 2nd St., San Francisco, (5) $29,600.

Calif., San Fernando—Improving Griswold Ave., etc., from Griffith Co., Railway Bldg., Los Angeles, lighting system $8,500, grading and paving, 4 in. asphaltic concrete, curbs and walks, total $49,900.

CONTRACTS AWARDED

Massachusetts—Dept. Pub. Wks., Div. Highways, Boston, Paving Daniel Webster Highway from Lowell to Chelmsford, granite block and rein.-con., to T. G. Jewitt, Jr., Inc., 37 7th St., New Bedford, $186,244; from Chelmsford to Tyngsboro, bituminous macadam, to J. R. Newell Co., Uxbridge, $184,650. Noted Apr. 17.

N. Y., Brooklyn—Park Bd., Municipal Bldg., New York, repairing sheet asphalt pavements on park roads to Sicilian Asphalt Paving Co., 41 Park Row, New York, $14,075; grading, curbing and paving with sheet asphalt on concrete Fort Hamilton Parkway, to Brooklyn Alcatraz Asphalt Paving Co., 407 Hamilton Ave., $113,278. Noted May 8.

N. Y., New York—Park Bd., Municipal Bldg., asphalt paving roadway of Central Park, to W. J. Fitzgerald, 547 West 45th St., $27,938; paving and repaving with asphalt mastic Harlem River Dr., to L. Di Minna, 2366 Lorrilard Pl., $13,400. Noted May 8.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., to Brusstar Constr. Co., Harlem River and 150th St., grading, curbing, laying sidewalks and paving East 176th St. $10,220, bituminous concrete paving East 169th St. $18,793, Anderson Ave. $41,840; to Interboro Asphalt Co., 2306 Creston Ave., sheet asphalt paving West 195th St. $116,887; to Interstate Contg. Co., 154 Nassau St., grading, curbing and laying sidewalks on Matthews Ave. $36,549, Havemeyer Ave. $11,841, Herschell St. $13,415; to T. DeRoma, 33 Evelyn Pl., grading, curbing and laying sidewalks on Andrews Ave. $35,350; to Estates Contg. Co., 270 East Burnside Ave., grading, curbing and laying sidewalks on Faraday Ave. $21,615; to M. DelBalso, 660 East 221st St., grading, curbing and laying sidewalks on Popham Ave. $6,019; to O'Connell & Strada, 3318 Olinville Ave., grading, etc. on Watson Ave. $14,240. Noted May 1.

N. J., Cape May—Cape May Co. concrete paving ½ mi. Sect. 2, Roosevelt Blvd., to Monihan & Hall. Ocean City. $25,730.

N. J., Newark—T. L. Raymond, dir. Pub. Wks., to J. B. Gilligan-Casey Co. 919 Broad St., paving 18th Ave., reclipped granite block, $26,636; to Standard Bitulithic Co., 50 Church St., New York City, paving Court St., reclipped granite block, $22,749; curbing, flagging and sheet asphalt paving Sunset Ave., $5,706; Price Grove Terrace, $16,510; to City Owned Asphalt Plant, sheet asphalt resurfacing Conklin Ave., $3,050; to Doriety Contg. Co., 186 Ridge St., grading, curbing and flagging 10th St., $5,943, 11th St., $6,892. Noted Apr. 24.

Pennsylvania—State Hy. Dept., Harrisburg, rein.-con. paving: 75,500 sq.yd. road Butler Co., to R. H. Cunningham & Sons, Turtle Creek, $393,701; 50,197 sq.yd. Route 88, Sect. 3, Wayne and Concord Twps., Erie Co., to H. E. Bunce, Olean, N. Y., $247,151; 58,400 sq.yd. Route 189, Valley and Cowanshannock Twps., Armstrong Co., to L. H. Hileman Constr. Co., New Kensington, $324,755; 55,650 sq.yd. Route 47, Sect. 2, St. Clairsville Boro, Bird, King and East St. Clair Twps., to W. C. Guncheon & Co., Masonic Temple, Harrisburg, $298,217; 15,188 sq.yd. Route 52, Conemaugh Twp., Somerset Co., to James & Nicholson Co. Inc., Johnstown, $78,954. Noted Apr. 10.

Maryland—State Rds. Comn., Baltimore, concrete paving 1.95 mi. highway in Kent Co., Contr. K-24, to Old Line Constr. Co., Chestertown, $32,805, 0.52 mi. in Talbot Co., Contr. T-17, to A. Farmer, St. Michaels, $17,200, 0.32 mi., Calvert Co., Contr. C-18, to Taylor & Truman, Annapolis, $11,693, 1.39 mi. in Garrett Co., Contr. G 27-A, to Monongahela Constr. Co., Fairmount, W. Va., $44,695; macadam resurfacing 0.95 mi. in Baltimore Co., Contr. B-50, to W. G. Sucro, Calvert Bldg., Baltimore, $12,835. Noted Apr. 24.

Md., Baltimore—Bd. Awards, redressing granite block and granite block liners during 1924, to J. J. Miller, New Amsterdam Bldg., $18 and $45 per M. Noted Apr. 24.

West Virginia—State Rd. Comn. Charleston, grading 5.64 mi. Reedsville-Monongalia Co. line Rd., 18 ft., Monongalia Co., to Sterling Constr. Co., Akron, $74,950, 3.7 mi. Northwestern Turnpike, 18 ft., Harrison Co., to F. M. Yates & Co., Smithfield, $52,708, 6.36 mi. Rock Camp-Peterson Rd., 18 ft., Project 3304, Monroe Co., to R. W. Brown & Co., Princeton, $70,061, 9.89 mi. Fleming-Dunlow Rd., 18 ft., Projects 3190 and 3202-B, Wayne Co., to C. E. Price, 2750 Division St., Huntington, $169,928; gravel surfacing 8.7 mi. Moorefield-Grant Co. line, 18 ft., Project 3148, Hardy Co., to N. W. Harper, Franklin, $52,429. Noted Mar. 27.

W. Va., Charlston—Kanawha Co., oil asphalt paving 1.3 mi. Campbells Creek Rd., Malden Dist., to J. O. McDermott, Ambrosia, $28,194, grading 6 mi. Dunbar-Sattes Rd., to Fayetteville Constr. Co., Fayetteville, $62,589.

W. Va., West Union — Doddridge Co. macadam paving 1 mi. Robinson Fork Rd., 18 ft., to B. Underwood, West Union, $14,904; grading 2.1 mi. Middle Island Rd., 18 ft., to Groves & Hess, Mole Hill, $24,765; 1.25 mi. Rock Run-Poverty Run Rd., 18 ft., to N. A. Hill & Co., West Union, $20,667. Noted Apr. 3.

W. Va., Williamson — Mingo Co. and State, grading and bituminous surfacing Marrowbone-Kermit Rd., Project 3298, to Sutton Constr. Co., Ashland, Ky., $95,000. Noted May 8.

W. Va., Winfield—Putnam Co., macadam surfacing 1 mi. Nitro-Poco Rd., to Smith & Vander, Nitro, $34,360. Noted Mar. 6.

North Carolina—State Hy. Comn., Raleigh, grading, concrete paving and bridging 1.35 mi. State Project 447, Lee Co., 18 ft., to C. D. Rigsbee, Durham, $40,036.

Georgia—State Hy. Dept., East Point, 7.611 mi. topsoil road, Upson Co., to Scott & Chambers, West Point, $65,915. Noted Apr. 10.

Fla., Jacksonville—Laying 3,210 sq.yd. concrete sidewalks and 37,648 sq.yd. tile sidewalks, to Morgan-Hill Co., Jacksonville, $1.49 sq.yd. Noted Mar. 13.

Fla., Tampa—Hillsborough Co., paving Henderson Blvd. and Bay to Bay Rd., Sunset Subdivision, 2 in. amesite on crushed rock, curbs and gutters, to McDonald Contg. Co., c/o R. B. Murdock, Whaley Bldg., $31,000.

Fla., Tampa—Hillsborough Co., to Cone Bros., Tampa, paving, asphalting block on rock base, Covodonga St., 7,000 sq.yd. asphalt block, 6,000 lin.ft. concrete curb and gutter, $34,750, Morrison St., 17,000 sq.yd. asphalt block, 14,600 lin.ft. concrete curb and gutter, $76,744; Azeele St., 31,000 sq. yd. asphalt block, 26,500 lin.ft. concrete curb and gutter, $146,795; Elm and Green Sts., $25,500.

Ala., Birmingham—Birmingham Electric Co. will pave 1st Ave. (between tracks) by day labor, $300,000. Jefferson Co. plans

Streets and **Roads (Continued)**

paving between gutters and car tracks. Noted Nov. 1.

Miss., Greenville—Washington Co., 60,000 cu.yd. grading Leland-Helm Rd., to T. E. Tanner and E. W. Bradshaw, Leland, $0.275 per cu.yd.

Tenn., Clarksville—Montgomery Co. will construct 12 mi. Port Royal, Ashland City, Dover and Russelville Rds., by day labor under supervision J. Selsemeyer, co. engr. $25,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, resurfacing 1.74 mi. Sect. "A" Windsor-Geneva Rd., Ashtabula, hillside brick, to Fitzgerald Constr. Co., Ashtabula, $4,744; grading, bridging and paving 0.459 mi. Sect. "F-2" Lima-Delphos Rd., Allen Co., Kentucky rock asphalt, to Spencer Stone Co., Spencerville, $11,976, 4.213 mi. Sect. "B" Youngstown-Conneaut Rd., Ashtabula Co., asphalt macadam, to T. W. Miller Co., Youngstown, $109,469, 1.095 mi. Sect. "G" Cleveland-East Liverpool Rd., 2.292 mi. and 0.939 mi. Sect. "D-2" Youngstown-East Liverpool Rd., Columbiana Co., concrete, to J. D. Paxon Co., Salem, $39,111, $81,659 and $35,391 respectively, 1.138 mi. Sect. "B-1" Wellsville-Salineville Rd., Columbiana Co., concrete, to E. A. Freshwater & Sons, Painesville, $41,600; 1.351 mi. Sect. "B" Petersburg-Unity Rd., Columbiana Co., bituminous macadam, asphalt, to R. Stone Co., 433 Amer. Bank Bldg., Lima, $52,979, 2.457 mi. Sect. "H-2" Jackson-Gallipolis Rd., Gallia Co., asphalt macadam, to W. M. Gray, 408 Fairwood Ave., Columbus, $72,959, 4.899 mi. Sect. "D" Cleveland-Burton Rd., Geauga Co., waterbound macadam, to H. L. Sharp, Kinsman, $125,776, 1.013 mi. Sect. "B" Deshler-Findlay Rd., Hancock Co., concrete, to Frost Constr. Co., Findlay, $29,230, 4.002 mi. Sect. "B" Walhounding-Newark Rd., Licking Co., rein.-con., to J. F. Stambaugh, Ada, $142,677, 1.306 mi. Sect. "U" Youngstown-New Bedford Rd., Mahoning Co., tar macadam, to E. E. Miller, Canfield, $18,066, 1.206 mi. Sect. "A" and "Larue North" Larue-Marseilles Rd., Marion Co., bituminous macadam, asphalt, to P. B. Putnam, Van Wert, $23,030, 2.59 mi. Sect. "F-2" Ravenna-Louisville Rd., rein.-con., Portage Co., to P. J. Grady, Youngstown, $72,788, 2.187 mi. Sect. "J" Painesville-Ravenna Rd., Portage Co., asphalt macadam, to Mahoning Constr. Co., Warren, $54,192, 2.53 mi. Sect. "G", 2.277 mi. Sect. "I" and 0.3743 mi. Sect. "Gilboa" Ottawa-Findlay Rd., Putnam Co., asphaltic macadam, to Ottawa Stone Co., Ottawa, $62,010, $57,279 and $11,118 respectively, 2.442 mi. Sect. "A" Fremont-Tiffin Rd., Sandusky Co., to Peerless Constr. Co., Fremont, $61,817, 1.659 mi. Sects. "R-1" and "R-2" Upper Sandusky-Bellevue Rd., Seneca Co., asphaltic macadam, to Lee Bros. & Petticord, Clyde, $35,136, 3.295 mi. Sect. "C" Fremont-Tiffin Rd., Seneca Co., asphaltic macadam, to Seneca Constr. Co., Kansas, $65,050; rein.-con. widening 5.372 mi. Sects. "R and W" Cleveland-Kent Rd., Portage Co., to A. E. Guilford Co., 320 Metropolitan Bldg., Akron, $43,803; 2 bridges on Sect. "D" Lima-Spencerville Rd., Allen Co., to P. B. Putnam, Van Wert, $6,462, concrete bridges on Sect. "G" and Sect. "F" Springfield-Washington C. H. Rd., Clark Co., to F. E. Davis, Springfield, $2,861 and $5,739 respectively. Noted May 1.

O., Akron—S. Porter, clk. Summit Co., graveling 1 mi. Botzum-Wyoga Rd., 20 ft., and 1 mi. Bath-Stow Rd., to T. L. Smith, Akron, $25,180 and $26,766 respectively, engrs. ests. $27,875 and $28,660 respectively; paving 4.1 mi. Cleveland-East Liverpool Rd., 20 ft., concrete, also Barberton Springfield Rd., asphalt, and Robinson Ave., asphalt, to T. E. McShaffrey Constr. Co., 171 South Forge St., $125,344, $60,244 and $45,217 respectively, engrs. ests. $150,269, $66,651 and $51,049 respectively. Noted Mar. 27.

O., Canton—Stark Co., (e. e. means engineers estimate), concrete curbing and paving 4.55 mi. South Canton-Massillon Rd., 20 ft., brick on concrete, to L. D. Burd Constr. Co., 1043 Spring Ave. N. E., $201,342, e. e. $225,000; 1.01 mi. Canal Fulton St., 20 ft., brick on concrete, to Elmer Vogt Paving Co., Massillon, $76,341, e. e. $80,000; Dueber Ave. extension, monolithic, to General Asphalt Paving Co., 1268 Dueber Ave., S. W., $154,187, e. e. $175,000; 2.69 mi. Shepler Church Rd., 20 ft., monolithic type, to Wise Bros. Co., Canton, $108,342, e. e. $120,000. Noted May 1.

O., Lisbon—Columbiana Co. brick resurfacing 1.047 mi. East Liverpool-Wellsville Rd., 20 ft., Liverpool Twp., to Tagenhorst & McLaughlin, East Liverpool, $79,235, engrs. est. $85,000; grading 0.55 mi. Wellsville-Salineville Rd., 20 ft., Washington Twp., to Kane Bros., Youngstown, $25,151, engrs. est. $27,000.

Ind., Greencastle—Comrs. Putnam Co., hardsurfacing 15,337 ft. C. H. Crosby Rd., 24 ft., to Pigg & Snyder, Terre Haute, $53,053. Engrs. est. $54,956. Noted May 1.

Ind., South Bend—St. Joseph Co., concrete paving 18,530 ft. Rerick Rd., 18 ft., to W. J. Nees Co., Frankfort, $84,400; 18,429 ft. Keltner Rd., 18 ft., to Seaman Constr. Co., Goshen, $87,850; Crofoot Rd., to J. C. Bontraegen, Elkhart, $103,169. Noted Apr. 17.

Michigan — State Hy. Dept., at office Comrs. Clare Co., Harrison, grading and surfacing 1.249 mi. State Trunk Line Rd. 14-37, to Hudson & Coons, Bennington, $41,024; cement furnished by State $13,800. Noted May 1.

Michigan—State Hy. Dept. at office Leelanau Co., Leland, grading and gravel surfacing 2.992 mi. State Trunk Line Rd. 22-16, D, and 3.106 mi. State Trunk Line Rd. 22-13, to Leelanau Co. Rd. Comn., Leland, $25,144 and $26,421 respectively. Noted May 8.

Michigan — State Hy. Dept., Lansing, grading and gravel surfacing 51,805 sq.yd. State Trunk Line Rd. 18-13, Midland Co., to R. H. Maxwell and G. Owens Hope, $30,541. Noted May 8.

Michigan — State Hy. Dept. at office Comrs. Ingham Co., Mason, grading and surfacing 0.723 mi. State Trunk Line Rd. 14-15, Sect. A, to Hudson & Coons, Bennington, $29,756 incl. Cement furnished by State $7,246. Noted May 8.

Michigan—R. B. Roberts Shirmer Bldg., Saginaw, engr. Saginaw Co. Rd. Comn., to A. Jeffrey, Saginaw, 4 mi. gravel on Road 36, $40,606, 3 mi. stone on Road 69, $34,344, and 4 mi. tarvia on stone on Road 55, $72,326. Noted Apr. 17.

Michigan — State Hy. Dept. at office Comrs. Monroe Co., Monroe, rejected bids Apr. 24, shaping and surfacing 4.197 mi. Federal Aid Project 50, B 2, and B 4, Monroe Co., 49,185 sq.yd. concrete. Work will be done with prison labor. Noted Apr. 17.

Mich., Detroit—Grading and paving with 3½ in. sheet asphalt on 8 in. concrete, to Detroit Asphalt Paving Co., 909 Free Press Bldg., Bulwer Ave. $15,824, Calvert Ave. $9,966, Milner Ave. $16,210, Sylvester Ave. $4,901, Torrey St. $10,141, Weitzel Court $9,362, Louis Ave. $9,084, Springwells Ave. $6,335, Walton Ave. $21,183, Hendrie Ave. $10,504; to Cooke Asphalt Paving Co., 1260 Penobscot Bldg., McPherson Ave. $25,344, Dequindre St. $46,530; to M. R. Hanna Co., 1636 Dime Bank Bldg., Byron Ave. $14,547, Grand Ave. $118,252, 14th Ave. $5,584, Griggs Ave. $14,961, Log Cabin Ave. $53,926, Princeton Ave. $38,995, Wilson Ave. $7,006. Paving alleys with one course 6 in. concrete, to C. L. Lincoln, 8074 East Canfield Ave., Alley 1940 $6,044, 1942 $4,998, 1946 $4,046, 1947 $3,861, 1948 $3,524; to R. J. Powelson Co., 6415 Iriquois Ave. 1941 $5,514, 1951 $2,901; to T. E. Currie, 909 Free Press Bldg., 1943 $4,819, 1944 $4,710, 1945 $4,018, 1948 $3,718, 1956 $4,820; to Bishop & Weir, 1305 Lafayette Bldg., 1950 $3,529, 1952 $2,819, 1955 $1,441, 1959 $913; to F. Porath, 305 Free Press Bldg., 1953 $2,321; to Otis Cement Constr. Co., 806 Hammond Bldg., 1954 $1,989, 1958 $3,148; to Building Maintenance Corp., 1620 West Lafayette Ave., 1957 $3,457.

Mich., Detroit—Paving alleys with one course concrete, to Otis Cement Constr. Co., 806 Hammond Bldg., 1,700 sq.yd. Alley 1920 $5,035; to R. J. Powelson Co., 6415 Iroquois Ave., 1,200 sq.yd. Alley 1921 $3,236, 1,400 sq.yd. Alley 1929 $3,744, 1,100 sq.yd. Alley 1933 $3,068; to J. Porath, 745 Griswold St., 1,400 sq.yd. Alley 1922 $3,555, 330 sq.yd. Alley 1937 $1,001; to C. L. Lincoln, 8074 East Canfield St., 410 sq.yd. Alley 1923 $1,256, 190 sq.yd. Alley 1930 $690, 1,200 sq.yd. Alley 1935 $3,329, 1,400 sq.yd. Alley 1936 $3,814; to T. E. Currie, 909 Free Press Bldg., 1,900 sq.yd. Alley 1925 $5,250; to Bishop & Weir, 1304 Lafayette Bldg., 1,900 sq.yd. Alley 1926 $5,143, 1,400 sq.yd. Alley 1927 $3,714, 1,200 sq.yd. Alley 1932 $3,140, and 700 sq.yd. Alley 1939 $1,970.

Mich., Detroit—Grading and paving with 3½ in. sheet asphalt on 8 in. concrete, 17,150 sq.yd. American Ave. and 18,680 sq.yd. Labelle Ave., to Detroit Asphalt Paving Co., 909 Free Press Bldg., $85,781 and $93,289 respectively.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, paving **(25-23 Douglas-Champaign means Route 25, Sect. 23, Douglas and Champaign Counties)**, to Harrison Eng. & Constr. Corp., Kansas City, Mo., 25-23 Douglas-Champaign, 25-24 Champaign nd 25-25 Champaign, $276,432; to Henkel Constr. Co., Mason City, Ia., 3-82 Morgan and 3-83 Scott, $274,400, and 2-71 and 2-72 LaSalle, $259,500; to Devine Constr. Co., Watseka, 8-18 and 8-19 Iroquois, $133,650; to Stresenreuter Bros., 3020 South Halsted St., Chicago, 25-14-1 Cumberland, $2,729; to Stevens Bros., St. Paul, Minn., 40-4 Carroll, $173,632; to Powers-Thompson Constr. Co., Joliet, 2-68, Marshall-LaSalle, $158,089, and 2-69 LaSalle, $102,366; to Hartman-Clark Bros. Co., Dwight, 4-7B, Livingston, $10,135 and 17-16A, Livingston $10,435. Grading to Phelan-Shirley Co., 306 South 24th St., Omaha, Neb., 27-4A Carroll, $42,428; to T. Ryan & Sons, Missouri Valley, Ia., 3-28A Warren-Mercer, $70,655, and 3-33A Warren, $7,282; to McAndrew & Hannahs, Keokuk, Ia. 36-11A, 36-12A and 36-13A, Adams, $158,500; to Cameron, Joyce & Co., Keokuk, Ia., 9-39A Fulton, $152,127. Noted Apr. 10 and 24.

Wis., Two Rivers—Vibrolithic concrete paving various streets, to E. J. Streu, Two Rivers, $38,613. Noted May 1.

Wis., Milwaukee—Concrete paving, etc. various alleys, to F. Bodgett, Inc., 521 Newton Ave., under specifications 1, 4 and 5 $13,180; to Parkinson Constr. Co., 322 27th St., under specifications 2, 7 and 8. $6,640, to Kroeing Constr. Co., 39th Ave. and Mitchell St., under specifications 3 and 6 $22,954. Noted May 8.

Wis., Milwaukee—Paving, etc. 29th Ave. from Pabst to Lincoln Sts., to R. Gumz, 831 13th Ave. $24,584; North Ave. from Lisbon Ave. to 53rd St., asphaltic concrete, also 3rd St. from Chestnut to Cedar Sts., asphalt resurface, to Badger Constr. Co., 97 Wisconsin St., $16,092 and $23,507 respectively. Noted May 8.

Ia., Boone—Paving various streets and alleys, 65,000 sq.yd. vibrolithic concrete, to Bryant Asphalt Paving Co., 807 Black Hawk Bank Bldg., Waterloo, $2.44 per sq.yd.

Ia., Estherville — Emmet Co., grading various roads, to O'Hanlon & Reilly, Omaha, Neb., 88,040 cu.yd. at $0.265, 34,578 cu.yd. $0.27, 30,705 cu.yd. $0.28.

Ia., Storm Lake—Paving, etc., with 6-in. rein.-con., 20,300 sq.yd. various streets, to Booth & Olson, 120 Virginia St., Sioux City, $55,242.

Minn., Hastings—R. W. Downs, aud. Dakota Co., Job 2401, State Rd. 1, 64,836 cu.yd. excav., to C. O. Engstrom, Hastings, $18,604, gravel surfacing to Marshall Concrete Tile Co., Marshall, $9,164, corrugated metal culverts to Lyle Culvert & Road Mchy. Co., 171 27th Ave. S. E., Minneapolis, $1,896, sectional concrete culverts to Elk River Products Co., Elk River, $951, monolithic culverts to F. J. Nelson, Hastings, $4,640; Job 2407, State Rd. 7, 37,793 cu.yd. excav., to D. W. Moore, 894 Edmund St., St. Paul, $10,719, monolithic culverts to R. H. Wessel, 721 Guardian Life Bldg., St. Paul, $2,052, sectional concrete culverts to Elk River Products Co., Elk River, $794. Noted Apr. 10.

Minn., St. Paul — Ramsey Co., paving, etc., Project 24-51, White Bear Rd., Whitaker St., Bald Eagle Blvd. and Park Ave., 37,000 sq.yd. asphaltic concrete, 12,000 cu.yd. earth excav., 3,350 lin.ft. concrete gutter, to W. A. Patterson, 901 Globe Bldg., $124,695; Prescott Connection between St. Croix Bridge and State Highway 3, 79,507 cu.yd. earth, 5,029 cu.yd. loose rock and 23,036 cu.yd. solid rock excav., 333,070 cu.yd. overhaul, to C. F. Sculley Equipment Co., 212 Dakota Bldg., $64,565. Noted Apr. 10 and 17.

Minn., White Bear—State Hy. Dept., St. Paul, State Project 1-36 here, between Automobile Club and Stewart Ave., 15,100 sq.yd. paving, 11,000 cu.yd. excav., 7,800 lin.ft. concrete curb and gutter, to W. A. Patterson, 901 Globe Bldg., St. Paul, $55,954 for oil asphalt. Noted Apr. 17.

Kan., Kansas City—Wyandotte Co., concrete paving 0.873 mi. Fort to Fort Rd., Federal Aid Project 102, to Rand Constr. Co., 619 Eks Bldg., $28,179. Noted Apr. 1.

Nebraska — State Hy. Dept., Lincoln, following highway work: **(P. means Project)**, to Lamoureaux Bros., 416 Arthur Bldg., Omaha, 9.78 mi. P. 2C, Otoe Co., 121,000 sq.yd. gravel, $32,670, 8.14 mi. P. 133 A, Otoe Co., 96,600 sq.yd. gravel, $34,776; to Yant Constr. Co., Omaha, 9.78 mi. P. 18, Lancaster Co., 207,000 sq.yd. gravel, $51,336; to Central Contractors, Central City, P. 19, Lancaster Co., $14,638, 2.2 mi. P. 25, Gage Co., $8,553, 4 mi. P. 122 A, Gage Co., 49,300 sq.yd. gravel, $14,149, 9.74 mi. P. 134 A, Seward Co., 120,450 sq.yd. gravel, $31,317; to Central Bridge & Constr. Co., Wahoo, 11.78 mi. P 27, Saunders Co., 68,750 sq.yd. 4 in. gravel, $13,750, and 73,600 sq.yd. 3 in. gravel, $20,608, 1.99 mi. P. 107 B, Saunders Co., 23,500 sq.yd. gravel, $6,510, grading and graveling 0.85 mi. P. 107 D, Saunders Co., grading, $850, gravel, $2,881; to Union Constr. Co., Kearney, 14.51 mi. P. 39, Lawson Co., 189,000 sq.yd. gravel, $33,453; to S. M. Aldridge Bros., Nebraska City, grading 3.59 mi. P. O. 50 D, Nance Co., 91,200 cu.yd. excav. $20,978, 4.38 mi. P. 116 B, Nemaha Co., 38,200 cu.yd. excav., $9,102, grading and graveling 5.66 mi. P. 216 A, Merrick Co., grading, $7,402, gravel to Yant Constr. Co., Omaha, $15,798; to H. A. Moseman,

Streets and Roads (Continued)

Omaha, grading 9.85 mi. P. 57, Dixon Co., 127,000 cu.yd. excav. $26,543; to Western Bridge & Constr. Co., 748 Peters Trust Bldg., Omaha, bridge on P. 71 B, Harlan Co., $5,634, and one on P. 143 D, York Co., $1,213, one on P. 219, Harlan Co. $9,943, one on P. 220, Harlan Co., $6,667; to A. C. Ross, Bayard, grading 6.07 mi. P. 71 B, Box Butte Co., 16,500 cu.yd. excav., $4,547; to G. W. Condon, 510 Farnam Bldg., Omaha, grading 3.11 mi. P. 84 C, Greely Co., $19,888, 7.72 mi. P. 136 B, Pierce Co., $17,531; to D. Quinton, Kearney, overflow pavement on P. 85 A, Valley Co., 1,400 sq.yd., $4,093; to Huston & Son, Kearney, grading 0.75 mi. P. 92 B. Sherman Co., 22,900 cu.yd. excav. $5,267, 3.68 mi. P. 212 Sherman Co., $18,581, 14.01 mi. P. 223, Sheridan Co., 100,500 cu.yd. excav., $38,983; to C. T. Whalen, North Platte, grading 282 mi. P. 111 B, McPherson Co., 25,500 cu.yd. excav., $15,733; to P. Shirley, Omaha, grading 3.93 mi. P. 113 B, Knox Co., $21,177; to Saunders & Lawrence, Oshkosh, graveling 2.08 mi. P. 117 B, Garden Co., 18,000 sq.yd. gravel $5,622, 3.7 mi. P. 117 B, Garden Co., 26,753 sq.yd. gravel $14,544; to A. A. Dobson, Lincoln, graveling 7.344 mi. P. 139 B, Madison Co., 89,350 sq.yd. gravel $13,403, grading and graveling 1.63 mi. P. 156 C, Hamilton Co., $10,567; to American Paving Co., 1325 Grace St., Omaha, paving 4.93 mi. P. 187 Douglas Co., $123,000, and 4.82 mi. P. 96 B, Douglas Co., $122,500; to E. Seabury, Omaha, grading 10.49 mi. P. 209 A, Butler Co., $27,930; to J. J. Hysham, Omaha, grading 6 mi. P. 204 B. Saunders Co., $25,204; to Koehler Lumber Co., Sterling, grading and bridges on 2.01 mi. P. 218 A, Johnson Co., grading $5,663, bridges $12,367; to A. Keithley, Kearney, grading 1.59 mi. P. 224 B, Keith Co., 17,400 cu.yd. excav., $4,639; grading and graveling 4.36 mi. P. 225, Lancaster Co., grading to J. W. McGeer, Lincoln, $7,539, gravel to Yant Constr. Co., Omaha, $12,312; graveling 2.348 mi. P. 5, Madison Co., 105,225 sq.yd. gravel, to Madison County (Madison), $17,362; grading 5.34 mi. P. 60 B, Howard Co., 70,000 yd. excav., to Howard County (St. Paul), $16,795, 2 in. gravel to Yant Constr. Co., Omaha, $10,688; grading 2.87 mi. P. 96 A, Custer Co., 33,000 cu.yd. excav. and 6.615 mi. P. 127 A, Custer Co., 95,300 cu.yd. excav., to Custer County (Broken Bow), $10,048 and $24,118 respectively; grading 8.18 mi. P. 193 A, Valley Co., 122,000 cu.yd. excav., to Valley County (Ord), $27,795. Noted Apr. 10.

N. D., Mott — Hettinger Co., grading, culverts, etc., on 4.039 mi. Federal Aid Project 220, 29,524 cu.yd. excav., 1,534 lin.ft. 12-36 in. rein.-con. pipe culverts, etc., to Stanley Bros. & Moyer, Bismarck, $12,594 for grading, and $18,229 for concrete work.

Wyoming—State Highway Comn., Cheyenne, grading and surfacing 24 ft., 14 mi. Federal Aid Project 5, Wyoming Rock Springs-Pinedale Rd., Sweetwater Co., to Maney Bros. Co., Oklahoma City, Okla., $49,086; 10.9 mi. Federal Aid Project 66-A Gillette-Arvada Rd., Campbell Co., to Watt Bros. Constr. Co., Buffalo, $74,478; 2 mi. Federal Aid Project 161-A, Basin-Manderson Rd., Big Horn Co., incl. four 15 ft. span pile bridge, to J. S. Tebbs, Cowley, $30,963; 10.5 mi. Federal Aid Project 142-B, Lincoln Highway, Wheatland-Casper Rd., Platte and Converse Counties, incl. 5 pile trestles, 454 ft. long, to Bagley Bros., Wheatland, $74,187; 11.3 mi. Federal Aid Project 49, Lincoln Highway, Thayer Junction, Ted Desert, Sweetwater Co., to F. A. Bundy, Cheyenne, $41,516. Noted Apr. 24.

Wyo., Casper—To U. S. Miller, Casper, 4 in. concrete walk, one course with 4 in. gravel cushion $0.188 sq.ft., same without cushion $0.165, 6 in. walk with cushion $0.24, without cushion $0.215, excav. and fill $0.65 cu.yd., overhaul beyond 60 ft. free haul $0.025 sta.yd., total $67,835.

Mo., Clayton—St. Louis Co., grading and surfacing approximately 4 mi. Missouri Bottom, Aubuchon and Mehl Ave. Rds., 18 ft., telford macadam, to C. J. Hanick, 4007 West Pine Blvd., St. Louis, $28,433. Noted May 1.

Ark., Little Rock—Pulaski Co. grading and concrete surfacing 7 mi. Confederate Blvd., 18 ft., to Kelliher Constr. Co., Southern Trust Bldg.

Tex., Bay City—Matagorda Co., grading and shell surfacing 8.25 mi. State Highway 60, Federal Aid Project 416, 15 ft., to P. G. Burns, San Bernardo, $31,692; rein.-con. drainage structures, to L. C. Watson, Matagorda, $4,746. Engrs. est. $72,404. Noted May 1.

Tex., Sanderson—Terrell Co., grading, gravel surfacing and bridging 12.48 mi. State Highway 12, Federal Aid Project 324-B, 18 ft., to F. P. Holt, Sanderson, $185,978; 29,681 cu.yd. gravel furnished by county. Engrs. est. $209,436. Noted May 8.

Tex., Tyler — Paving various streets, vertical fibre brick on 4 in. concrete, to H. W. Greenway, 214 Hemphill St., Ft. Worth, $3.15 per sq.yd. Engrs. est. $25,000.

Colorado — State Hy. Dept., Denver, gravel surfacing 12.046 mi. Federal Aid Project 248-A, Chaffee Co., to Western Constr. Corp., 33rd and Blake Sts., Denver, $93,534; concrete paving 0.787 mi. Federal Aid Project 246-B, Pueblo Co., to W. A. Colt & Son, Las Animas, $29,454, 2.944 mi. Federal Aid Project 255-B, Morgan Co., to W. F. Pigg & Son, 534 Commonwealth Bldg., Denver, $92,486; grading 1.0575 mi. Federal Aid Project 254-A, Grand Co., to Pioneer Constr. & Eng. Corp., Denham Bldg., Denver, $72,409. Noted May 1 and Apr. 17.

Arizona—State Hy. Dept., Phoenix, to Pacific Constr. Co., Home Builders Bldg., Phoenix, Federal Aid Project 71, Phoenix-Yuma Highway, 4,266 cu.yd. excav. roadway $1.15, 33,500 cu.yd. excav. borrow $0.30, 928 cu.yd. excav. structures $1.50, 97,898 sq.yd. concrete $1.25, 544 cu.yd. concrete $16, etc., total $282,719.

Wash., Everett—Concrete paving Oakes Ave. from Hewitt to 35th Sts., to J. W. Hoover & Co., Everett, $31,940. Noted April 24.

Wash., Ritzville — Adams Co., grading and surfacing with crushed rock 9.5 mi. Ralston-Berge Rd., to W. J. Doust, 1034 Indiana St., Spokane $59,129, 9 mi. Donahue Rd. 10, to Mitchell Bros., East 127 Mission St., Spokane, $56,662.

Oregon—State Hy. Dept., Salem, grading and graveling 2.73 mi. Seaside Cannon Beach Sect. Roosevelt Highway, to Peterson & Scott, Portland, $66,246; broken Stone resurfacing 13 mi. Allen Ranch Sect. The Dalles-California Highway, 18 ft., to Porter & Conley, Inc., Ry. Exch. Bldg., Portland, $55,240.

Calif., Daly City (Branch San Francisco) — Improving Templeton St., etc., 640,000 ft. 4 in. concrete with 1½ in. asphaltic concrete surface, 40,000 cu.yd. grading, 290,000 sq.ft. cement walks, etc., to Pacific States Constr. Co., Call Bldg., San Francisco, $282,580. Noted May 1.

Calif., Los Angeles — To Griffith Co., Railway Bldg., improving 87th St. between Figueroa and Hoover Sts., grading $3,000, 54,486 sq.ft. asphalt $0.23, 11,374 sq.ft. oil and roll $0.07, sewer $9,000, total $32,790; to G. R. Curtis, 2440 East 26th St., improving Ave. 32 between Carlyle St. and Verdugo Rd., grading $11,000, 26,496 sq. ft. Warrenite-bitulithic $0.265, sewer $4,350, etc., total $26,350, 8th Ave. between Washington and Adams Sts., grading $7,000, 3,442 sq.ft. bituminous $0.12, 99,738 sq.ft. Warrenite-bitulithic $0.2925, etc., total $39,410.

Calif., Santa Monica—Improving Wilshire Blvd., 1,256,682 ft. grading, 979,889 ft. asphaltic concrete with Warrenite surface, etc., to Keen Paving Co., Dudley Bldg., Sacramento, $413,075.

Ontario—Dept. Pub. Highways, 110 University Ave., Toronto, **(C. means Contract)** macadam on 3 mi. C. 1028, 5.4 mi. C. 1062 and 5.4 mi. C. 1092 to Bate, McMahon Co., Central Chambers, Ottawa, $175,000, 5.5 mi. on C. 1024, to A. Bissonette, Alfred, $65,000, 1.9 mi. on C. 1090 to R. S. Fisher, 559 Sherbourn St., Toronto, $35,000, 5.2 mi. C. 1089, to E. Ervine, Alexandria, $65,000, 4.9 mi. C. 1025, to McDonnell & Dibblee, 416 St. James St., Montreal, Que., $65,000, 2.2 mi. C. 1026 to McLean & Stidwell, Cornwall, $30,000, 1 mi. C. 1060 to T. J. McLean, Wingham, $15,000, 4 mi. C. 1093 to Orr & Clark, 121 Carlaw Ave., Toronto, $60,000; macadam surface treatment 9.5 mi. C. 1034, 5.3 mi. C. 1035, 1.8 mi. C. 1057, 4.2 mi. C. 1058, 4.2 mi. C. 1059, 3.7 mi. C. 1098, to V. E. Belanger, Hawkesbury, $190,000, 11.8 mi. C. 1036, 4.9 mi. C. 1037. 7.8 mi. C. 1045. 3.1 mi. C. 1064, 12.4 mi. C. 1073, to Bituminous Spraying & Contg. Co., Confederation Life Bldg., Toronto, $80,000, 11.7 mi. C. 1032, 10.5 mi. C. 1033 7.2 mi. C. 1038, 5.7 mi. C. 1039, 6.9 mi. C. 1040, 9 mi. C. 1041, 2 mi. C. 1046, 7.2 mi. C. 1068, 6.3 mi. C. 1071, 2.4 mi. C. 1074, 17.8 mi. C. 1096 and 5.4 mi. C. 1100, to Dufferin Constr. Co., 210 Victoria St., Toronto, $175,000, 13.2 mi. C. 1067 to J. B. Dunkley, 111 Northcliffe Blvd., Toronto, $25,000, 2.4 mi. C. 1070 to T. Sweeney, Arnprior, $4,000, 12.6 mi. C. 1042, 10.2 mi. C. 1043 and 6.7 mi. C. 1072, and grading C. 1106 to R. Honsberger, Vineland $60,000; washed gravel concrete pavement on 1.8 mi. C. 1051 and 4 mi. C. 1087 to Cadwell Sand & Gravel Co., Windsor, $150,000, 5.2 mi. C. 1084 to Chick Contg. Co., Windsor, $140,000; grading 5 mi. C. 1047, 1.5 mi. C. 1048 and 1 mi. C. 1049 to G. Campbell, R.R. Essex, $45,000, 3 mi. C. 1077, 5.4 mi. C. 1078 and 4.9 mi. C. 1079, also macadam on 1.4 mi. C. 1056, to Curran & Briggs, Orillia, $45,000, grading 2.5 mi. C. 1076 to P. E. Fitzpatrick, Box 53, Kingston $20,000; bituminous macadam on 1 mi. C. 1088, macadam surface treatment on 3.4 mi. C. 1097 and grading 3.3 mi. C. 1102, to Grant Bros., Natl. Bank Bldg., Ottawa, $45,000; widening concrete arch bridge C. 1110, to W. P. Holdcraft, Box 62, Kingston, $15,000; bituminous macadam on 4.1 mi. C. 1054, and macadam on 4 mi. C. 1094, to A. E. Jupp Constr. Co., 170 Berkeley St., Toronto, $90,000; macadam surface treatment on 8.1 mi. C. 1044, 11.5 mi. C. 1099, bittuminous macadam on 2.8 mi. C. 1055, grading 3 mi. C. 1080, and macadam on 0.7 mi. C. 1091 to Law Constr. Co., 107 Hillsdale Ave., Toronto, $85,000; grading 2 mi. C. 1101 to J. J. McNabb, Brussels, $10,000; concrete culverts on C. 1116 and grading approaches to Beckitts Creek Bridge to A. A. Outram, Port Hope, $12,000 and $15,000 respectively; concrete bridge on C. 1081 to A. M. Pratt, Laurel, $12,000, crushed stone concrete pavement 0.44 mi. C. 1082 to Sumerville Co., 22 Cross St., Welland, $18,000; asphalt pavement on 2.3 mi. C. 1019, to Standard Paving Co., Central Chambers, Ottawa, $80,000; concrete bridge on C. 1113 to W. E. Tidy, 12 Linsmore Crescent, Toronto, $12,000; macadam on 3 mi. C. 1095 and concrete bridges on C. 1111, to J. A. Vance, Woodstock, $60,000.

Calif., San Anselmo — Improving Tunstead Ave., etc., 302,292 ft. surfacing grading, 1,618 cu.yd. excav., 385,625 ft. asphaltic concrete surface, 4,162 tons asphaltic concrete base, gutters, curbs, etc., to Pacific States Constr. Co., Call Bldg., San Francisco, $132,250. Noted May 1.

Calif., Stockton — Improving Harding Way, Walnut St., etc., grading, curbs, gutters, paving, etc., to C. Moreing, Commercial Savings & Bank Bldg., $59,500.

Ont., Kitchener—Asphalt pavements on Glasgow, College, Victoria and King Sts., to Standard Paving Co., Central Chambers, Ottawa, $55,000.

Ont., Seaforth—J. A. Wilson, clk., 9,830 sq.yd. asphalt pavement on Main St., to Godson Contg. Co., Manning Chambers, Toronto. Noted Mar. 27.

Industrial Works

PROPOSED WORK

Mass., Boston—Cold Storage—Libby & Libby Co., 24 North St., plans extensive additions to plant. Private plans.

Mass., Boston—Factory, etc.—Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, Pa., having plans prepared by French & Hubbard, engrs., 210 South St., Boston, 6 story and basement, 80 x 200 ft. factory and warehouse, C St., here. $150,000.

N. Y., Schenectady—Laboratory, etc.—General Electric Co., River Rd., had plans prepared radio experiment station, incl. laboratory, transformer station, towers, etc. $150,000. Private plans.

Fla., Lakeland—Abattoir—City election June 10, $40,000 bonds, abattoir. C. C. Brown, Lakeland, engr.

Ala., Bessemer—Mill—Hercules Powder Co., Amer. Trust Bldg., Birmingham, plans mill, 4 mi. from here. $300,000. Engineer and architect not selected.

O., Cleveland—Factory—Adam Hoffman Co., 10522 Cedar Ave., plans 2 story and basement, 50 x 60 ft., brick. $40,000. E. M. Hoffman, vice pres. Engineer and architect not selected.

O., Columbus—Plant—Lockwood, Greene & Co., archts. and engrs., Hanna Bldg., Cleveland, soon take bids 3 story, 100 x 240 ft. concrete plant, 1 story, 50 x 300 ft. forge shop, 50 x 167 ft., storage shed and 1 story, 50 x 167 ft. hot bolt shop, brick and concrete, etc., here, for Columbus Bolt Wks., Water and Chestnut Sts. $350,000.

O., Dayton—Plant—Christian Publishing Assn., 5th and Ludlow Sts., plans 5 story and basement, 55 x 90 ft., rein.-con. and brick, plain foundation, Court and Ludlow Sts. $175,000. Engineer and architect not selected.

O., Dayton—Factory—Comer Mfg. Co., Apple St., plans 5 story and basement, 100 x 250 ft., rein.-con., plain foundation, South Ludlow St. $175,000. Private plans.

O., Hamilton — Shop — Ford Motor Co., Highland Park, Mich., had plans prepared by A. Kahn, 1000 Marquette Bldg., Detroit, Mich., 1 story, 102 x 201 ft., brick, steel and concrete addition, plain foundation, 4th St., here.

O., Springfield—Plant—Crowell Publishing Co., 202 South High St., plans 7 story and basement, rein.-con. and brick, plain foundation. $200,000. Frank Hill Smith, Inc., Winters Bldg., Dayton, archts.

O., Zanesville — Factory — See "Contracts Awarded."

Ind., Anderson — Plant — Hughes-Curry Packing Co., 353 Transportation Bldg.,

Industrial Works (Continued)

having plans prepared by Henschein & MacLauren, engrs., 1637 Prairie Ave., Chicago, 2 story, 70 x 145 ft., brick and concrete, West 8th St. $100,000.

Ind., Bloomington—Printing Plant—W. S. Bradfute having plans prepared by J. L. Nichols, Bloomington, 2 story and basement, 40 x 66 ft., brick and steel. $40,000.

Ind., Dunkirk—Plant—Indiana Glass Co. having plans prepared by Austin Co., engrs., 16112 Euclid Ave., Cleveland O., 1 story, 86 x 110 ft., brick and steel. $40,000. Noted Dec. 6.

Ind., Ft. Wayne—Plant—News-Sentinel Printing Co., plans 3 or 4 story and basement, rein.-con., brick and steel. $160,000. Meade & Hamilton, Garfield Bldg., Cleveland, O., engrs.

Ind., Monon—Factory—Granolite Art Products Co., 244 4th St., Milwaukee, Wis., having plans prepared by Leichenko & Esser, 38 South Dearborn St., Chicago, 1 story, 140 x 360 ft., fireproof, here. $150,000.

Wis., Milwaukee — Factory — Natl. Blow Pipe & Ventilating Co., 489 12th St., plans 1 story, 60 x 122 ft., brick and timber, plain foundation, 1st St. $50,000. Engineer and architect not selected.

Wis., Milwaukee — Packing — Plankinton Packing Co., Muskego Ave. and Canal St., plans to rebuild 3 story, packing plant, brick and timber, Muskego Ave., recently destroyed by fire. $40,000. Engineer and architect not selected.

Wis., New Richmond—Grain Mill—New Richmond Roller Mills, W. Grover, mgr., soon takes bids 2 story grain mill and elevator, rein.-con., plain foundation. $40,000. Private plans.

Wis., Oconto—Mill—Holt Hardwood Co. plans to rebuild 2 story mill, recently destroyed by fire. Engineer and architect not selected.

Wis., Osseo — Factory — Osseo Canning Co. taking bids 2 story, brick and timber addition, plain foundation. $40,000. Private plans.

Ia., Cedar Rapids — Factory — Ford-Renick Co. Ltd., having plans prepared by F. Friedline, Kentland, Ind., 6 story, 62 x 79 ft., rein.-con. and brick. $250,000.

Ia., Cedar Rapids — Plant — Ford & Renick Co., Ltd., having plans prepared by F. Friedline, Kentland, Ind., 4 story, 62 x 109 ft., rein.-con. and brick, package plant. $150,000.

Tex., Coleman — Plant — West Texas Utility Co. having plans prepared by R. H. Cameron, City National Bank Bldg., San Antonio, 1 story, 60 x 90 ft., rein.-con., brick and tile. $60,000. Noted Feb. 28.

Tex., Corsicana—Mill—Clopton Planing Mill Co., making plans 2 story, 100 x 125 ft., brick, East 4th St. $50,000. Engineer and architect not announced.

Tex., Dallas—Factory—Standard Spring & Axle Co., Commerce and Duncan Sts., plans 2 story, brick and concrete, Commerce St. $50,000.

Tex., Ranger—Plant—Phillips Petroleum Co., Breckenridge, making plans casinghead plant, near here. $150,000. Private plans.

Tex., Robstown—Mill Robstown Oil Mill Co. plans additions to mill. $50,000. Engineer not announced.

Okla., Guthrie — Plant — Aaron Produce Co. made final plans 1 story, 125 x 175 ft., brick addition to cold storage plant, plain foundation, Harrison St. $60,000. Private plans.

Okla., Owen — Plant — Owen-Osage Oil Co., Tulsa, takes bids about May 20, casinghead gasoline plant, 15,000,000 cu.ft. daily capacity, here. $40,000.

Calif., Crockett—Sugar Refinery, etc.—California-Hawaiian Sugar Refining Corp., Matson Bldg., San Francisco, plans additions to refinery and warehouse, here. $1,000,000.

Calif., Ontario—Pre-cooling and Packing Plant — West Ontario Citrus Assn. plans rein.-con. To exceed $100,000.

Ont., Orillia — Factory — Canada Wood Specialty Co. having plans prepared by E. Webb & Son, Orillia, 2 story, 50 x 80 ft. rein.-con. and brick, plain foundation. $75,000.

Que., Montreal—Laundry—Toilet Laundry Co. Ltd., 425 Richmond St., plans 6 story laundry, Guy St. $150,000.

China, Shanghai—Power Plant—Federal Telegraph Co., Alexander Bldg., San Francisco, Calif., having plans completed by Bakewell & Brown, 251 Kearney St., San Francisco, Calif., rein.-con. and steel, here. $250,000.

BIDS DESIRED

Mass., Boston—Plant—Green Shoe Mfg. Co., 35 Northampton St., taking bids 5 story, 42 x 170 ft., brick and timber, Harrison Ave. $100,000. W. L. Miner, 60 Pemberton Sq., archt.

Pa., Harrisburg—Power Plant—June 10, by Dept. Property & Supplies, Capitol Bldg., alterations and extensions to power plant in Capitol; adv. E. N.-R. May 15.

Pa., McDonald—Foundry—General Fdry. & Machine Co., Peoples Bank Bldg., Pittsburgh, taking bids 1 story, 60 x 75 ft., brick and steel, here. Private plans.

Pa., Pittsburgh — Power House — D. L. Clark Candy Co., Martindale St., will build 2 story, brick and concrete, Martindale St., by separate contracts. $45,000. P. Dietz, Lyceum Bldg., engr.

Pa., Sharon—Machine Shop and Service —Natl. Malleable & Steel Castins Co., Quincy St. and Woodhill Rd., Cleveland, O., taking bids 3 story, steel, brick and rein.-con., concrete foundation, South Dock St., here. $200,000. Private plans.

La., New Iberia — Power House — See "Waterworks."

Mo., Kansas City—Plant—Amer. Can Co., 120 Bway., New York City, will build rein.-con. and steel addition, plain foundation, here. $500,000. Work will be done by separate contracts. Private plans.

BIDS RECEIVED

N. Y., Brooklyn—Repair Shop—Transit Comn., 49 Lafayette St., New York, May 9, furnishing and erecting structural steel for electrical repair shop at Coney Island Yard, here, from J. P. Clark Co., 50 Grand Central Terminal, New York, $66,133. Noted May 1.

CONTRACTS AWARDED

N. Y., Brooklyn — Housing Station — Dept. Plant & Structures, Municipal Bldg., New York, housing station, 2nd Ave. and 11th St., here, to Eastern Constr. Co., 110 West 40th St., New York, $101,623. Noted Apr. 24.

N. Y., Brooklyn—Plant—E. R. Squibb, 36 Doughty St., rein.-con., brick and steel addition, plain foundation, Vine and Doughty Sts., to Turner Constr. Co., 244 Madison Ave. Archts. est. $500,000. Noted May 1.

N. Y., Eltingville—Substation—See "Unclassified under New York."

N. Y., Livingston—Substation—See "Unclassified under New York."

N. Y., New York—Plant—J. B. Snook Sons, archts. and engrs., 52 Vesey St., 16 story, 75 x 100 ft., rein.-con. and steel, concrete pile foundation, Varick St., to Turner Constr. Co., 244 Madison Ave., for Merchants Refrigerating Co., 161 Chambers St. Archts. est. $500,000. Noted Feb. 7.

N. Y., New York — Plant — Lockwood, Greene & Co., archts. and engrs., Pershing sq. Bldg., 11 story, 100 x 125 ft., rein.-con., West 45th St., to Hegeman-Harris Co., 185 Madison Ave., for Houbigant, Inc., 16 West 49th St. Noted Apr. 24.

N. Y., Portchester—Plant—Russell, Bursall & Ward Bolt & Nut Co., South St., 2 story, 60 x 340 ft., rein.-con. and steel, plain foundation, to Austin Co., 217 Bway., New York City.

N. J., Jersey City — Foundry — Boynton Furnace Co., Pacific Ave., 1 story, rein.-con. and steel, plain foundation, 40,000 sq.ft. floor space, to Austin Co., 217 Beay., New York City. Archts. est. $150,000.

Pa., Cheswick — Machine Shop — Hall Pump & Compressor Co., 213 Galveston Ave., N. S., Pittsburgh, 1 story, 60 x 160 ft., here, to J. A. McKay, Water and West Sts., Pittsburgh, $75,000.

O., Cleveland — Electric Sub Station — Cleveland Electric Illuminating Co., c/o E. J. Cook, engr., Illuminating Bldg., 1 story, 57 x 102 ft., brick, concrete and steel, East 165th St., to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $100,000.

O., Cleveland—Factory and Forge Shop —Peck, Stowe & Wilcox Co., 2176 West 3rd St., 1 story, 90 x 108 ft. and 3 story, 66 x 100 ft., brick and steel, 2176 West 3rd St., to H. K. Ferguson Co., 4900 Euclid Ave. Archts. est. $100,000.

O., Cleveland — Factory — Astrup Co., 2937 West 25th St., 2 story and basement, 50 x 97 ft., brick and rein.-con., 2937 West 25th St., to Natl. Concrete Fireproofing Co., Citizens Bldg. Archts. est. $50,000. Noted Apr. 10.

O., Cleveland — Factory — White Motor Co., 842 East 79th St., superstructure for 2 story, 150 x 160 ft., brick and steel, 825 East 79th St., to G. A. Rutherford Co., 2725 Prospect Ave. Archts. est. $200,000.

O., Zanesville—Factory—Mosaic Tile Co., 4 story, 80 x 160 ft., brick and concrete addition, Copemill and Dryden Rds., to R. H. Evans Co., Zanesville, $150,000. Second unit, 50 x 150 ft., will be constructed when above factory is completed. Noted May 1.

Ill., Chicago—Factory—Western Shade Cloth Co., 2100 South Jefferson St., 2 story, 123 x 400 ft., fireproof, 2100 South Jefferson St., to Raymond Concrete Pile Co., 111 West Monroe St. Archts. est. $500,000. Noted Apr. 17.

Ill., Chicago — Factory — Illinois Tool Wks., 154 West Erie St., 1 story, 240 x 240 ft., fireproof, 2501-09 North Keeler St., to F. H. Stowell Co., 28 North Clinton St. Engrs. est. $125,000.

Wis., Milwaukee—Plant—Zitron Bros., 157 Muskego Ave., 1 story, 50 x 100 ft., brick and timber, plain foundation, to T. Stark & Co., 130 Muskego Ave. Est. $40,000.

Wis., Racine—Plant—G. Pfleger, Route 1, 2 story, 40 x 50 ft., brick, title and concrete, plain foundation, to G. Henning, 338 Main St. $40,000. Noted Mar. 27.

Wis., Rhinelander — Plant — Rhinelander Paper Co. will build 1 story, 42 x 108 ft., brick and steel, addition, by day labor. $40,000. L. A. De Guere, Wood Blk., Wisconsin Rapids, engr.

Wis., Two Rivers—Foundry—Becker Mfg. Co., M. Becker, secy., will build 1 story, 54 x 112 ft., brick and steel, plain foundation, by day labor. $40,000. Private plans.

Wis., Wausau—Factory—Marathon Electric Mfg. Co., Plumer Island, 1 story, 52 x 116 ft., brick and concrete, plain foundation, to T. Kohl, 924 Jefferson St. $40,000.

Neb., Omaha—Warehouse and Garage—Nebraska Power Co., 15th and Farnum Sts., will build 1 story and basement, 113 x 262 ft. rein.-con. and brick, 4310 Leavenworth St., by day labor. $150,000. F. S. Stott, 216 Kennedy Bldg., archt. Noted Dec. 6.

Mo., St. Louis—Factory—S. G. Adams Stamp & Stationery Co., 410 North 6th St., general contract 4 story and basement, 50 x 134 ft., brick and concrete, Garrison and Franklin Aves., to Gillespie & Daly, 722 Chestnut St. Archts. est. $50,000. Noted Apr. 3.

Calif., Eureka—Ice Plant—Eureka Ice & Cold Storage Co., ice plant, 50,640 sq.ft. floor space, to Mercer-Fraser Co., Eureka. Noted May 10, 1923.

Calif., Fresno—Ice Plant—Peoples Ice Corp., 2035 South Bway., J. R. Irskine, mgr., 2 story, steel and concrete addition to ice plant, to R. Hess, Fresno, $80,000. Noted Jan. 24.

Calif., Los Angeles — Packing Plant — Cudahy Packing Co., 803 Macy St., 3 and 4 story, 103 x 137 ft., rein.-con. and brick, to North Pacific Constr. Co., Detwiler Bldg., $180,000. Noted Apr. 10.

Calif., Oakland — Factory — New Metal Products Co., c/o E. B. Field Co., 301 13th St., 1 story, 100 x 100 ft. rein.-con., 59th and Doyle Sts., to Barrett & Hilp, 918 Harrison St., San Francisco. To exceed $40,000.

Calif., Oakland — Factory — Aluminum Cooking Utensil Co., Monadnock Bldg., San Francisco, 2 story, rein.-con., 46th St., here, to K. E. Parker Co., 519 California St., San Francisco, $97,625.

Calif., Sacramento — Creamery — Glenn Dairy Co., 3673 Folson Blvd., 2 story, rein.-con., to Holdener Constr. Co., 2608 R St., $50,000. Noted May 8.

Calif., Stockton—Shops, etc.—Western Pacific R.R. Co., Mills Bldg., San Francisco, rein.-con. shops, roundhouse, storerooms, etc., here, to W. A. Betchel, 625 Market St., San Francisco.

Ont., Toronto—Factory—Dominion Tar & Chemical Co., Bathurst St., 2 or 3 story, 80 x 200 ft. rein.-con., brick and steel, plain foundation, to Anglin-Norcross Ltd., Temple Bldg. Archts. est. $200,000.

Buildings

PROPOSED WORK

Mass., Boston—Court House—City plans courthouse, Wilson Park. $225,000.

Mass., Boston—Home—City Overseers of the Poor, Chardon St., having plans prepared by Newhall & Blevens, 9 Park St., 3 story, 48 x 65 ft. and 4 story, 58 x 90 ft., rein.-con., Chardon St. $350,000.

Mass., Brockton—Apartment—Stone & Alexander, Spring St., had plans prepared by C. T. Olson, Main St., 4 story and basement, 97 x 107 ft., brick and stone, West Elm and Newbury Sts. $150,000.

Mass., Brockton—School—H. Porter, chn. School Bd., having plans prepared by G. L. Falk, 153 Main St., grade school and assembly hall, brick, Oakdale St. and Oakland Ave., $200,000.

Mass., Cambridge — Theatre — F. Shea, Arlington Hotel, Boston, plans 110 x 130 ft., rein.-con. and brick, Howard St., here. $150,000. Private plans.

Mass., Edgartown—School—Town having plans prepared by Brainerd & Leeds, 89 Franklin St., Boston, for Union School, 2 story, 60 x 110 ft., brick and stone, near West Tisbury Rd. $150,000.

Mass., Fall River—Church—United Presbyterian Church Society had plans prepared by F. R. Hindle, 72 Weybosset St., Providence, R. I., 50 x 150 ft., brick, Rock and Walnut Sts.

Buildings (Continued)

Mass., Holyoke — School — W. H. Peck, supt. schools, having sketches made by McLaughlin & Burr, 88 Tremont St., Boston, school. $160,000.

Mass., New Bedford—Apartment—S. E. Shea, Times Bldg., had plans prepared by Leary & Walker, Times Bldg., 5 story, 120 x 130 ft., brick. $400,000.

Mass., Springfield — School — School Bd. having plans prepared by M. W. Maloney, 23 Pearl St., 2 story, rein.-con. and brick. $300,000.

Mass., Waltham — Hospital — Waltham Hospital Corp. plans addition to hospital. $300,000. J. C. Plan, chn. executive com.

Mass., West Somerville—Church—Methodist Episcopal Church Society plans 60 x 100 ft., church, chapel and school, stone and brick, College Ave. and Chapel St. $275,000. Woodbury & Stewart, 51 Boylston St., Boston, archts.

Mass., Winthrop—School—Bd. Selectmen having plans prepared by Brainerd & Leeds, 89 Franklin St., Boston, 1 and 2 story, rein.-con. and brick, Hernan St. $280,000.

N. Y., Brooklyn—Hotel—S. Welsch & Sons, c/o Shampan & Shampan, archts. and engrs., 189 Montague St., having plans prepared 6 story, brick, steel and stone, plain foundation, 25 Lafayette Ave. $400,000.

N. Y., Jamaica—Y. M. C. A., 55 Hanson Pl., Brooklyn, having plans prepared by G. W. Conable, archt. and engr., 46 West 24th St., New York, 4 story, 100 x 175 ft., brick, steel and stone, plain foundation, Flushing Ave. and Grove St., here.

N. Y., New York — Apartment — One Eleven West 16th St. Co., c/o Gronenberg & Leuchtag, archts. and engrs., 450 4th Ave., having plans prepared 6 story, brick, steel and stone, plain foundation, 107 West 16th St. $200,000. D. H. Knott, pres.

N. Y., New York—Bank and Office—Corn Exchange Bank, 13 William St., soon takes bids 7 story, 50 x 100 ft., brick, steel and stone addition, plain foundation, Bway. and Liberty St. W. W. Chapin, 347 Madison Ave., archt. and engr.

N. Y., New York — Hospital — Lebanon Hospital, Westchester and Cauldwell Aves., having sketches made by C. B. Mayer, archt. and engr., 31 Union Sq., 10 story, brick, steel and stone, plain foundation, Grand Concourse between 173rd St. and Mt. Eden Ave. $2,000,000.

N. Y., White Plains — Apartment — C. Herman, c/o G. A. Bagge & Sons, archts. and engrs., 299 Madison Ave., New York City, having plans prepared 3 story, 175 x 600 ft., brick, steel and stone, plain foundation, South Bway., here. $400,000.

N. J., Camden—Hotel—Community Hotel Corp., c/o W. Kennedy, secy., 533 Market St., plans hotel, Bway. and Cooper St. $1,250,000. H. L. Stevens & Co., 522 5th Ave., New York City, archts.

N. J., Newark — Schools — Bd. Educ., Broad St., having preliminary plans prepared by Guilbert & Bettelle, 2 Lombardy St., school on Van Buren St., $315,000, and on Richelieu Terrace, $250,000, both brick, steel and stone, plain foundations.

N. J., Princeton — Triangle Club of Princeton University, plans theatre. $400,000. D. C. Stuart, 182 Western Way, chn. com.

Pa., Somerset — Hospital, etc. — Comrs. Somerset Co., plan 3 story and basement, 90 x 140 ft., rein.-con., brick and steel, hospital, auditorium, etc. $150,000.

Md., Baltimore — Animal House and Aviary — Mayor and City Council, City Hall, rejected bids 1 story and basement, 60 x 410 ft., brick and stone, Druid Hill Park. Noted May 8.

W. Va., Huntington—Hotel—F. C. Prichard, Robson-Prichard Bldg., having plans prepared by J. Z. Dietz, State Savings & Trust Bldg., Indianapolis, Ind., 13 story, 120 x 200 ft., rein.-con., marble, brick and steel, 6th Ave. $2,500,000.

W. Va., Huntington — Office — W. H. Lewis, 817 4th Ave., takes bids about June 15, 10 story, 50 x 110 ft., rein.-con., brick and steel, 5th Ave. $200,000. Meanor & Handloser, Professional Bldg., archts. Noted May 8.

W. Va., Parkersburg—Hotel—E. A. Brast Co. will have plans revised 6 story, rein.-con. and brick, plain foundation. Former bids rejected. $150,000. Pleasants, Pennington & Lewis, 477 5th Ave., New York City, engrs. Noted Apr. 24.

Ga., Atlanta — Church — Druid Hill Baptist Church, 765 P de L Ave., having plans prepared by Daugherty & Gardner, Stahlmans Bldg., Nashville, Tenn., 1 story, brick and stone. $250,000.

Fla., Lakeland — City Hall and Auditorium—Election June 10, $275,000 bonds, city hall and auditorium.

Fla., Lakeland—Hospital—City election June 10, $300,000 bonds, hospital.

Ala., Birmingham — Club — Birmingham Athletic Club, 510 North 20th St., plans 10 story, 75 x 110 ft., 3rd Ave. and 23rd St. $1,300,000. Engineer and architect not selected.

Ala., Birmingham — Hotel — Tutwiler Hotel Co., 2000 5th Ave., having plans prepared by Miller & Martin, Title Bldg., and soon takes bids 10 story, 110 room, rein.-con. and steel addition, 20th St. and 5th Ave. $440,000.

Ala., Birmingham—Store—L. Pizitz, 118 19th St., plans 7 story, 75 x 110 ft., 19th St., 2nd Ave. $1,500,000.

Ala., Gadsden—Bank—City Natl. Bank soon takes bids 6 story, 50 x 125 ft., rein-con. and steel, 4th and Broad Sts. $150,000. A. D. Simpson, Gadsden, archt.

La., New Orleans — Auditorium — M. Behrman, chn. Convention and Tourists Bureau, of Assn. of Commerce, asked A. D. Danziger, Carondelet Bldg., to submit plans for proposed auditorium. $1,500,000. Half of sum required will be financed through loaning company other half raised by public subscription. When complete will be turned over to Assn. of Commerce for maintenance and operation.

Tenn., Nashville — Administration — G. Peabody College for Teachers plans administration building, on campus. $200,000.

O., Cincinnati — Clubhouse — Knights of Columbus, 16 East 9th St., plans 7 story, brick and stone, 9th St. $600,000. J. F. Sheblessey, 1202 Republic St., archt.

O., Cincinnati—Dormitory—Conservatory of Music, Burnet and Highland Sts., soon lets contract 5 story, brick addition. $150,000. W. B. Tuthill, 185 Madison Ave., New York City, archt.

O., Cleveland — Apartment — M. F. Narosny, 12216 Edmonton Ave., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 38 x 144 ft., brick 1910 East 93rd St. $150,000. Noted Aug. 9.

O., Cleveland—Apartment—J. Schnader, 1089 East 125th St., has plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 89 x 108 ft., brick and wood, East 138th St. $150,000.

O., Cleveland — Apartment — M. Swee, 3472 East 123rd St., had plans prepared by A. W. Harris, Discount Bldg., 3 story and basement, 104 x 162 ft., brick, North Morland Blvd. $300,000.

O., Cleveland—Commercial—J. C. Latimer, Union Trust Bldg., having sketches made by Miller & James Co., Erie Bldg, brick, Oregon Ave. $200,000.

O., Columbus—Office—Amer. Insurance Union, 44 West Broad St., having plans prepared by Crane & Kiehler, 542 Griswold St., Detroit, Mich., 17 story and basement, rein.-con., brick and steel, plain foundation. Noted Feb. 28.

O., Kent — Physical Education — Bd. Trustees State Normal School having plans prepared by Roman & Ingleson, 1614 North High St., Columbus, 3 story and basement, rein.-con. and brick. $160,000.

O., Lakewood—Apartment—Narosny & Libhaber, 11523 Tuscora Ave., Cleveland, having plans prepared by L. R. Walker and J. L. Mauer, 1900 Euclid Ave., Cleve-

SUBWAY—BROOKLYN, N. Y.

Following are lowest three bids opened by Transit Comn., 49 Lafayette St., New York City, Apr. 25, for Sect. 2 of Route 70, a part of Rapid Transit Railroad, (A) Oakdale Contg. Co., Inc., 93 Amity St., Flushing (awarded contract; not yet approved by Bd. Estimate); (B) Patrick McGovern, Inc., 50 East 42nd St., New York City; (C) Frederick L. Cranford, Inc., 149 Remsen St., Brooklyn. The unit bids were as follows:

	A	B	C
196,050 cu.yd. earth excavation above M.H.W.	$6.90	$9.50	$11.32
50,230 cu.yd. earth excavation below M.H.W.	7.00	9.50	14.32
1,750 cu.yd. earth excavation above and below M.H.W. for sewers	7.00	9.50	11.32
32,660 cu.yd. concrete masonry in place	16.00	24.50	21.50
160,000 sq.ft. rubbing surface of concrete	.10	.05	.15
6,800 cu.yd. protective concrete masonry in place	16.00	25.00	25.00
20 cu.yd. rubble stone masonry in place	10.00	15.00	12.00
20 cu.yd. dry rubble masonry in place	10.00	12.00	10.00
80 cu.yd. brick masonry in place	32.00	50.00	35.00
15 cu.yd. hollow terra cotta brick or tile masonry	32.00	50.00	35.00
100 bbl. grout of portland cement	6.00	6.00	8.00
25 cu.yd. broken stone or gravel in place	4.00	3.50	4.00
Waterproofing			
33,180 sq.yd. (*a*) 1-ply	.90	1.25	1.25
28,000 sq.yd. (*c*) 3-ply	2.10	2.75	2.50
100 sq.yd. (*d*) 4-ply	2.65	4.60	3.00
1,500 sq.yd. (*f*) 6-ply	3.80	6.90	3.50
100 sq.yd. (*i*) dry ply	.65	1.10	1.25
4,700 cu.yd. waterproofing, brick in asphalt mastic	40.00	50.00	45.00
Cast iron pipe and fittings			
1,550 lin.ft. (*a*) 3 in.	.90	1.15	1.50
230 lin.ft. (*b*) 4 in.	1.00	1.35	2.00
1,100 lin.ft. (*c*) 6 in.	1.60	2.50	2.00
5,500 lin.ft. (*d*) 8 in.	2.30	3.50	3.00
140 lin.ft. (*e*) 10 in.	3.00	4.50	3.50
Standard galvanized W.S. pipe			
100 lin.ft. (*a*) 3 in.	1.00	1.50	1.75
240 lin.ft. (*b*) 4 in.	1.50	2.00	2.00
100 lin.ft. (*c*) 6 in.	2.00	2.80	2.50
50 lin.ft. (*d*) 8 in.	3.00	5.00	5.00
145,000 duct. ft. tunnel ducts in place	.25	.30	.30
1,000 duct. ft. 3 in. fibre conduits in place	.25	.40	.40
1,900 ton riveted steel	105.00	150.00	150.00
4 ton architectural steel and iron	264.00	350.00	300.00
390 sq.ft. (*b*) steel doors and appurtenances (complete)	6.00	9.00	5.00
2 counterbalanced emergency exit covers (complete)	240.00	500.00	300.00
2,410 ton steel beams and shapes	105.00	150.00	150.00
540 ton steel rods and bars	96.00	80.00	105.00
8 ton miscellaneous iron castings except for sewers and pipe	250.00	160.00	250.00
16 ton miscellaneous iron castings for sewers	120.00	100.00	300.00
7,600 lb. special wire forms in place	.20	.15	.30
3,000 lin.ft. hand rail	.42	.35	.75
7,000 sq.ft. steel gratings for ventilation	2.70	2.50	3.50
270 sq.ft. vault lights	3.00	3.25	3.50
Street surface restored			
6,465 sq.yd. (*a*) within curb lines	3.00	2.00	4.50
20,320 sq.yd. (*e*) between curb lines, asphalt pavement	4.80	4.50	7.00
850 sq.yd. (*f*) between curb lines, granite block	4.20	8.00	5.00
250 lin.ft. (*i*) new bluestone curb, in place	1.50	3.50	2.50
200 sq.yd. constructing and finishing upper 3 in. concrete walls and slabs	1.80	1.50	4.50
120 removing and delivering memorial trees	108.00	85.00	25.00
Wrought steel electric conduits			
19,700 lin.ft. (*a*) ¾ in.	.25	.20	.60
100 lin.ft. (*b*) 1¼ in.	.40	.35	.60
100 lin.ft. (*c*) 2 in.	.50	.45	1.00
16,600 lin.ft. (*d*) 1 in.	.30	.25	.60
1,530 cast iron outlet boxes	1.20	1.00	2.50
10 cast iron pull boxes	3.00	5.00	10.00
16 steel splicing boxes 36 in. x 30 ft. x 7 in.	12.00	10.00	10.00
Cast iron pipe including specials			
150 lin.ft. (*a*) 6 in.	1.60	2.00	3.00
90 lin.ft. (*b*) 3 in.	1.00	1.00	2.00
20 lin.ft. (*c*) 4 in.	1.50	1.50	2.50
100 lin.ft. (*f*) 8 in.	2.50	3.50	4.00
2,130 lin.ft. 12 in. vitrified pipe sewer	2.65	4.40	5.00

	A	B	C
115 lin.ft. 15 in. vitrified pipe sewer	3.60	7.00	7.00
2,420 lin.ft. 18 in. vitrified pipe sewer	3.75	7.20	8.00
1,265 lin.ft. 20 in. vitrified pipe sewer	4.50	7.80	8.00
115 lin.ft. 22 in. vitrified pipe sewer	5.50	10.45	10.00
3,100 lin.ft. 24 in. vitrified pipe sewer	6.10	9.50	10.00
125 ton cast iron pipe (straight)	107.00	205.00	100.00
62 ton cast iron pipe (special)	210.00	230.00	200.00
75 lin.ft. 6 ft. reinforced concrete circular sewer	48.00	40.00	50.00
Flat top reinforced concrete sewers			
240 lin.ft. (*a*) 3 ft. 6 in. x 2 ft. 4 in.	12.00	19.00	30.00
875 lin.ft. (*c*) 4 ft. x 2 ft. 6 in. sewers	13.20	22.00	22.00
75 lin.ft. reinforced horseshoe sewer 7 ft. 6 in. x 9 ft. 6 in.	180.00	83.00	100.00
350 lin.ft. (*c*) electric overhead trolley	7.20	10.00	10.00
Maintaining and supporting elevated railroad (lump sum)	10,000.00	2,300.00	6,000.00
3,200 lin.ft. 6 in. water pipe	.80	1.00	2.00
100 lin.ft. 8 in. water pipe	1.00	1.50	3.00
100 lin.ft. 12 in. water pipe	1.50	2.00	3.00
100 lin.ft. 16 in. water pipe	1.80	2.50	5.00
630 lin.ft. 20 in. water pipe	2.00	3.00	10.00
100 lin.ft. 30 in. water pipe	3.50	3.50	12.00
100 lin.ft. 36 in. water pipe	5.00	5.00	12.00
100 lin.ft. 48 in. water pipe	6.00	8.00	15.00
35 service connections for water pipe	20.00	50.00	30.00
100 lin.ft. maintaining 66 in. aqueduct	60.00	10.00	50.00
100 lin.ft. 3 in. cast iron gas pipe	.40	1.00	2.00
420 lin.ft. 4 in. cast iron gas pipe	.60	1.00	2.50
2,140 lin.ft. 6 in. cast iron gas pipe	.80	1.25	3.00
920 lin.ft. 8 in. cast iron gas pipe	1.00	1.80	3.00
100 lin.ft. 10 in. cast iron gas pipe	1.20	2.00	3.00
100 lin.ft. 12 in. cast iron gas pipe	1.50	2.50	3.50
100 lin.ft. 16 in. cast iron gas pipe	1.60	3.00	5.00
370 lin.ft. 20 in. cast iron gas pipe	2.00	5.00	5.00
7,130 lin.ft. (*a*) 6 in. W.S. by-passing pipe	3.50	8.00	6.00
1,050 lin.ft. (*h*) 4 in. W.S. by-passing pipe	3.00	5.00	5.00
160 lin.ft. (*a*) 12 in. W.S. by-passing pipe above street surface	6.60	10.00	10.00
200 lin.ft. (*b*) 16 in. W.S. by-passing pipe above street surface	10.50	16.00	13.00
580 lin.ft. (*c*) 20 in. W.S. by-passing pipe above street surface	13.00	20.00	15.00
270 lin.ft. (*h*) trestle support	2.40	25.00	8.00
520 lin.ft. (*i*) cable suspension for pipe over 16 in.	3.60	25.00	8.00
140 lin.ft. (*j*) cable suspension for pipe 16 in. or under	3.60	25.00	6.00
35 service connections for gas pipe	20.00	50.00	50.00
70 ton new c.i. hub and spigot pipe (straight)	84.00	105.00	100.00
40 ton new c.i. hub and spigot pipe (special)	192.00	205.00	200.00
28,000 duct ft. electric ducts and conduits in place	.36	.35	.40
Wrought steel pipe electric ducts and conduit			
120 lin.ft. (*a*) 2½ in.	.40	.60	1.00
230 lin.ft. (*b*) 3 in. pipe	.40	.80	1.50
140 lin.ft. (*c*) 3½ in. pipe	.60	1.00	2.00
100 lin.ft. (*n*) 2 in. pipe	.30	.40	1.50
140 lin.ft. (*g*) 4½ in. pipe	.60	1.30	2.50
35 service connections electric ducts	36.00	75.00	60.00
1,060 lin.ft. (*a*) 3 in. wooden electric ducts and conduits	.60	.40	.60
120 lin.ft. (*c*) 4 in. wooden electric ducts and conduits	.60	.60	.75
5,250 lin.ft. (*a*) 3 in. fibre electric ducts and conduits	.50	.35	.40
2,300 lin.ft. (*b*) 3½ in. fibre electric ducts and conduits	.50	.40	.50
280 lin.ft. (*c*) 4 in. fibre electric ducts and conduits	.50	.45	.60
15 service boxes on relocated duct lines	36.00	100.00	150.00
10 junction boxes on relocated duct lines	240.00	500.00	250.00
10 junction boxes additional	840.00	500.00	300.00
Extended totals (including underpinning of buildings)	$3,948,830	$4,974,296	$5,919,506

Buildings (Continued)

land, 3 story, brick and timber, plain foundation, Clifton Blvd. and Cove Ave., here. $150,000.

Ind., Evansville — Community — Trinity Methodist Church plans community house. $200,000. A. E. Craig, pastor. Engineer and architect not selected.

Ind., Indianapolis—Apartment—T. W. De Hass, Hume-Mansur Bldg., having plans prepared by George & Zimmerman, Meyer-Kiser Bank, 3 story and basement, rein.-con. and brick, McClain Pl. $150,000.

Ind., Indianapolis—Apartment—George & Zimmerman, archts., 501-3 Meyer-Kiser Bank Bldg., making plans and soon takes bids 3 story and basement, brick and stone, North Meridian St., for W. Woodbridge, 2258 North Meridian St. $190,000.

Ind., Indianapolis—Hospital—Bd. Health having plans prepared by A. Scherrer, Ind. Trust Bldg., remodeling and additions, incl. detention ward, completing 3rd and 4th floors of nurses' home, etc., brick. $280,000.

Ill., Chicago — Apartment — Daemicke Bros., c/o T. R. Bishop, archt., 35 South Dearborn St., plans 3 story, 132 x 151 ft., fireproof, 6446-58 Kenwood St. $475,000.

Ill., Chicago—Apartment—Smolin & Gumbiner, c/o Dubin & Eisenberg, archts., 14 West Washington St., plans 3 story and basement, fireproof, Horne and Pierce Sts. $500,000.

Ill., Chicago — Hospital — Masonic Hospital Assn., c/o G. F. Schreiber, archt., 105 West Monroe St., plans 6 story, fireproof, Wellington St. near Florence St. $250,000.

Ill., Chicago—Hospital—Southwest General Hospital, c/o B. H. Jillson, archt., 30 North Michigan St., plans 4 story, 50 x 170 ft., fireproof, Wood and 57th Sts. $200,000.

Ill., Chicago—Temple—Memorial Masonic Temple Assn., c/o G. E. Dewey, 1414 South Michigan Ave., plans 6 story, fireproof, Drexel and 49th Sts. $500,000. W. W. Bendus, 332 South Michigan St., archt.

Ill., Rogers Park (Chicago P. O.)—High School—See "Excavation, Drainage, Irrigation" under "Contracts Awarded."

Ill., Springfield—Temple—A. A. O. N. M. S. having plans prepared by Johnson, Miller, Miller & Yeager, 30 North 5th St., Terre Haute, Ind., 4 story and basement, 130 x 170 ft., rein.-con. $800,000.

Wis., Appleton—Church—First Methodist Congregation, J. Holmes, pastor, 737 Lawrence St., soon takes bids 2 story, stone and concrete, plain foundation. $250,000. Childs & Smith, 720 North Michigan Blvd., Chicago, archts.

Wis., Beloit—School—St. Jude Congregation, c/o J. Hanz, pastor, 747 Hackett Ave., had plans prepared by F. H. Kemp, Beloit, 2 story and basement, brick and tile, plain foundation. $150,000.

Wis., Milwaukee — Apartment — J. F. Zivnuska, 582 Mitchell St., plans 3 story, brick and concrete, plain foundation, Grand Ave. Engineer and architect not selected.

Wis., Milwaukee — Warehouse — E. R. Godfrey & Sons, 294 Bway., plans 8 story and basement, brick and concrete, plain foundation, Bway. $150,000. Engineer and architect not selected.

Neb., Omaha—Church—Dundee Presbyterian Church, 50th St. and Underwood Ave., c/o J. J. Dodds, had plans prepared and takes bids about June 1, 1 story and basement, 160 x 165 ft. $250,000. C. Steinbaugh, 662 Brandeis Theater Bldg., archt.

Neb., Omaha—Hall and Community—Knights of Columbus, 2301 Harney St., having plans prepared by L. A. Daly, 662 Peters Trust Bldg., 6 story and basement, 140 x 152 ft. rein.-con., brick and steel, 20th and Dodge Sts. $500,000. Noted Jan. 24.

Neb., Omaha—Hospital—St. Catherines Hospital had plans prepared by L. A. Daly, 622 Peters Trust Bldg., 3 story and basement, 60 x 180 ft., 811 Forrest Ave. $200,000.

Mo., St. Louis—Market—City soon takes bids 3 story and basement, 226 x 270 ft., rein.-con., brick, stone and steel, Bway. $1,350,000. L. R. Bowne & H. Updike, 301 City Hall, archts. E. E. Christopher, 301 City Hall, engr. Noted Jan. 31.

Tex., Dallas—Office—Lang & Witchell, archts., Amer. Exch. Natl. Bank, takes bids latter part of month, 14 story and basement, 90 x 106 ft. brick, steel and concrete, Browder and Wood Sts., for Southern Exch. Building Co., c/o architects. $800,000.

Tex., El Paso—Schools—Voted $500,000 bonds for 2 schools, brick and concrete. Address Mayor Dudley. Noted Apr. 24.

Tex., Houston—Bank and Office—Pub. Natl. Bank making plans 6 story and basement, brick, concrete and steel, Main and Preston Sts. $300,000. Engineer and architect not announced.

Tex., Sherman—Administration—Austin College, steel, plans brick and concrete, on campus. $300,000. Engineer and architect not selected.

Okla., Bartlesville — High School — Bd. Educ. had preliminary plans prepared 3 story and basement, 120 x 220 ft., rein.-con. and brick, plain foundation, 4th St. $390,000. Architect not selected.

Ariz., Phoenix — School — St. Marys Parochial School having plans prepared by Lescher & Mahoney, Bank of Arizona Bldg., fireproof, Polk and 3rd Sts. $150,000.

Ariz., Phoenix—Temple—Masonic Bodies having plans prepared by Lescher & Mahoney and V. Wallingford, archts., Bank of Arizona Bldg., 2 story and basement, 100 x 150 ft., brick or concrete. $150,000.

Ariz., Tucson — Church — First Baptist Church having plans prepared by R. H. Orr, Corporation Bldg., Los Angeles, 100 x 130 ft. brick. $150,000.

Ariz., Tucson—School—Trinity Presbyterian Church having plans prepared by R. H. Orr, Corporation Bldg., Los Angeles, 2 story and basement, brick school to be used temporarily as church. $150,000.

Colo., Denver—Store—Denver Dry Goods Co. having plans prepared by M. H. and B. Boyt, Colorado Natl. Bank Bldg., 2 story, 80 x 207 ft. addition, 16th and California Sts. $350,000.

Ore., Portland — Monastery — Servite Fathers, 3121 West Jackson St., Chicago, had preliminary plans prepared by Houghtaling & Dougan, Gearin Bldg., 8 buildings, main one to be 150 x 400 ft., Sandy Blvd. and 82nd St., near here. $5,000,000-$7,000,000. A. M. Mayers, 909 South Smith Ave., in charge. $1,000,000 will be spent this year and bids will be let from time to time on small units.

California — Hospital — City and San Francisco Co. having plans prepared by H H. Meyers, Kohl Bldg., San Francisco, fireproof tuberculosis hospital in hills of San Mateo Co. To exceed $150,000.

Calif., Crockett—Warehouse—See "Industrial Works."

Calif., Emeryville — Warehouse, etc. — Pacific Gas & Electric Co., 445 Sutter St., San Francisco, plans warehouse and distributing station, here. To exceed $300,000. Probably private plans.

Calif., Huntington Park (Branch of Los Angeles)—Bank and Office—Hellman Commercial Trust & Savings Bank, 601 South Main St., Los Angeles, having plans prepared by A. S. Heineman, San Fernando Bldg., Los Angeles, 3 story and basement, 50 x 150 ft., brick, here.

Calif., Long Beach—School—Southwest Military Institute, c/o Wright & Gentry, archts., Marine Bank Bldg., having plans prepared fireproof group of school buildings. $175,000.

Calif., Los Angeles — Church — First Church of Christ Scientist, c/o Milwaukee Building Co., archts., Wright-Callendar Bldg., having preliminary plans prepared church, probably brick with basement, Orange St. $150,000.

Calif., Los Angeles—Club and Office—Los Angeles Ad Club, c/o J. J. Frauenfelder, archt., Story Bldg., having preliminary plans prepared 10 to 12 story and pasement, 50 x 180 ft., fireproof, Orange St.

Calif., Los Angeles — Nurses Home — Methodist Hospital c/o Rea & Garstang, archts., Trust & Savings Bldg., having plans prepared 5 story and basement, brick and rein.-con., Grand Ave. To exceed $250,000.

Calif., Los Angeles—Warehouse—Neptune Meter Co., 701 East 3rd St., having plans prepared by W. J. Saunders, Laughlin Bldg., 3 story (ultimately 6 story) and basement, 131 x 177 ft., rein.-con., Alameda and 3rd Sts.

Calif., Oakland—Bank and Office—Central Natl. Bank, 14th St. and Bway., having sketches made by G. W. Kelham, Sharon Bldg., San Francisco, Class A, probably rein.-con. $1,000,000.

Calif., Oak Park (Sacramento P. O.)—Theatre, Store and Office—M. T. Jorgensen, archt., 110 Sutter St., San Francisco, preparing plans brick, here. $150,000. Owner's name withheld.

Buildings (Continued)

Calif., San Diego—High School—Bd. Educ. having plans prepared by E. F. Banning, 206 Bancroft Bldg., 2 story, 129 x 250 ft., tile and brick, Point Loma Dist. $200,000.

Cal., San Fernando—Theatre, Store and Office—San Fernando Theatre and Holding Co., Inc., c/o A. G. Bailey, archt., Junior Orpheum Bldg., Los Angeles, had preliminary plans made 2 story, 75 x 150 ft., rein.-con. and steel, Porter St.

Calif., San Francisco—Apartment—J. and J. Goldstein, c/o E. E. Young, archt., 2002 California St., completing plans 6 story and basement, rein.-con., Hyde and Sutter Sts. $150,000.

Calif., San Francisco—Apartment—J. Steur, 760 Geary St., having plans prepared by J. C. Hladik, Monadnock Bldg., 6 story and basement, brick, Sutter St. near Leavenworth St. $150,000.

Calif., San Francisco—Hotel—W. F. Gunnison and H. P. Merritt, archts., 57 Post St., having plans prepared 5 story and basement, rein.-con. addition to hotel. $150,000. Owner's name withheld.

Calif., San Francisco—Office and Loft—United Holding Co., c/o W. A. Stephen, archt., 351 Kearny St., having plans prepared 4 story and basement, rein.-con., Julia and Mission Sts. $150,000 or more.

Calif., San Francisco—Police Station—City and San Francisco Co. having preliminary plans prepared by A. I. Coffey, Humboldt Bank Bldg., 2 story, rein.-con., 4th and Clara Sts. $150,000.

Calif., Santa Monica—Church—St. Monicas Church having preliminary plans prepared by A. C. Martin, Higgins Bldg., Los Angeles, brick, 8th St. $150,000. School and parish house will be erected when church is completed.

Calif., Visalia—Lodge—The Masonic Lodges of Visalia plan fireproof, Court St., South. $150,000.

Que., Berthier—Hotel—P. Beaudoin, Berthier, plans to rebuild 4 story, 80 x 80 ft., recently destroyed by fire. $150,000. Architect's name withheld.

Que., Cartierville—Home—Sisters of Home for Incurables, having plans prepared by Viau & Venne, 99 St. James St., Montreal, 5 story, 75 ft. high, 52 x 2,700 ft., rein.-con. and brick, Gouin Blvd., here. $2,500,000.

Que., Montreal—Schools—Catholic School Comrs., 87 St. Catherine St. W., having plans prepared by I. Vautrin and J. Venne, 30 St. James St., Meilleur School, Rouen St. $300,000; by Viau & Venne, 99 St. James St., St. Philomene School, Rosemount Ave. $150,000; by David & Brosseau, Keiffer Bldg., St. Catherine St. W., St. Croix School, De Biencourt St., $214,000, and St. Augustine de Canterbury School, Cote St. Antoine Rd. $150,000; by Gascon & Parent, 502 St. Catherine St. E., St. Margaret Mary School, Delormier Ave., $150,000; by J. O. Marchand, 294 St. Catherine St. E., St. Ambroise School, De-Normandville St. $750,000.

Que., Westmount—Hall—City plans to issue $200,000 bonds, reconstructing Victoria Hall, Sherbrooke St. W. A. McLagan, mayor.

Ont., Cobourg—College—Bd. Educ. having plans prepared by Power Son & Drever, Kingston, 2 story and basement, 8 room, rein.-con., brick and steel, plain foundation, $150,000.

Ont., Toronto—School—Separate School Bd., 477 Jarvis St., having plans prepared by J. M. Cowan, 991 Bay St., 2 story and basement, 10 room, rein.-con., brick, stone, steel and tile, plain foundation, $175,000.

Ont., Toronto—Forestry—University of Toronto, Queens Park, having plans prepared by Darling & Pearson, 2 Leader Lane, 3 story and basement, rein.-con., brick and steel, plain foundation, Queens Park. $150,000.

BIDS DESIRED

Mass., Boston—Apartment—Coleman & Gibert, 331 Huntington Ave., taking bids 5 story, 150 x 200 ft., fireproof, Huntington Ave. and Opera Pl. $200,000. Funk & Wilcox Co., 26 Pemberton Sq., archts.

N. Y., New York—Nurses School—May 19, by Medical Superintendent, Bellevue Hospital, 415 East 26th St., additional wings to Bellevue training school for nurses. Former bids rejected. Noted May 8.

N. Y., New York—School—June 10, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, P. S. 73, Anderson Ave., Bronx Boro, here, for Bd. Educ., 500 Park Ave. Noted July 12.

N. Y., New York—Synagogue—Congregation Shearith Israel, c/o B. H. and C. N. Whinston, archts. and engrs., 2 Columbus Circle, will build brick, steel and stone, plain foundation, Southern Blvd. and Intervale Ave. $150,000. Work will be done by separate contracts under supervision of architects. Noted May 1.

N. J., Trenton Junction (Trenton P. O.)—Dormitory—May 28, by B. G. Lewis. State Office Bldg., Trenton, 2 story, brick and steel, concrete pile foundation, here, for New Jersey School for Deaf. $235,000. A. H. Moses, Temple Bldg., Camden, engr. Guilbert & Betelle, Commerce Bldg., Newark, archts.

Pa., Grove City—Church—June 2, by Grove City Presbyterian Church and J. C. Fulton & Son, archts., Thompson Ruby Bldg., 2 story and basement, 100 x 180 ft., brick and stone, Pelton Hall site. $300,000.

Pa., Hazelton—Church—May 20, by J. S. Fagan, pastor St. Gabriels Roman Catholic Church, 1 story and basement, 66 x 150 ft. brick and steel, 121st St. and Wyoming Ave. $330,000. P. S. Sheridan, Markle Bank Bldg., archt.

Pa., Monaca—Factory—Superior Steel Co., c/o M. P. Simpson, 431-3 3rd Ave., New Brighton, will build and award separate contracts, two 1 story buildings, one 60 x 100 ft. other 60 x 200 ft., brick and steel. Private plans.

Pa., New Castle—Church—St. Marys Roman Catholic Congregation and J. P. Brenot, archt., National Transit Bldg., Oil City, taking bids 1 story and basement, 65 x 150 ft., steel and stone, Beaver St., here. $150,000.

Pa., Phila.—Apartment—Solomon Bros., 9th and Walnut Sts., will build and award separate contracts, 4 story and basement, 80 x 100 ft., brick and steel, 5th St. and City Line. $200,000. Stetler & Dysher, Jefferson Bldg., archts.

Pa., Phila.—Recreation—May 20, by Bureau Recreation, C. H. Grakelow, dir., 1 and 2 story and basement, 80 x 259 ft., brick and steel, plain foundation, called George A. Vare Recreation Centre, 26th and Morris Sts. $150,000. P. H. Johnson, 1713 Sansom St., archt. Noted Feb. 21.

Pa., Pittsburgh—Apartment—Milwood Realty Co., Benedum Trees Bldg., and E. F. Wood & Co., archts., Century Bldg., taking bids 8 story and basement, 60 x 120 ft., brick and steel, Milwood St. $250,000.

Pa., Uniontown—Bank and Office—May 21, by A. Kahn, archt., Marquette Bldg., Detroit, Mich., 7 story and basement, 73 x 150 ft., rein.-con., brick and steel, plain foundation, Bway. and West Main St., here, for Citizens Title & Trust Co. $800,000.

Pa., Upper Darby—High School—June 5, by Bd. Educ. c/o H. W. Caster, archt., Stephen Girard Bldg., Phila., 2 story and basement, 58 x 160 ft., rein.-con. and brick, plain foundation, Lancaster Ave. $250,000.

Md., Baltimore—High School—May 28, by Bd. Awards, 3 story, rein.-con. and brick, plain foundation, Hilton St., $1,000,000. H. G. Perring, Hearst Tower, superv. engr. Pub. Impvt. Comn. Smith & May, Calvert Bldg., archts. Noted May 8.

W. Va., Huntington—Bank and Office—First Natl. Bank, 4th Ave. and 10th St., taking bids and opens same about June 1, 12 story, 60 x 70 ft., rein.-con., brick and steel, 4th Ave. $450,000. Meanor & Handloser, Professional Bldg., archts.

N. C., Raleigh—High School—May 21, by School Com. Hugh Morson High School, Bennehan Sq. $400,000. C. Gasden Sayre, Allen Bldg., archts.

O., Ashtabula—Commercial and Club—L. O. O. M. taking bids 3 story and basement, 82 x 115 ft., brick, steel and concrete. $150,000. E. B. Lee, 1210 Chamber of Commerce Bldg., Pittsburgh, Pa., archt.

O., Cleveland—Orphanage—G. S. Rider & Co., archts., Century Bldg., taking bids 1st group 1 and 2 story, brick and steel buildings, incl. school, dining hall, frame cottages and boiler house. State St. and Bean Rd., for Catholic Charities Corp., c/o W. T. Lyon, pres., 704 Century Bldg. Total cost $2,000,000.

Mich., National Mine—High and Grade School—May 22, F. Moody, secy. Bd. Educ., 2 story and basement, 91 x 211 ft. rein.-con., brick and steel. $250,000. A. D. Hubert, 6-7-8, Kreuz Bldg., Menominee, archt. Noted Feb. 14.

Ill., Chicago—Apartment—M. Telechansky, 1018 Hyde Park Blvd., taking bids 3 story, 60 x 122 ft., fireproof, 5053-59 Ellis Ave. $150,000. C. J. Petciski, 157 West Randolph St., archt.

Ill., Chicago—Apartment—Wolff, Sexton, Harper & Trueax, archts., 7 West Madison St., taking bids 3 story, 100 x 137 ft., fireproof, 69th and Wabash Sts., for J. W. Torrence, c/o architects. $165,000.

Ill., Chicago—Apartment—Hall Lawrence, Rippel & Radcliffe, archts., 123 West Madison St., taking bids 4 story, 100 x 123 ft., fireproof, 6428-38 Cottage Ave., for Lowell Building Corp., c/o architect. $300,000.

Ill., Chicago—Apartment—Rawson & Eisenberg, archts., 5 North La Salle St., taking bids 3 story and basement, 95 x 127 ft., fireproof, Austin and Filmore Sts., for C. P. Leavitt, c/o architect. $150,000.

Ill., Chicago—Bank and Office—K. M. Vitzthum & Co., archts., 605 North Michigan St., taking bids 6 story, 83 x 125 ft., fireproof, North and Crawford Sts., for Pioneer Trust & Savings Bank, c/o archts. $650,000.

Ill., Chicago—School—Z. T. Davis, archt., 400 North Michigan St., taking bids 3 story, fireproof, 6410-12 Dante Ave., for St. Cyrils College, 6411 Dante Ave. $650,000.

Ill., Chicago—Store and Apartment—J. Ecklund, 6942 Stony Island St., taking bids 3 story, 73 x 125 ft., fireproof, 68th and Stony Island Sts. $150,000. A. G. Lund, 453 West 63rd St., archt.

Wis., Milwaukee—Apartment—May 21, by Rosman & Wierdsma, archts., 490 Bway., 3 story and basement, 47 x 154 ft., brick and tile, plain foundation, Ogden Ave., for Franklin Realty Co., 85 Mason St. $150,000. Noted Apr. 3.

Wis., Milwaukee—High School, etc.—Brust & Philipp, archts., 405 Bway., taking bids 3 story and basement, 132 x 220 ft., high school and convent, brick and concrete, plain foundation, Mitchell and 24th Ave., for Our Lady of Mercy Academy, 705 Natl. Ave. $400,000. Noted Dec. 27.

Wis., Racine—Hotel—May 24, by E. B Funston Co., archts., Janes Bldg., 8 story and basement, 78 x 100 ft., brick and concrete, plain foundation, for Friedman Hotel Corp., 505 Main St. $350,000. Noted Mar. 6.

Neb., Plattsmouth—Infirmary—Nebraska Masonic Home, c/o J. R. Webster, 1540 Natl. Bank Bldg., Omaha, taking bids on first unit, 4 story and basement, L shape, 43 x 85 x 110 ft. brick or stone. $150,000 or more. J. Latenser & Sons, 732 Peters Trust Bldg., Omaha, archts.

Mo., St. Louis—Apartment—E. M. Worthington, 329 Belt Ave., will build 3 story and basement, with two 40 x 178 ft. wings, rein.-con., brick and stone, 4368 Lindell Blvd., by separate contracts. Brick and concrete work, etc. awarded to Kiel, Boaz-Kiel Constr. Co., 4030 Chouteau St. Total cost $200,000.

Tex., Galveston—School—June 5, by Secretary Bd. Trustees, Public Free Schools, two 2 story, 110 x 150 ft., grade schools known as San Jacinto and Central Schools, rein.-con., stucco over brick and hollow tile, etc. W. B. Ittner, 905 Locust St., St. Louis, Mo., archts.

Okla., Wewoka—Court House—May 19, by Clerk Seminole Co., 3 story and basement, 110 x 170 ft., rein.-con. and brick, plain foundation, Wewoka St. $160,000. Monnott & Reid, Empire Bldg., Oklahoma City, archts. Noted Apr. 10.

Calif., Los Angeles—Garage—H. L. Pierce, archt., Wright-Callendar Bldg., taking bids 1 story, 100 x 125 ft., brick, Pasadena Ave., for Albertson Motor Co., 1549 South Figueroa St.

Calif., Los Angeles—Store, Office and Loft—E. C. and E. W. Taylor, archts., 713 West 8th St., taking bids 12 story and basement, 45 x 100 ft., rein.-con., North Bway., for C. Pico, et al., c/o architects.

Calif., San Francisco—Club—Bakewell & Brown, archts., 251 Kearny St., taking bids 2 story, frame and plaster, for Olympic Club, Olympic Club Bldg. $200,000. Noted Nov. 22.

Que., Thetford Mines—City Hall and Court House—City taking bids 3 story, 69 x 100 ft. concrete and steel. $200,000. A. Lacroix, Quebec, archt.

Que., Three Rivers—Station and Office—May 17, by Ross & McDonald, archts., Belmont St., Montreal, 2 story, 32 ft. high, 80 x 325 ft. rein.-con., brick, steel and stone, Champflour St., here, for Canadian Pacific Ry., Windsor Sta., Montreal. Noted Feb. 28.

BIDS RECEIVED

N. J., Asyla (Grenloch, P. O.)—Hospital—Camden Co., Court House, Camden, May

Buildings **(Continued)**

6, general contract group of buildings for tuberculosis hospital, here, from Sinclair & Griggs, Medical Arts Bldg., Phila., $1,012,-000; plumbing and drainage, from N. Connelly, 1404 North 18th St., Phila., $93,776; heating and ventilating from Camden Heating Co., 8 Market St., Camden, $64,-750; electrical work from Eastern Electric Constr. Co., 1936 South College Ave., Phila., $38,500. Noted Apr. 17.

Pa., Phila.—Hospital, etc.—W. Krusen, dir. Pub. Health, 584 City Hall, May 2, from F. W. Mark Constr. Co., Commercial Bldg., general construction of buildings, dormitories, extensions and alterations to boiler house, at Phila. Hospital for Insane, at Byberry, 35th Ward, $572,650, landscape work, iron fences, gates, grading and paving macadam roads $91,850, buildings, connecting corridors, extending dining room and kitchen, also power house at Phila. Institute for Feeble Minded at Byberry, 35th Ward, $1,111,864; from N. Connelly, 1404 North 18th St., plumbing in 4 cottages for Institute for Feeble Minded, $56,444, and plumbing in 2 dormitories at Insane Hospital $36,988; from Mechanical Equipment Co., 214 South 12th St., heating and mechanical equipment in cottages $224,893 and in dormitories $145,051; from W. V. Pangbourne & Co., 1927 West Montgomery St., electric work in cottages $77,-980 and in dormitories $27,000. Noted Apr. 24.

Tenn., Memphis — High School — City, constructing North Side High School, 3 story, from B. B. Buffalo & Co., 3rd and Union Sts. $195,000. Noted Apr. 20.

Mo., Koch—Infirmary—Bd. Pub. Serv., 208 City Hall, St. Louis, May 2, general contract 3 story and basement, 62 x 165 ft., at Robert Koch Sanitorium, here, from J. J. Clarke Constr. Co., Arcade Bldg., St. Louis, $226,885. Noted Apr. 3.

Calif., San Jose — Office — Commercial Club, c/o Binder & Curtis, archts., 255½ 1st St., 10 story and basement, Class A, brick and steel, general contract from R. W. Littlefield, 357 12th St., Oakland, $191,100. Noted Apr. 10

CONTRACTS AWARDED

Mass., Boston — Office — Travers Trust Co., c/o Funk & Wilcox Co., archts. and engrs., 26 Pemberton Sq., will build 9 story, 75 x 80 ft., rein.-con., Friend and Travers Sts., by day labor. $200,000.

Mass., Chatham—School and Town Hall —Town, 2 story, 60 x 110 ft., brick and stone, Main St., to C. A. Batson, Brockton. $150,000.

N. Y., Le Roy—School—Bd. Educ., 2 story and basement, 43 x 59 x 63 x 167 ft., brick and steel, plain foundation, to P. G. Hauck, Cox Bldg., Rochester. Noted Apr. 10.

N. Y., New York—Apartment—Brown, Wheelock, Harris, Vought & Co., 20 East 48th St., 13 story, 60 x 125 ft., brick, steel and stone, plain foundation, 1030 5th Ave., to Dwight P. Robinson & Co., Grand Central Palace. Archts. est. $1,500,000.

N. Y., New York — Apartment — J. Paterno, 601 West 115th St., will build 16 story, brick, steel and stone, plain foundation, 115th St. and Riverside Dr., by day labor. $4,000,000. Private plans.

N. Y., New York—Warehouse—Melville Shoe Corp., 121 Duane St., 6 story and basement, 110 x 120 ft., rein.-con. and steel, plain foundation, Hudson St., to Turner Constr. Co., 244 Madison Ave. Noted Apr. 24 under "R. W. Realty Co., Inc."

N. Y., Yonkers—Exchange—New York Telephone Co., 15 Dey St., New York City, 3 story, brick, steel and stone addition, plain foundation, Riverdale Ave., here, to Gillies-Campbell, 101 Park Ave., New York City. Archts. est. $200,000.

N. J., Atlantic City—Hotel—W. Smedley, archt., St. Girard Bldg., Phila., 9 story and basement, 57 x 185 ft., and 6 story and basement, 53 x 143 ft., steel addition, sheet and wood pile foundation, here, to Turner Constr. Co., 1713 Sansom St., Phila., for Hotel Dennis, Michigan Ave. and Beach. Archts. est. $1,500,000. Noted Apr. 3.

N. J., Cedargrove—Hospital—G. S. Bergen, purch. agt. Essex Co., Court House, Newark, general contract hospital, here, to J. Mitchell, Inc., 999 Bergen Ave., Jersey City, $696,154; plumbing, kitchen and other equipment, to R. B. Smith, 62 Ann St., Newark, $95,632; electrical work, Item 1, to Pub. Serv. Production Co., Park Pl., Newark, $36,300, Items 2 and 3, to K. W. Electrical Co. 47 Lawrence St., Newark, $46,431; heating, ventilating and mechanical equipment, to Stewart & Farrell, 269 Camden St., Newark, $87,742. Noted Apr. 10.

N. J., Trenton—School—Sacred Heart Parish, 153 North Warren St., 4 story, 60 x 115 ft., brick and steel, South Broad St., to F. D. Priory, Inc., 11 West State St., $150,000.

Pa., Phila.—Store—Frank & Seder, 11th and Market Sts., 12 story and basement, 78 x 108 ft., rein.-con., steel and terra cotta, plain foundation, to P. M. Sax, Penfield Bldg., who will take sub-bids when plans are completed. Architects est. $1,000,000. Noted May 1.

Md., St. Marys City — Seminary — St. Marys Female Seminary, 3 story and basement, 42 x 152 ft., concrete and brick, plain foundation, to Hastings & Parsons, Water St., Salisbury, $134,792. Noted May 8.

D. C., Wash.—Chapels, etc.—National Episcopal Cathedral, chapels and burial vaults, etc., here, to G. A. Fuller & Co., Munsey Bldg., $500,000.

W. Va., Morgantown—Lodge B. P. O. E. Lodge 411, remodeling and addition, 40 x 100 ft., general contract to Baker & Combs, Morgantown. Archts. est. $150,000. Noted Oct. 4.

S. C., Greenville—Hotel—Poinsette Hotel Co., 12 story, 100 x 200 ft., brick, steel and concrete, to Hunkin-Conkey Constr. Co., Hunkin-Conkey Bldg., Cleveland, O. Archts. est. $1,000,000.

Tenn., Knoxville—Church—First Presbyterian Church, State St., 1 story, brick and stone addition, to Worsham Bros. Constr. Co., Empire Bldg., approximately $150,000.

O., Akron—City Hall—Bd. Control, steel, concrete and sandstone, South High St., to Moran Constr. Co., Terminal Bldg., $681,524. Noted May 1.

O., Cleveland—Church—St. Johns Cantius Church, 906 College St., 1 story and basement, 90 x 190 ft., brick, steel and stone, Professor and College Sts., to Hebring Co., 1832 West 54th St. Archts. est. $250,000. Noted Apr. 24.

O., Cleveland — Home — Eliza Jennings Home for Aged, c/o C. S. Orr, pres., 14903 Clifton Blvd., Lakewood, 3 story and basement, brick, steel and concrete, 10503 Detroit Ave., here, to J. Grant & Son, 4500 Euclid Ave. Archts. est. $250,000. Noted Apr. 24.

O., Cleveland — Office — Twelve Twenty Huron Co., c/o S. H. White, archt., Schofield Bldg., converting 12 story, brick and steel garage into office, 1220 Huron Rd., to Van Blarcom Co., Plymouth Bldg. Archts. est. $440,000.

Ind., Ft. Wayne — Apartment — Apartment Building Co., c/o A. M. Stauss, Shoaff Bldg., 3 story and basement, 100 x 150 ft., rein.-con. and brick, Berry St., to O. Springer, 419 Citizen Trust Bldg. Archts. est. $250,000.

Ind., Ft. Wayne — Temple — Mispah Temple, A. A. O. N. M. S., 5 story and basement, 146 x 165 ft. rein.-con., brick and steel, to M. Irmscher & Sons, 118 West Berry St. $352,930. Noted Dec. 27.

Ind., Indianapolis — High School — Bd. School Trustees, 150 North Meridian St., 2 story, brick annex, general contract to Cornell Eng. Co., Cornell Ave., $220,000; heating and ventilating, also plumbing to Hayes Bros., Inc., 236 West Vermont St., $31,780 and $35,965 respectively. Engrs. est. $315,119. Noted Mar. 6.

Ind., Indianapolis—Lodge—I. O. O. F. Lodge 465, 3 story and basement, 42 x 120 ft., rein.-con. and brick, to Service Constr. Co., Castle Hall Bldg. Archts. est. $150,000.

Ind., Marion — School — Bd. School Trustees, 2 story and basement, rein.-con., brick and steel, concrete pile foundation, 4th St. to Anderson & Hunnicut Constr. Co., Union City. $187,000. Noted Nov. 29.

Mich., Detroit—Hotel—L. W. Tuller. Tuller Hotel, 13 story and basement, 60 x 100 ft., rein.-con., brick and steel, plain foundation, Sproat St. and Park Ave., to O. Misch Co., 159 East Columbia St. Archts. est. $875,000.

Ill., Chicago — Apartment — A. West, 6719 Oglesby St., 3 story, 125 x 154 ft., fireproof, 7108-22 Constance St., to A. and E. Anderson Co., 19 South LaSalle St. Archts. est. $300,000.

Ill., Chicago—Office—Owner, c/o K. M. Vitzthum & Co., archts., 6059 North Michigan St., 25 story, fireproof, Michigan and Beaubien Sts., to Thompson-Black, 212 West Washington St. Archt. est. $2,-000,000.

Ill., Chicago—Store and Apartment—R. B. Wolinsky, 3105 West Harrison St., 3 story, 99 x 115 ft., fireproof, 400-408 South Laramie St., to M. A. Alter & Sons, 1443 North Luna St. Archts. est. $150,000.

Ill., Chicago — Warehouse — Holton Seelye & Co., 140 South Dearborn St., 6 story, 50 x 160 ft., fireproof, 4036-38 South Michigan St., to H. Janisch & Co., 1813 Winona St. Archts. est. $200,000.

Ill., Chicago—Warehouse—Tide Water Oil Sales Corp., c/o A. Epstein, archt., 2001 West Pershing Rd., 2 story, 100 x 140 ft., fireproof, 1441 West 57th St., to E. W. Sproul Co., 2001 West Pershing Rd. Archts. est. $150,000. Noted May 8.

Wis., Kohler — Office — Kohler Co., 3 story and basement. 66 x 210 ft., brick and concrete, plain foundation, to Immel Constr. Co., Dana Bldg., Fond du Lac. $300,000. Noted Apr. 24.

Wis., Lancaster — High School — School Bd., F. Glanville, clk., 2 story and basement. 90 x 130 ft., brick and tile, plain foundation, to H. Evers, 656 Builders Exch., Minneapolis, Minn., $109,260. Noted Apr. 17.

Wis., Milwaukee — Factory — E. C. Landisch, 901 22nd St., 1 story, 60 x 100 ft., brick and timber, plain foundation, 30th St., to Starck Bros., 265 23rd Ave., $40,000.

Wis, Oshkosh—Print Shop—Goettmann Printing Co., 38 Main St., 1 story and basement, 40 x 125 ft., brick and tile, plain foundation, Washington St., to B. B. Ganther, 385 Bowen St. $40,000.

Minn., Northfield—Science Hall—St. Olafs College, P. O. Holland, business mgr., general contract 3 story and basement, 84 x 164 ft., rein.-con., brick and tile, to E. G. Evensta, 714 Builders Exch., Minneapolis. Total cost $250,000. Noted Apr. 24.

Kan., Chanute—Municipal—City, 3 story, 198 x 198 ft., rein.-con., brick and steel, plain foundation, to G. H. Seedhoff Constr. Co., Broadview Hotel Bldg., Wichita, $239,890. Noted Apr. 24.

Mo., St. Louis—Apartment—See "Bids Desired."

Mo., St. Louis — Garage — Commodore Garage Co., c/o W. L. Allen, 615 Chestnut St., general contract 3 story and basement, rein.-con. and steel, 7th St. near Franklin St., to J. S. Alberici Constr. Co., Boatmens Bank Bldg. Archts. est. $200,000.

Mo., St. Louis—Hotel and Shop—Mayfair Investment Co., 312 North 8th St., 17 story and basement, 69 x 128 ft., brick, rein.-con., steel, terra cotta and marble, to P. J. Bradshaw, International Life Bldg., $2,000,000. Noted Apr. 10.

Tex., Houston—Business—J. A. Baker, Chamber of Commerce, general contract 1 story, 240 x 300 ft., brick and steel, Main and Travis Sts., to W. A. Lang, 2nd Natl. Bank, $150,000.

Calif., Beverly Hills—Store—W. G. McCarty, c/o Walker & Eisen, archts., Great Republic Life Bldg., Los Angeles, 1 story (ultimately 6 story), 60 x 200 ft. with 50 x 110 ft. wing brick, here, to C. Thoren, 6764 Hawthorne Ave., Los Angeles, $150,000.

Calif., Los Angeles — Club — Womens Athletic Club, c/o Allison & Allison, archts., Hibernian Bldg., 7 story and basement, 150 x 156 ft., Class A, rein.-con., general contract to Macdonald & Driver, Douglas Bldg., $479,365. Noted May 1.

Calif., Orange—Theatre and Store—H. Z. Adams will build brick, seating capacity 1,300, Maple and Glassell Sts., by day labor. $150,000. West Coast Theatres, Inc., Knickerbocker Bldg., Los Angeles, lessee. Noted May 8.

Calif., San Diego—Bath House—Mission Beach Co., Mission Beach, 175 x 350 ft., heavy mill construction, stucco and steel, to Wurster Constr. Co., Wholesale Terminal Bldg., Los Angeles, $350,000. Noted Jan. 17.

Calif., San Jose—Store and Office—Sainte Claire Realty Co., c/o Weeks & Day, archts., 315 Montgomery St., San Francisco, 5 story and basement, rein.-con., 1st and San Carlos Sts., here, to Cahill Bros., Sharon Bldg., San Francisco, $400,000. Noted May 1.

Calif., Santa Monica — High School — Santa Monica Junior High School Dist., general contract to Alston & Hogan, Oceanpark (Santa Monica P. O.), $174,685. Noted May 1.

Que., Giffard—Orphanage—Les Soeurs de La Charite, 5 story, 70 x 364 ft., concrete, stone, brick and steel, to F. X. Lambert, Ste Anne De La Pocatiere, $400,000.

Que., Montreal — Hospital — Ancient Arabic Order of Nobles of Mystic Shriners, 4 story, 65 x 275 ft., rein.-con., stone, brick and stucco, Pine Ave., to Church Ross & Co. Ltd., 10 Cathcart St., $250,000.

Federal Government Work

BIDS DESIRED

Pa., Pittsburgh — Generating Plants — June 11, by U. S. Engineer, Pittsburgh, two hydro-electric generating plants for Locks 7 and 8, Monongahela River; adv. E. N.-R. May 15.

Ala., Florence—Bridge—Aug. 5, by U. S. Engineer, Florence, bascule bridge across Navigation Lock of Wilson Dam; adv. E. N.-R. May 15.

Ala., Florence—Operating Machinery—June 14, by U. S. Engineer, Florence, operating machinery for regulating gates at Wilson Dam, Tennessee River; adv. E. N.-R. May 15.

O., Cincinnati—Cottages—June 2, by U. S. Engineer, 405 Custom House, lock-keepers cottages at Dams 34, 35 and 38, Ohio River; adv. E. N.-R. May 15.

Minn., Mille Lacs—School, etc.—May 26, by Comrs. Indian Affairs, Wash., D. C., frame schoolhouse, water and heating systems, etc., here.

Calif., San Francisco—Bridge—May 28, by C. H. Sweetset, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., 350 ft. bridge over Big Bear Lake Dam, in Angeles Natl. Forest, San Bernardino Co., 621 cu.yd. concrete, etc.

Calif., San Francisco—Roads—May 28, by C. H. Sweetser, dist. engr., U. S. Bureau Pub. Rds., 9 Main St., San Francisco, 2 mi. Pine Knot Rd. and 1 mi. Fredalba Rd., in Big Bear Natl. Forest, San Bernardino Co., 74,600 cu.yd. excav., 260 cu. yd. concrete, 25,000 lb. steel, etc.

BIDS RECEIVED

S. C., Charleston—Electric Crane—Spec 4962—Bureau Yards & Docks, Navy Dept., Wash., D. C., electric traveling bridge crane at Navy Yard, from Niles-Bement Pond Co., 111 Bway., New York City, $8,945. Noted Apr. 24.

Minn., St. Cloud—Screening Buildings—Spec. 4964—Bureau Yards & Docks, Navy Dept., Wash., D. C., door, window and porch screens at U. S. Veterans Hospital here, from E. J. Fellman, 126 Center St., Milwaukee, Wis., $10,500. Noted Apr. 10.

CONTRACTS AWARDED

N. Y., Oswego—Post Office—Treas. Dept. Office Supervising Architect, Wash., D. C., repairs to post office incl. restoration of stone work, new roof, gutters, downspouts, waterproofing, etc., to W. L. Morrison Constr. Co., 613 15th St. N. W., Wash., D. C., $43,000. Noted Apr. 3.

Unclassified

PROPOSED WORK

Grandstand—Clearfield, Pa.—Clearfield Park Assn., E. A. Brown, secy., soon takes bids 70 x 210 ft., brick, rein.-con. and steel. $55,000. Osborn Eng. Co., 7016 Euclid Ave., Cleveland, O., engrs.

Port Development—St. Petersburg, Fla.—Election May 20, $500,000 bonds port development.

Transmission Line — Alabama — See "Dams."

Gas Main Extensions, etc.—New Orleans, La.—New Orleans Gas Light Co. (New Orleans Public Service Inc.) approved two 16 in. main extensions one 8,400 ft. low pressure line other 11,600 ft. high pressure line, two regulator stations to be installed, $120,000; gas distribution department contemplates expenditure $415,000 to provide new regulator stations, new short line extensions and meters, new mains in advance of city paving programme, also renewing and replacing small mains which are inadequate at present. F. G. Frost, genl. supt.

Subway—Cincinnati, O.—Plans 1.6 mi. subway (mostly open cut) from Mitchell Ave. to point 250 ft. west of tracks of Norfolk & Western R.R., $172,890; 2.21 mi. subway (mostly open cut) from point 250 ft. west of Norfolk & Western R.R. tracks to Marion Ave. (Norwood), $456,201; 1.47 mi., (mostly open cut) from Marion Ave. (Norwood) to Oakley, $407,692. F. Krug, City Hall, engr. Noted Feb. 28.

Transmission Line — Kansas — United Water, Gas & Electric Co., plans 15 mi. 6,600 volt transmission line north and west of Hutchinson. $45,000. Private plans.

Park Improvements — El Paso, Tex. — Voted $95,000 bonds park improvements, club house, water system, golf course and other recreation appliances, etc. Address Mayor Dudley.

Lighting System—Claude, Tex.—Election May 31, $35,000 bonds, complete lighting system.

Transmission Line—Oklahoma—Chandler Electric Co., Chandler, making final plans 20 mi. transmission line from Chandler to Key West. $40,000. F. D. Knapp, Chandler, engr.

Transmission Line — Oklahoma — Southwest Power Co., McAlester, making preliminary plans 70 mi. transmission line from Hartford, Ark. to Willburton, Okla. $200,000. Albert Emanuel Co., 61 Bway., New York City, engr.

Subway—Denver, Colo.—City and Union Pacific R.R., 17th and Welton Sts., plans subway on 38th St. and Downing Ave. $300,000. A. K. Vickery, City Hall, engr.

Lighting System—Blendora, Calif.—Plan lighting system, pressed steel and copper standards, portion Plendora, Wabash, Ada Sts., etc. To exceed $25,000. F. Long, city clk.

Street Lighting System—Corona, Calif.—Plans lighting system on 5 mi. streets, probably marbelite standards.

Ornamental Lighting System—Glendale, Calif.—See "Streets and Roads."

Street Lighting System—Pasadena, Calif.—See "Streets and Roads."

Stadium—Santa Barbara, Calif.—Santa Barbara High School Dist. plans stadium to seat from 3,000 to 4,000. $25,000 to $30,000.

Street Lighting System—Venice, Calif.—Plans street lighting system on portion Washington Blvd. and Ocean Front Walk. To exceed $25,000.

Conduit Cables—Montreal, Que.—Plans to install 26,500 ft. conduit cables in district bounded by St. Laurent, Berri, Craig and Commissioners Sts. $25,389. H. Terreault, city engr.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., plans 4 in. c.i. gas mains: in 3,970 ft. Gasgrain St. $9,528, 1,245 ft. in DeGaspe St. $2,415, 2,350 ft. Drolet St. $4,816, 2,000 ft. in Henri Julien St., $4,991; 6 in. c.i. pipe in 460 ft. Villeray St. $1,251; 8 in. c.i. pipe in 4,300 ft. St. Domonique St. $14,835, 12 in. c.i. pipe in 1,450 ft. Jarry St., $7,279; 16 in. c.i. pipe in 4,050 ft. Berri St., $33,575. E. S Stanton, supt. gas distribution.

BIDS DESIRED

Jetty—Brooklyn, N. Y.—See "Streets and Roads."

Heating and Ventilating Apparatus, etc. —Brooklyn, N. Y. — May 26, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., heating and ventilating apparatus in P. S. 197, Elsmere Pl., through to Delamere Pl.; heating and ventilating apparatus and plumbing, etc., in P. S. 201, 12th Ave. from 80th to 81st Sts., for Bd. Educ., 500 Park Ave., New York.

Heating and Ventilating Apparatus, etc. — Creedmoor (Jamaica P. O.), N. Y. — May 26, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating, ventilating apparatus and plumbing work, in P. S. 33, 222nd St. through to 224th St. from 91st Rd. to 92nd Ave., here, for Bd. Educ., 500 Park Ave., New York.

Heating and Ventilating Apparatus — New York, N. Y.—May 26, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in an addition to P. S. 36, Black Rock, Castle Hill Aves.; in P. S. 80, East Mosholu Parkway N. and Van Cortland Ave., Bronx Boro, for Bd. Educ., 500 Park Ave.

Heating and Ventilating Apparatus — St. George, N. Y.—May 26, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in an addition to P. S. 16, Daniel Low Terrace through to Monroe Ave., here, for Bd. Educ., 500 Park Ave., New York.

Tunnels—Montreal, Que.—May 20, by R. Bauset, city clk., pedestrian tunnels under Canadian Natl. Ry. tracks at Greene Ave. and Shearer St. rein.-con. walls, 2 ft. thick, 7 ft. diam. H. A. Terreault, city engr.

BIDS RECEIVED

Heating and Ventilating Apparatus, etc.—Brooklyn, N. Y.—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., May 12, heating and ventilating apparatus in addition to Erasmus Hall High School, Bedford Ave., from Austin Eng. Co., 121 West 42nd St., New York, $152,775; plumbing and drainage, from J. A. Graf, 394 Waverly Ave., $96,742. Noted May 1.

Heating and Ventilating Apparatus — New York—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, May 8, heating and ventilating apparatus, etc., in masters house, dormitory buildings, infirmary, power house, etc., for Parental School on westerly side of road between Flushing and Jamaica, about 1,700 ft. south of North Hempstead Turnpike, Flushing, from Austin Eng. Co., 121 West 42nd St., New York City City, $64,375. Noted Apr. 24.

Heating and Ventilating Apparatus — New York, N. Y.—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., May 8, heating and ventilating apparatus in P. S. 202, Hegeman Ave., from Raisler Heating Co., 129 Amsterdam Ave., New York, $136,525; in P. S. 206, Ave. V, from Alvord & Swift, Grand Central Terminal, New York, $135,756. Noted Apr. 24.

Heating and Ventilating Apparatus — Brooklyn, N. Y.—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, May 8, heating and ventilating apparatus in P. S. 71, Roberts Ave., here, from Alvord & Swift, Grand Central Terminal, $100,756. Noted Apr. 24.

Heating and Ventilating Apparatus — Jamaica, N. Y.—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, May 8, heating and ventilating apparatus in P. S. 116, Wren Pl., South Jamaica, from Alvord & Swift, Grand Central Terminal, New York City, $100,756. Noted Apr. 24.

Heating and Ventilating Apparatus — Richmond Hill (Jamaica P. O.), N. Y. — W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 121 109th (Suwanee) Ave., here, from Alvord & Swift, Grand Central Terminal, New York City, $100,756. Noted Apr. 24.

Plumbing, etc.—Asyla (Grenloch, P. O.), **N. J.**—See "Buildings."

Steel Pontoon—Algiers, La.—Algiers Pub. Serv. Co., Inc., Canal St., New Orleans, 1 steel pontoon for Morgan St. landing here, from W. P. Copping Steel Plate & Iron Wks. Inc., 401 North St. Patrick St., New Orleans, $24,450. Noted Apr. 17.

Retards, etc. — Lexington, Mo. — State Hy. Dept., Jefferson City, 2,400 lin.ft. current retards along north bank of Missouri River, above here, in connection with bridge over Missouri River, here, from Woods Bros. Constr. Co., Lincoln, Neb. $140,400.

CONTRACTS AWARDED

Transmission Line—New York—Staten Island Edison Corp., St. George Terminal, St. George, 33,000 volt transmission line from Livingston power house to Eltingville, also outdoor substations at Livingston and Eltingville, to J. G. White Eng. Corp., 43 Exchange Pl., New York City.

Foundations—Brooklyn, N. Y.—Transit Comn., 49 Lafayette St., New York, foundations for electrical repair shop at Coney Island Yard, here, to J. D. Walsh, Inc., 132 4th St., $37,000. Noted May 8.

Column Foundations, etc.—New York, N. Y.—Transit Comn., 49 Lafayette St., column foundations, etc. in Westchester Ave. Yard, Routes 19 and 20, to P. T. Cox Contg. Co., 154 Nassau St., $204,040; permanent ramps at Times Sq. station, Routes 4 and 36, Agreement "CT," to Fox Reynolds Co., 81 East 125th St., $9,600; signal tower in Lenox Ave. Yard, Agreement "DA," to J. B. Roberts Co., 1170 Bway., $19,521; structural steel for Westchester Ave. Yard, Routes 19 and 22, to C. Meads & Co., 217 West 14th St., $148,000; tracks for portion of Lenox Ave.-148th St. Yard, to T. H. Reynolds Co., 50 Park Pl., $70,401. Noted May 1 and 8.

Heating and Ventilating Apparatus, etc. —Cedargrove, N. J.—See "Buildings."

Coal Trestle, etc.—Pleasantville, N. J.—Atlantic City R.R. Co., Phila., Pa., 144 ft. rein.-con. coal trestle timber office building, 25 x 60 ft., brick garage, etc., Doughty Rd., here, to Curtis-Grindrod Co., 10 South 18th St., Phila., Pa.

Coal Trestle, etc. — Lansdowne, Pa. — Newton Coal Co., Franklin, Bank Bldg., Phila., coal trestle 160 ft. long, drive-way, office, and scales, etc., to H. E. Baton, 1713 Sansom St., Phila.

Grain Elevator—Frederick, Md.—Frederick County Farmers Exch., J. H. Gambrill, treas., grain elevator, workhouse, and storage, brick, plain foundation, to M. A. Long Co., 17 North Guilford Ave., Baltimore, $35,000.

Stadium — Austin, Tex. — University of Texas, concrete stadium (1st unit), to Walsh & Burney, Calcasieu Bldg., San Antonio. $201,000. Noted May 1.

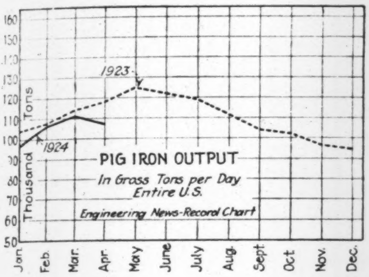
CONSTRUCTION NEWS

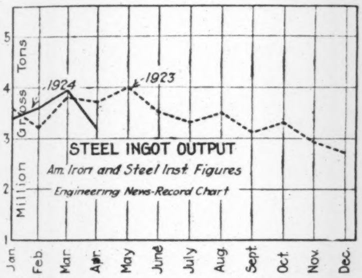
Engineering News-Record, May 22, 1924

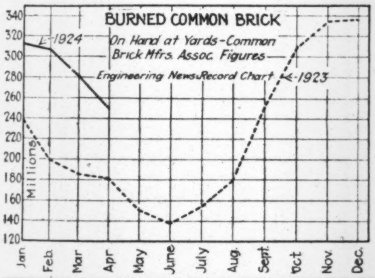
The Construction Barometer

Drop in Iron and Steel Production—Lumber and Cement Output Increased—Fewer Building Permits Being Issued—Decline in Large Contract Letting

THE drop in the pig-iron output and falling off in steel production and demand offer sharp contrast to the upward trend in lumber and cement production and increased consumption of common brick. This situation is depicted in the accompanying charts. Production appears to be following the regular seasonal trends so far as the basic materials are concerned. Cement and brick reserves, however, are heavier than a year ago, while there is less lumber and steel on hand. The whole production situation is settling down to a point where the mill output will be curtailed to meet the immediate needs of the consumer and the buyer will endeavor to keep warehouse stocks as low as possible. There are fewer building permits being issued and large contract letting has fallen off during the last week. A slight gain, however, is noted in the number of large public jobs now out for bids.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
May 1	23,838,000	20,548,000	44,386,000
May 8	30,319,000	38,829,000	69,148,000
May 15	21,484,000	25,500,000	46,984,000
3 weeks	$75,641,000	$84,877,000	$160,518,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

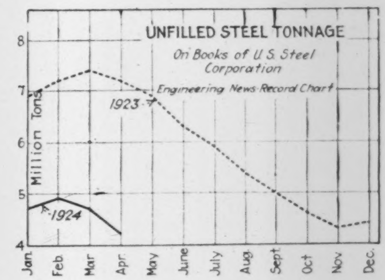
Week Ended	No.	Public Work	No.	Private Work
May 1	20	4,801,000	33	11,761,000
May 8	10	2,637,000	47	19,111,000
May 15	9	2,261,000	38	20,937,000
3 weeks	39	$9,699,000	118	$51,809,000

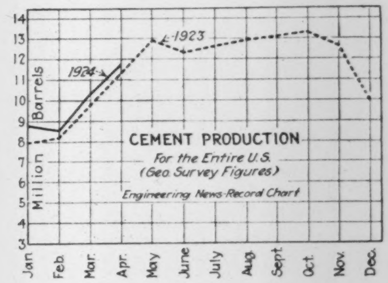
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

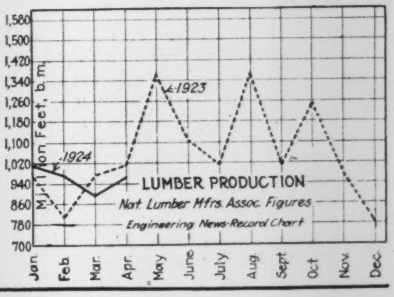
		Public			
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
May 1	30	50	100	51	249
May 8	35	45	96	40	198
May 15	38	44	98	41	214

STEEL AND PINE LUMBER SLIGHTLY WEAKER

	Quoted on May 22 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.10 @2.25	$2.10 @2.35	May 15
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	60.00	61.00	May 15
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.56	.55	Apr. 24







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
May 23	Silver Creek, N. Y.	May 8
May 23	New York, N. Y.	May 15
May 23	Brooklyn, N. Y.	May 15
May 26	Highlands, N. J. Adv. May 8 to 22.	May 8
May 26	Fredonia, N. Y. Adv. May 15 and 22.	May 15
May 26	Villa Park, Ill.	May 22
May 26	Toledo, O.	May 22
May 26	Iron Mountain, Mich.	May 22
May 27	Minneapolis, Tenn.	May 22
May 27	Keansburg (Arlington P. O.), N. J.	May 8
May 27	Kingsford, Mich. Adv. May 22.	May 22
May 28	Long Island City, N. Y.	May 22
May 28	New York, N. Y.	May 22
May 29	Brooklyn, N. Y.	May 22
May 29	Long Island City, N. Y.	May 22
May 29	Waconia, Minn.	May 22
May 29	Vandalia, Ill. Adv. May 22.	May 22
May 30	Inman, S. C.	May 22
June 2	Racine, Wis.	May 1
June 6	Denver, Colo. Adv. May 8 to 22.	May 15
June 6	Fulton, N. Y. Adv. May 22.	May 22
June 12	Cleveland, O.	May 15
June 14	Tucumcari, N. M. Adv. May 15 and 22.	May 15
June 24	Tampa, Fla. Adv. May 22.	May 22
May 26	Detroit, Mich.	May 22

SEWERS

Bids Close		See Eng. News-Record
May 26	Toledo, O.	May 22
May 27	Keansburg (Arlington P. O.), N. J.	May 8
May 27	Long Island City, N. Y.	May 22
May 28	Wash., D. C.	May 1
May 29	Waconia, Minn.	May 22
May 29	Astoria, Ill.	May 22
May 29	Kenosha, Wis.	May 22
June 2	Shelby, Mont.	May 8
June 2	San Diego, Calif.	May 22
June 3	St. Louis, Mo.	May 8
June 4	Philadelphia, Pa. Adv. May 22.	May 22
June 4	Sayreville, N. J. Adv. May 22.	May 22
June 6	Portland, Me.	May 15
June 18	Union City, Tenn. Adv. May 15 and 22.	May 15
May 24	Columbus, O.	May 8
May 26	Sunbury, Pa.	Apr. 10

BRIDGES

Bids Close		See Eng. News-Record
May 26	California	May 8
May 26	New Jersey	May 15
May 26	Curwensville, Pa.	May 22
May 27	Vermont	May 22
May 27	New Richmond, Wis.	May 22
May 27	Dalton, Mass.	May 22
May 28	Michigan	May 22
May 29	Harrisburg, Ore. Adv. May 15 and 22.	May 15
June 2	Los Angeles, Calif.	May 8
June 2	New Jersey	May 22
June 3	West Chester, Pa. Adv. May 15 and 22.	May 22
June 3	Louisiana	May 22
June 5	Key West, Fla. Adv. May 8 to 22.	May 8
June 6	Milford, O.	May 15
June 9	Alabama	May 15
June 12	Albany, Ore. Adv. May 15 and 22.	May 15
June 18	Philadelphia, Pa. Adv. May 22.	May 22
June 27	Seattle, Wash. Adv. May 15 and 22.	May 15

DAMS

May 31	Merced, Calif.	May 22

RAILWAYS

May 31	California	May 22

EXCAVATION, DRAINAGE IRRIGATION

May 23	Bluffton, Ind.	May 22
May 26	Paxton, Ill.	May 8
May 28	Merced, Calif.	May 22
May 29	Jefferson, Wis.	May 22
May 31	Danville, Ill.	May 8
May 31	Cumberland, Ont.	May 22
June 3	New Jersey Adv. May 15 and 22.	May 22
June 17	Lake Village, Ark.	May 22

STREETS AND ROADS

May 23	New York, N. Y.	May 15
May 23	Wooster, O.	May 22
May 23	Evansville, Ind.	May 22
May 24	Haynesville, La.	May 8
May 24	Bement, Ill.	May 8
May 24	Noblesville, Ind.	May 22
May 25	Duluth, Minn.	May 15
May 25	Crown Point, Ind.	May 22
May 25	Boston, Mass.	May 22
May 26	East Boston (Boston P. O.), Mass.	May 22
May 26	Dorchester (Boston P. O.), Mass.	May 22
May 26	Decatur, Ala.	May 15
May 26	Plainfield, N. J. Adv. May 15 and 22.	May 15
May 26	Cleveland, O.	May 15
May 26	Michigan	May 15
May 26	Waukesha, Wis.	May 15
May 26	Chillicothe, Mo.	May 22
May 26	Sandwich, Ont.	May 22
May 27	Westmont, N. J.	May 22
May 27	Ottawa, Ont.	May 15
May 27	St. Louis, Mo.	May 8
May 27	Horicon, Wis.	May 15
May 27	Louisiana	May 15
May 27	Minnesota	May 15
May 27	Maryland Adv. May 15 and 22.	May 15
May 27	Michigan	May 15
May 27	Bastrop, La.	May 15
May 27	Vermont	May 22
May 27	Florence, S. C.	May 22
May 27	Meadville, Pa. Adv. May 22.	May 22
May 27	New Hampshire	May 22
May 27	Massachusetts	May 22
May 27	New York, N. Y.	May 22
May 28	Brooklyn, N. Y.	May 22
May 28	Michigan	May 22
May 28	Baltimore, Md.	May 22
May 28	Independence, Kan.	May 8
May 28	Port Washington, Wis.	May 22
May 29	St. George, N. Y.	May 22
May 29	Minneapolis, Kan.	May 8
May 29	Palo Pinto, Tex.	May 8
May 29	Alpine, Tex.	May 8
May 29	Vandalia, Ill.	May 15
May 29	Beckley, W. Va.	May 15
May 29	Michigan	May 22
May 29	Richmond, Ind.	May 22
May 29	Columbus, O.	May 22
May 29	Nebraska	May 22
May 29	Atkins, Ark.	May 22
May 30	Cameron, Tex.	May 8
May 30	Alice, Tex.	May 8
May 31	Waupaca, Wis.	May 15
May 31	Wichita, Kan.	May 8
June 1	Duluth, Minn.	Apr. 3
June 2	Shelby, Mont.	May 8
June 2	Huntsville, Ala.	May 15
June 2	Highland Falls, N. Y. Adv. May 8 to 22.	May 15
June 2	San Jose, Calif.	May 15
June 2	California	May 15
June 2	Clarington, O.	May 22
June 2	Mt. Holly, N. J. Adv. May 15 and 22.	May 22
June 2	Warsaw, Ind.	May 22
June 2	Michigan	May 22
June 2	Huntsville, Ala.	May 22
June 3	Franklin, Tex.	May 22
June 3	Massachusetts	May 22
June 3	Michigan	May 22
June 3	West Virginia Adv. May 22.	May 22
June 3	Rushville, Ind.	May 15
June 3	Carrizo Springs, Texas	May 15
June 3	Pennsylvania Adv. May 15 and 22.	May 15
June 3	West Virginia	May 22
June 3	Fort Wayne, Ind.	May 22
June 3	New York Adv. May 15 and 22.	May 22
June 4	Delaware	May 15
June 4	Winchester, Ind.	May 22
June 4	Freehold, N. J. Adv. May 22.	May 22
June 4	Michigan	May 22
June 5	Louisiana	May 22
June 5	Virginia Adv. May 22.	May 22
June 5	North Little Rock, Ark.	May 22
June 5	Key West, Fla. Adv. May 8 to 22.	May 8
June 5	Elkins, W. Va.	May 22
June 5	Sumter, S. C.	May 22
June 6	Georgia Adv. May 22.	May 22
June 9	Alabama	May 15
June 9	Sweetwater, Texas	May 22
June 10	Birmingham, Ala.	May 22
June 10	Oskaloosa, Kan.	May 22
June 16	Alabama	May 22
June 16	Michigan	May 22
July 1	Lisbon, O.	May 15
July 1	Lisbon, O.	May 22

INDUSTRIAL WORKS

May 26	Detroit, Minn.	May 22
June 10	Harrisburg, Pa. Adv. May 22.	May 22
June 17	Saratoga Springs, N. Y. Adv. May 22.	May 22

BUILDINGS

May 26	Columbus, O.	May 1
May 26	Hudson Falls, N. Y.	May 22
May 26	Milwaukee, Wis.	May 22
May 26	Montreal, Que.	May 22
May 27	Washington, D. C.	May 22
May 27	Allentown, Pa.	May 22
May 28	Baltimore, Md.	May 15
May 28	Trenton Junction (Trenton P. O.), N. J.	May 15
May 31	Clymer, Pa.	May 22
May 31	Atlantic City, N. J.	May 22
June 1	Canton, Mo.	May 8
June 2	Mt. Pleasant, N. Y. Adv. May 22.	May 22
June 2	Columbus, O.	May 8
June 2	Grove City, Pa.	May 15
June 2	Columbus, O.	May 22
June 2	Kansas City, Kan.	May 22
June 3	Koch, Mo.	May 8
June 3	Caruthersville, Mo.	May 22
June 5	Upper Darby, Pa.	May 15
June 5	Galveston, Tex.	May 15
June 5	Mansfield, O.	May 22
June 5	Pine Bluff, Ark.	May 22
June 5	Denver, Col.	May 22
June 9	Irvington, N. J. Adv. May 22.	May 22
June 10	New York, N. Y.	May 22
June 10	Burlington, Wis.	May 22
June 10	New York, N. Y.	May 15
June 14	Brooklyn, N. Y.	May 22
June 16	Greigsville, N. Y. Adv. May 15 and 22.	May 22
June 18	Asbury Park, N. J.	May 22
July 1	Dallas, Tex.	May 22

FEDERAL GOVERNMENT WORK

May 26	School, etc.—Mille Lacs, Minn.	May 15
May 28	Tenders—Portland, Ore. Adv. May 1, 15 and 22.	May 1
May 28	Boiler—Pawtucket, R. I.	May 8
May 28	Power House — Huntington, W. Va.	May 8
May 28	Boiler — Leavenworth, Kan.	May 8
May 28	Road—Nevada	May 8
May 28	Bridge — San Francisco, Cal.	May 15
May 28	Road—San Francisco, Cal.	May 15
May 28	Tube Building—Annapolis, Md.	May 22
May 31	Dredging—Detroit, Mich. Adv. May 1 to 22.	May 8
June 2	Cottages—Cincinnati, O. Adv. May 15 and 22.	May 15
June 2	Steel Barge—Chicago, Ill.	May 22
June 4	Hospital Buildings — San Diego, Calif.	May 8
June 5	Derrick Boat—Chicago, Ill.	May 22
June 10	Dredging, etc.—Jacksonville, Fla.	May 22
June 11	Post Office—Saranac Lake, N. Y.	May 8
June 11	Generating Plants—Pittsburgh, Pa. Adv. May 15 and 22.	May 15
June 12	Tower—Philadelphia, Pa. Adv. May 15 and 22.	May 22
June 12	Post Office—Dubois, Pa. Adv. May 22.	May 22
June 14	Operating Machinery—Florence, Ala. Adv. May 15 and 22.	May 15
June 16	Breakwater—Dunkirk Harbor, N. Y. Adv. May 22.	May 22
June 17	Post Office—Salesbury, Md.	May 22
June 18	Post Office — Salisbury, Md. Adv. May 22.	May 22
June 18	Dump Scows—Pittsburgh, Pa. Adv. May 22.	May 22
June 25	Bridges—Wilmington, Del. Adv. May 1 to 22.	May 1
Aug. 5	Bridge—Florence, Ala. Adv. May 15 and 22.	May 15

UNCLASSIFIED

May 26	Heating and Ventilating Apparatus—New York, N. Y.	May 15
May 26	Heating and Ventilating Apparatus—Brooklyn, N. Y.	May 15
May 26	Heating and Ventilating Apparatus — Creedmoor (Jamaica P. O.), N. Y.	May 15
May 26	Heating and Ventilating Apparatus—St. George, N. Y.	May 15
May 26	Paving Blocks—Plymouth, Mass.	May 22
May 28	Heating and Ventilating — Baltimore, Md.	May 22
May 28	Heating System—Ogdensburg, N. Y. Adv. May 15 and 22.	May 22
May 28	Heating and Ventilating Apparatus—Brooklyn, N. Y.	May 22
May 28	Waterproofing Track Floors —Brooklyn, N. Y.	May 22
May 29	Milwaukee, Wis.	May 22
June 2	West Allis, Wis.	May 22
June 2	Steel—New York, N. Y.	May 22
June 6	Sea Wall, etc.—Tampa, Fla.	May 1

MATERIAL AND EQUIPMENT

May 26	Road Roller, etc.—Milwaukee, Wis.	May 22
May 27	Cement—New York, N. Y.	May 22
May 28	Asphalt Macadam Binder, etc.—Brooklyn, N. Y.	May 22
May 28	Asphaltic Road Oil, Wire and Cable—Milwaukee, Wis.	May 22
May 31	Cement—Merced, Calif.	May 22
Aug. 29	Dredger—Brisbane, Queensland, Australia	Apr. 10

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

N. J., Maple Shade—Making plans pumping station and filter plant, 1 m.g. capacity. Remington & Vosbury, 509 Cooper St., Camden, engrs.

Ga., Barnesville—Voted $30,000 bonds for waterworks and sewers.

Wis., Kimberly—Soon takes bids two 500 g.p.m. pumps, 100,000 gal. steel tank on 110 ft. steel tower, deep well, airlift equipment, etc. $100,000. E. A. McMahon, c/o City Hall, Menasha, engr. Noted Apr. 24.

Wis., Green Bay—Allouez Twp. had plans prepared new waterworks. $75,000 bonds voted. H. R. Albert, Courthouse engr. Noted Apr. 24.

Mo., Perryville—Making plans reservoir distribution system, etc. $75,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, engrs. Noted Apr. 10.

Mo., Steele—Making preliminary plans reservoir, distribution mains, etc. $35,000. A. C. Moore, 222 Industrial Bldg., Joplin, engr.

Tex., Gilmer—Election May 27, $22,000 bonds waterworks extensions. R. M. Denman, mayor.

Tex., Grand Saline—Voted $50,000 bonds, waterworks improvements, incl. dam, pumping station and purification plant. H. N. Roberts, Lubbock, consult. engr.

Calif., Placerville — Plans to purchase 1,154 lin.ft. 8 in., 900 lin.ft. 6 in., and 2,950 lin.ft. 4 in. water pipe. C. H. Windham, city engr.

Ont., Aylmer—Voted $69,500 bonds 18,000 ft. 6 in. c.i. mains, hydrants, pumps, etc.

Ont., Port Credit—Making plans 12,000 ft. mostly 6 in. c.i. mains, hydrants, etc. $31,500. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

Waterworks (Continued)

BIDS DESIRED

N. Y., Brooklyn — May 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Kings Highway, Mansfield and Delamere Places, Hegeman, Prospect, Flatlands, Lott, Bedford, Riverdale and Sheffield, Q, R and X Aves., East 26th, 27th, 29th, 59th, Douglass, 48th and 73rd Sts., here.

N. Y., Fulton — June 6, by H. S. Andrews, comr. Pub. Wks., furnishing one complete steam pumping unit 4 m.g. capacity, f.o.b. Fulton; adv. E. N.-R. May 22.

N. Y., Long Island City—May 28, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Calamus, Clermont, Mauriac and Holmes Aves., Hill, Ramsey, Van Dorn and Chauncey Sts., Boro Queens, here.

N. Y., Long Island City—May 29, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Skillman Ave. and Buckley St., 1st Ward, and Packard St., 2nd Ward, Boro Queens.

N. Y., New York—May 28, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Westchester Esplanade, Arnow, Adee, Barnes, Paulding, Radcliff and Yates Aves., also Crotona Parkway, Eames Pl., Grand Concourse, Longfellow, Sheridan, Teller and University Aves., East 165th, West 195th and McClellan Sts., here, Bronx Boro.

Fla., Tampa—June 24, by City Comn., pumping station, water treatment plant, pumping machinery, pipe, valves, etc. N. S. Hill, Jr., 112 East 19th St., New York City, consult. engr.; adv. E. N.-R. May 22.

O., Toledo—May 26, by Comrs. Lucas Co., Water Supply Line 50, Main Sewer Dist. 5, 9,943 lin.ft. 6 in. c.i. pipe, etc., $20,700; No. 69, in Sewer Dist. 11, 17,160 lin.ft. 6 in. and 2,745 ft. 8 in. c.i. pipe, etc., $42,200; No. 73, in Main Sewer Dist. 4, 3,050 lin.ft. 6 in. c.i. pipe, etc., $6,700; No. 74, in Main Sewer Dist. 9, 9,324 lin.ft. 6 in. and 2,650 lin.ft. 8 in. c.i. pipe, etc., $26,400; No. 80, Main Sewer Dist. 11, 6,545 lin.ft. 6 in., and 1,660 lin.ft. 8 in. c.i. pipe, etc., $18,300; No. 81, in Main Sewer Dist. 11, 6,025 lin.ft. 6 in. and 1,380 lin.ft. 8 in. c.i. pipe, $17,000. L. C. Boyatt, co. sanitary engr.

Mich., Iron Mountain—May 26, by W. A. Henze, chn. Bd. Water Comrs., laying 1,100 ft. 10 in., 6,600 ft. 8 in., 16,400 ft. 6 in. c.i. pipe, and specials. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Mich., Kingsford—May 27, by Village, c.i. mains, etc. L. W. Cox, genl. mgr.; adv. E. N.-R. May 22.

Ill., Villa Park — May 26, by village, 100,000 gal. steel tank, also two 12 in. wells. Suhr & Berryman, 105 North Clark St., Chicago, village engrs.

Minn., Minneapolis—May 27, by F. S. Gram, city purch. agt., 152 tons castings for Water Dept. N. W. Elsberg, city engr.

Minn., Waconia — May 29, by Village. waterworks system, incl. well, pump house and pump equipment, tank and tower, mains, $25,000. C. L. Pillsbury Co., 1200 2nd Ave. S., Minneapolis, engrs. Noted May 8.

Tex., Inman—May 30, by town, water and sewer systems, incl. 75,000 gal. tank and tower, 250,000 gal. concrete reservoir, one building, two 750 g.p.m. motor driven centrifugal pumps, two 10 in. wells, two deep well pumps, 13,280 ft. 6- to 10-in. c.i. pipe, 6,490 ft. 1½ in. galvanized pipe; 38,116 ft. 8- to 12-in. sewer pipe, twenty-five 5 in. flush tank syphons, gate valves, boxes, etc.

BIDS RECEIVED

O., Cleveland—Cuyahoga Co., May 7, 11,700 ft. 6- to 12-in. c.i. mains, Impvt. 350 C, from Kassouff & Co., 3182 West 25th St., $79,697. Noted May 1.

O., Cleveland — Dept. Pub. Utilities, Ridge Rd. main, Sect. 2, from J. Kalill & Jackson Co., 621 Bangor Bldg., $39,222 Noted May 8.

Minn., Minneapolis — F. S. Gram, city purch. agt., two 1 ton trucks for Water Dept., from Sturr Bullard Motor Co., 63 South 13th St., and W. H. Kuhlmann & Co., 605 West Bway., each bid $10,991 for two; two 7 ton gas locomotives, from W. H. Ziegler Co., 425 South 5th St., $2,790 each. Noted May 1.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall engine pits and gallery intake for Missouri River waterworks plant at Howards Bend, from Frazier-Davis Constr. Co., Arcade Bldg., $1,058,228. Noted Apr. 17.

Okla., Tulsa—Paving slopes of Mohawk Reservoir, Spavinaw Water Project, 41,000 sq.yd. fine grading, 2,000 cu.yd. excav., 4,000 cu.yd. embankment, 20,000 sq.yd. concrete paving, 197,000 lb. reinforcing, etc., from E. G. Fike & Co., 22 Nebraska Bldg., $49,893. Noted Apr. 24.

CONTRACTS AWARDED

N. Y., Burdett—Lehigh Valley R.R. Co., 143 Liberty St., New York City, will build concrete reservoir and engine water supply system, here, by day labor. $100,000. G. T. Hand, ch. engr.

N. Y., Jamestown—For 2 m.g. concrete reservoir, to Mullen, Guinnane & Ludwig, 303 North Main St., $28,829. Noted May 8.

N. J., Newton—Town Com., 115 Spring St., 924 lin.ft. 4 in. c.i. pipe, to J. Fox & Co., 233 Bway., New York City, $66.50 per ton. Noted Apr. 10.

Pa., Phila.—Bureau Water, Dept. Pub. Wks., City Hall, Contr. 670, to H. F. Munro & Sons, 2406 North Mascher St., $2,057; Contr. 671, to Elliott Co., 802 Morris Bldg., $4,680; Contr. 672, to L. J. Sommer & Son, 2436 Brown St., $2,393; Contr. 674, to E. M. Nichols, 27 North 38th St., $27,300; Contr. 675, to Bethlehem Shipbuilding Corp., 25 Bway., New York City, $960; Contr. 679, to A. P. Smith Mfg. Co., East Orange, N. J., $38,850. Noted May 1.

Md., Baltimore — Bd. Awards, storm water drains in Sewer Dists. 48 and 34-A, as outlined in Storm Water Contr. 68, 4,000 ft. 15- to 36-in. storm drain and inlet connections, to Ryan Constr. Co., 18 Light St., $22,897. Noted May 8.

Ky., Madisonville—Illinois Central R.R. Co., 135 East 11th Place, Chicago, pumping station and pipe line, here, to Railroad Water & Coal Handling Co., 608 South Dearborn St., Chicago. Est. cost to exceed $25,000.

O., Cleveland—Cuyahoga Co., 11,700 ft. 6- to 12-in. c.i. mains, to Kassouff & Co., 3182 West 25th St., $79,697. Noted May 22.

O., Cleveland—Steel mains in Ingersoll Rd., Contr. 33-A, 48 in. lock bar steel, to D. Lowensohn, 6795 Wakefield Ave., $294,115. Noted May 1.

Mich., Kingsford—Constructing 12 mi. mains, as follows: 6 and 8 in. pipe, to Natl. Cast Iron Co., Birmingham, Ala., $0.883 per ft.; 4 in. pipe to McWane Cast Iron Pipe Co., Birmingham, Ala., $0.61 per ft.; hydrants, to Traverse City Iron Wks., Traverse City, 4 in. hydrants with 4 in. valve and box for 6½ ft. trench $73.50, 4 in. hydrants with 6 in. valve and box for 6½ ft. trench $83.75, 8 in. hub valves $34, 6 in. $20.50, and 4 in. $12.

Ill., Chicago — For 4 complete pumping units, 14,186 lb. per hr. resultant steam consumption, 133,000 lb. total weight of main unit, to De Laval Steam Turbine Co., North Clinton St. and Penna. R.R., Trenton, N. J., $334,760.

Ill., Hinsdale—Deep well for waterworks, to M. T. Peterson, Madison, Wis., $5,500. Noted Apr. 10.

Neb., Kearney—Reservoir to W. Knutzen & Son, Kearney, $28,937; wells to Well Wks. Mfg. Co., Kansas City, Mo., $3,990; well pumps and motors to American Well Wks., 112 North Bway., Aurora, Ill., $5,000; oil engines, to De La Vergne Machine Co., East 138th St., New York City $57,365; c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., East Burlington, N. J., $18,000; pipe line etc., by day labor, $4,725. Noted May 1.

Tex., Ranger — Stand pipe and wash water tank, to Chicago Bridge & Iron Co., Praetorian Bldg., Dallas, $25,000. Filter plant to be awarded soon. Noted May 1.

Tex., Snyder—Water and sewer extensions, to J. B. Winslett, 1001 Main St., Dallas, $37,965. Noted Apr. 10.

Ont., Chippawa—Plans waterworks system incl. pump house, pumps, mains, reservoir, etc. $75,000.

Ont., Timmins—See "Sewers."

Sewers

PROPOSED WORK

Mass., Boston—Dept. Pub. Wks., plans sewers and catch basins in Shawmut Ave. $25,000. J. A. Rourke, comr.

Mass., Brighton (Boston, P. O.)—Plans sewer in Hichborn St. and private land between Everett and Arthur Sts. $45,000. E. F. Murphy, city sewer engr.

N. Y., Old Forge — Rejected bids extending sewerage system. Will readvertise. To exceed $25,000. R. E. Thomson, village pres.

N. Y., Tonawanda—Making plans trunk sewer between Ellicott Creek and Niagara River, to exceed $25,000. T. J. Barrelly, city engr.

Pa., Elizabethtown—Rejected bids sewerage system, etc. Noted Mar. 20.

Ga., Barnesville—See "Waterworks."

Wis., Green Bay—Soon takes bids 24 in. vitr. sewers in Roscoe and Day Sts., Longdale, Columbia, Northern, and Mather Aves. $25,000. A. E. Kringel, City Hall, engr.

S. D., Sioux Falls—Plans sewers. $40,000. S. B. Howe, city engr.

Mo., Perryville—Making plans storm and sanitary sewers, disposal system, etc. $45,000-$60,000. Burns & McDonnell, 402 Interstate Bldg., Kansas City, engrs. Noted Apr. 10.

Tex., Gilmer—Election May 27. $28,000 bonds for sewer extensions. R. M. Denman, mayor.

Tex., Houston—Harris Co. election May 28, $350,000 bonds, storm sewers. J. C. McVea, city engr.

Tex., Houston—Election June 10, $150,000 bonds sanitary sewers. J. C. McVea, city engr.

Okla., Chandler — Made surveys 19,000 ft. 8 and 10 in. vitr. clay sewers in 11 blocks, 7th, 9th, 11th and Sheffield Sts. $27,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

Colo., Denver—Plans 16 mi. 8- to 24-in. sewers in Globeville Sanitary Sewer Dist. $234,300. A. K. Vickery, City Hall, engr.

Calif., Stockton—See "Bridges."

Calif., Williams—Voted $40,000 bonds for sewerage system. Noted Apr. 24.

Ont., Chippawa—Plans 20,000 ft. vitr. clay sewers, concrete disposal plant, etc. $60,000.

Ont., Cochrane—Having plans prepared 20,000 ft. 8 in. vitr. tile sanitary sewers. $40,000. J. Lanning, Cochrane, engr.

Ont., Port Elgin—Soon takes bids 15,000 ft. 8 in. sewers and disposal works. $50,000. Gore, Nasmith & Storrie, Confederation Life Bldg., Toronto, engrs.

BIDS DESIRED

N. Y., Long Island City—May 27, by M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., sewers Rockaway Blvd., 98th, 97th, 96th, Sandol and Pansy Sts., Way, Millwood and Cooper Aves., Natl. (Lonona) Ave., 146th St. (Brewster Ave.), 92nd St. (Bigelow Ave.), 95th St. (Chester Ave.), Liberty Ave. from 92nd (Bigelow Ave.) to 90th St. (Gherardt Ave.) and Liberty Ave. from Woodhaven Ave. to 95th St. (Chester Ave.).

N. Y., North Pelham (mail New York)—Village taking bids 12- to 48-in. storm water sewers. J. F. Fairchild, 4 North 3rd Ave., Mt. Vernon, engr.; adv. E. N.-R. May 22.

N. J., Sayreville—June 4, by Boro Council, completing sewerage system. W. S. Coulter, 114 Liberty St., New York City, consult. engr.; adv. E. N.-R. May 22.

Pa., Phila.—June 4, by Delaware River Bridge Joint Comn., Widener Bldg., sewers for bridge over Delaware River between here and Camden, N. J. G. Pinchot, chn.; adv. E. N.-R. May 22.

O., Toledo—May 26, by Comrs. Lucas Co., local sanitary sewer 93 in Main Sewer Dist. 11, 16,606 lin.ft. 8- to 20-in. pipe, and 3,540 ft. 6-in. sewer in cross-overs, etc., $80,800; No. 95, in Main Sewer Dist. 4, 2,560 lin.ft. 8-in. pipe, and 1,090 ft. 6 in. in cross-overs, $10,161; No. 97, in Main Sewer Dist. 9, 11,510 lin.ft. 8- to 12-in. pipe and 2,270 ft. 6-in. pipe in cross-overs, etc., $50,777; No. 99, in Main Sewer Dist. 11, 8,235 ft. 8- to 12-in. pipe, and 1,510 ft. 6-in. in cross-overs, etc., $30,192; No. 100, in Main Sewer Dist. 11, 7,120 lin.ft. 8- to 18-in. pipe, and 1,635 lin.ft. 6-in. sewer pipe in cross-overs, $34,365. L. C. Boyatt, co. sanitary engr.

Calif., San Diego—June 2, by A. H. Wright, city clk., sewerage system, Mission Beach St., incl. 27,945 lin.ft. 6 in., 5,470 lin.ft. 10 in., 6,781 lin.ft. 12 in. concrete pipe, 127 manholes, 6 flush tanks, one settling tank, 3 pumping stations, 1,200 lin.ft. c.i. outfall pipe, etc. F. A. Rhodes, city engr. Noted Apr. 10.

Mich., Detroit—May 26, by Dept. Pub. Wks., 2,732 ft. Eaton Ave. Arm of West Livernois Sewer in Eaton Ave., 1,028 ft. 4 ft. cylinder and 1,544 ft. 3 ft. 6 in. cylinder, 160 ft. crock; 2,476 ft. Eaton Ave. Arm of East Wyoming Ave. Sewer, 394 ft. 4 ft. 6 in., 555 ft. 4 ft., 555ft. 3 ft. 9 in. and 832 ft. 3 ft. 6 in. cylinder, 140 ft. 15 in. crock; 1,748 ft. Mack Ave. Arm West Ashland Ave. Sewer, 580 ft. 4 ft. 9 in., 595 ft. 4 ft. and 325 ft. 3 ft. 6 in. cylinder, 62 ft. 20 in. and 155 ft. 18 in. crock; 885 ft. Harper Ave. Arm West Bedford Ave. Sewer, 815 ft. 4 ft. 6 in. cylinder and 70 ft. 24 in. crock. G. Jerome, city engr.

Ill., Astoria — May 29, by City Clerk, 26,050 lin.ft. 10-in. and 24,900 lin.ft. 8-in. vitr. clay sewer, 74 manholes, 9 drop manholes, 2 auto flush tanks, 3 non-auto flush tanks, disposal plant, etc. $41,000. W. A. Fuller Co., 1917 Railway Exch., St. Louis, Mo., engrs.

Wis., Kenosha—May 29, by C. M. Osborn, city mgr. 3 mi. 12- to 48-in. combined storm and sanitary sewers. To exceed $25,000. R. M. Smith, City Hall, engr.

Minn., Waconia — May 29, by village, sanitary sewerage system, 16,032 lin.ft. 8 in. and 1,497 ft. 10 in. sewers, disposal plant, etc. C. L. Pillsbury Co., 1200 2nd Ave., S., Minneapolis, engr. Noted May 8.

Sewers (Continued)

Tex., Dallas—See "Streets and Roads."
Tex., Inman—See "Waterworks."

BIDS RECEIVED

N. J., Oaklyn—For 2½ mi. 8, 10 and 12 in. terra cotta sanitary sewers, from Penna. Eng. & Constr. Co., Real Estate Trust Bldg., Phila., $42,000.

Pa., Phila.—Dept. Pub. Wks., Bureau Surveys, City Hall, branch sewers from J. J. McHugh, 1617 Race St., Aikens St., $2,262, Georges Lane $10,555, Magnolia St. $6,376, Mitchell St. $7,691, Oxford St. $15,577, Trinity St. $360,366; from O'Neill Co., 127 East Mermaid Lane, Broad St. $2,546, Edgemoor Rd., $11,178, Judson St. $1,652, Linmore St. $466,870, Malvern Ave. $37,329; from W. H. Garson, 5033 Brown St., Cobbs Creek Pkwy. $11,602, Flanders Rd. $8,670; from A. Jaffala, 139 South 56th St., Dicks Ave. $19,963; from P. Ventresco, 6325 Chew St., Durham St. $8,841, Edna St. $5,097, Haines St. $16,370; from A. J. Henderson 5807 Chew St., Dupont St. $244,380, Middleton St. $65,788; from J. Perna, Jr., 316 North 65th St., 57th St. $21,543, Sheridan St. $736, Spring St. $4,688; from McCoal Constr. Co., 5033 Duffold St., Janney St. $5,126, Weikee St. $422,315. Noted May 8.

O., Cleveland—For **(1)** 2,250 ft. 12- to 24-in. vitr. tile sewer in Highland Rd. **(2)** 1,045 ft. 24 in. vitr. tile in East Blvd. **(3)** 2,410 ft. 12- to 24-in. vitr. tile in Abell Ave. **(4)** 1,450 ft. 12- to 24-in. vitr. tile in East 143rd St. **(5)** 930 ft. 12- to 24-in. vitr. tile in Thrush Ave. **(6)** 980 ft. 5 ft. concrete in Ridge Rd., from G. F. Randall, Lorain, **(1)** $13,896 **(5)** $4,667; F. Phillips Co., Engineers Bldg., **(1)** $13,896; C. Jackson, 1318 East 84th St., **(2)** $13,607; Hanna & Michael, 2457 East 55th St., **(3)** $14,946; Kastaouff & Co., 3182 West 25tn St., **(4)** $12,169; J. Kalill & Jackson, Bangor Bldg., **(6)** $29,351. Noted May 1.

Mich., Detroit—Dept. Pub. Wks., 4,561 ft. Wyoming Ave. Sewer Sect. 7, 4 ft. 6 in. to 6 ft. 9 in. monolithic concrete, from Jeynes & Affeld, 1208 Ford Bldg., $98,072. Noted May 1.

CONTRACTS AWARDED

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, May 7, sewers in 71st St., to S. Coenzo, 678 Glenmore Ave., 86⅔% o fengrs. est. $19,571); Brooklyn Ave., to C. F. Vacharas, 645 40th St., 89% ($4,243); 45th St., to Beconi & Son, 570 18th St., 90% ($3.776); 80th St., to R. Iovino, 77% ($400); West 37th St. and 11th Ave. to Tozzi Contg. Co., 136 63rd St., 89.44% ($900) and 95.25% ($1,465) respectively. Noted May 1.

N. Y., Syracuse—Intercepting Sewer Bd. sewer in Salina St. East to Orange St., to Provo Bros., 103 Hiawatha St., $100,725. Noted July 12.

Pa., Phila.—Dept. Pub. Wks., Bureau Surveys, City Hall, main sewer in Cottman St., to Pacifico Ventresco, 6325 Chew St., $27.501; completing Rock Run Main Sewer in Ogontz Ave., to E. F. Bennis, 641 East Chelten Ave., $38,516; main sewer in Venango St., to C. A. Conan, 133 North Vodges St., $88,218; removing old sewer and constructing new sewer in Courtland St., and main sewer in Oakland St., to Ryan Constr. Co., 735 Real Estate Trust Bldg., $347,110 and $74,518 respectively; main sewers in Mifflin and Sanger Sts., to J. Lombardi, 601 Lincoln St., $76,112 and $22,782 respectively. Noted May 15.

Ala., Florence—City 3,000 ft. 84-in. segmental block sewer, to Kirkpatrick & Hitchcock, Court St., $33,000. Noted Mar. 20.

O., Akron—Summit Co. sanitary sewer in Magadore Rd. Dist., to J. B. Kuhn, Barberton, $149,610. Engrs. est. $155,000.

Ind., Indianapolis—Bd. Sanitary Comrs. of Sanitary Dist., City Hall, **e. e. means engrs. est.**, 3 sections of sewer interceptor. to H. W. Miller, Limestone Ave., $143,653, e. e. $192,000; 1 section to Sheets & Canfield, c/o F. Lingenfelter, engr., Indianapolis, $214,498, e. e. $223,000; 1 section to Columbia Constr. Co., 2108 Columbia Ave., $161,111, e. e. $169,000. Noted Apr. 10.

Ind., Tell City—City Council, sewer in Fulton St., to H. Rees & Son, Quincy, Ill., $76,942. Noted May 1.

Mich., Detroit—Dept. Pub. Wks., vitr. crock Sewer 4122 to S. Healy, 6466 Epworth Blvd., $77,000; Sewer 4919 to Rennie & Dibble, 11565 Oakwood Ave., $6,540; Sewer 1421 to Coffman Crane Service Co., 708 Empire Bldg. $6,911.

Mich., Detroit—Dept. Pub. Wks., vitr. crock sewers in Lateral 4081 to Louers & Somerville, 1245 Alter Rd. $3,490; Lateral 4098 to H. Ponterelli & Co., Wolverine Hotel, $13,581; Lateral 4111 to Cousino Mercier Co., 13183 Wark St. $2,776; Lateral 4116 and 4118 to Central Constr. & Eng. Co., Detroit, $12,930 and $21,426 respectively; Lateral 4117 to C. R. Lenane, 2631 Woodward Ave., $19,870; Laterals 4120 and 4133 to Rennie & Dibble Constr. Co., 11565 Oakwood Blvd., $4,286 and $10,726 respectively; Lateral 4130 to J. Monte, Detroit, $1,658; Lateral 4132 to Hammen & Co., 4612 Woodward Ave., $17,000. Noted May 15.

Tex., Snyder—See "Waterworks."

Calif., Glendale — See "Streets and Roads."

Calif., Los Angeles — See "Streets and Roads."

Ont., Timmins—Sewers and water main extensions, to McNamara Bros., Timmins, $45,511.

Waste Disposal

PROPOSED WORK

Calif., Long Beach—City having specifications written for incinerator. R. D. Vanalstine, city engr.; adv. E. N.-R. May 22.

BIDS RECEIVED

Md., Baltimore—Bd. Awards, 3 story, 55 x 173 ft., waste disposal plant, 28th and Sisson Sts., from Price Constr. Co., Maryland Trust Bldg. $103,900. Noted May 8.

CONTRACTS AWARDED

O., Steubenville—R. P. Price, dir. Pub. Serv., 70 ton 24 hr. refuse and garbage incinerator, to A. Walthers, Moundsville, W. Va., $25,000. Noted Apr. 17.

Bridges

PROPOSED WORK

Massachusetts—Ways and Means Comn., Boston, plans reconstructing, strengthening and repaving Howard Bridge between Boston and Cambridge, removing old draw span and building new span. $600,000. Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, engrs.

N. Y., Buffalo—See "Unclassified."

N. Y., Oswego—Bd. Supervs. Oswego Co. plans bridges. $75,000-$80,000. E. A. Howard, co. supt. highways.

N. J., Perth Amboy—State Hy. Dept., Trenton, plans to lower elevation of 8 piers, 18 ft., on New Amboy Bridge over Raritan River, between Perth Amboy and South Amboy, so river may be dredged. $64,943. W. G. Sloan, Broad St. Bank, Trenton, engr.

Pa., Phoenixville—Comrs. Chester Co., (West Chester), soon takes bids 1,100 ft. concrete bridge, 43 ft., 8 arches and 4 reinforced girder spans, over French Creek Valley, at Gay St., here. H. H. Quimby, Phila., consult. engr.

Pa., Renovo — Boro plans 496 ft. rein.-con. bridge and viaduct, 23 ft. roadway, 296 ft. rein.-con. in northeast approach, 221 ft. rein.-con. in southwest approach, incl. 15 concrete piers. $188,000. Project to be financed by Boro, Clinton Co. Pennsylvania R.R., State Hy. Dept. and Public Service. F. E. Colony, boro engr.

Fla., Clearwater — See "Streets and Roads."

Missouri — State Hy. Dept., Jefferson City, plans fifteen 20 ft. rein.-con. slab, two 45 ft. and one 25 ft. rein.-con. deck girder spans, etc. Chariton Co.; one 40 ft. and two 30 ft. rein.-con. deck girder, four 10 ft. and three 12 ft. rein.-con. slab spans, etc. Wayne Co.; two 12 ft. rein.-con. slab spans, etc. Scotland Co.; one 50 ft. and two 20 ft. I-beam spans, etc., Bollinger Co. B. H. Piepmeier, state highway engr.

Tex., Belleville—See "Streets and Roads."

Tex., Brownsville — Cameron Co. voted $15,000 to match $30,000 appropriated by State for bridge across Arroyo Colorado, concrete flooring, steel girders. $45,000.

Tex., Kingsville—Gulf Coast Lines Ry., Union Sta., Houston, plans rebuilding bridge across South Fernando Creek, here, recently destroyed by fire. $40,000. C. S. Kirpatrick, c/o owner, engr.

Calif., Garey—Santa Barbara Co., Santa Barbara, had plans prepared reconstructing 5 spans of present bridge over Sisquoc River near here. $27,500. O. H. O. Neill. Santa Barbara, co. surv.

Calif., Stockton—Plans election to vote on $339,800 bonds, bridges, sewers, street paving and purchase rights of way. W. B. Hogan, city engr.

Que., Scotstown—Provincial Government, Parliament Bldg., Quebec, had plans prepared 2 span concrete bridge, here. $30,000. I. E. Vallee, c/o owner, engr.

BIDS DESIRED

New Hampshire — See "Streets and Roads."

Vermont—May 27, by T. W. Dix, ch. engr. State Hy. Dept., Montpelier, bridge known as Gassetts Overpass seven 25 ft. spans and two 75 ft. spans, steel superstructure, concrete foundation, Federal Aid Project 54A, in Chester; bridge in Wethersfield, three 25 ft. rein.-con. spans trestle type Federal Aid Project 64A; steel truss bridge on Main St., in Waterbury, one 163 ft. and one 72 ft. spans, Federal Aid Project 61A.

Mass., Dalton—May 27, by Bd. Selectmen, deck riveted truss highway bridge, concrete floor, known as Berkshire Mill Bridge, over Housatonic River, Housatonic St. E. W. Wiggin, 113 Church St., New Haven, Conn., consult. engr. Noted Mar. 20.

New Jersey — June 2, by State Hy. Comn., Trenton, 3 concrete bridges with spans 14 ft., 2 8 ft. 6 in., and 10 ft. each, 30 ft. roadway, and removing 2 existing bridges at M. P. O. 2, 1.4 and 2.0 on Route 5, Sect. 11, between Belvidere and Delaware, Warren Co. A. L. Grover, secy.

Pa., Curwensville—May 26, by Boro. Council, rein.-con. girder bridge, two 54½ spans, over Anderson Creek, Walnut St.

Pa., Phila.—June 18, by Delaware River Bridge Joint Comn. at Room 806 Widener Bldg., completion of anchorage bridge over Delaware River between here and Camden, N. J. G. Pinchot, chn.; adv. E. N.-R. May 22.

Pa., West Chester—June 16, by D. M. Golder, controller Chester Co., rein.-con. bridge over French Creek. H. H. Quimby, 3920 Girard Ave., Phila., consult. engr., adv. E. N.-R. May 22.

Virginia—See "Streets and Roads."

S. C., Florence—See "Streets and Roads."

Georgia—See "Streets and Roads."

Ala., Huntsville — See "Streets and Roads."

Louisiana—June 3, by State Hy. Comn., Reymond Bldg., Baton Rouge, 325 ft. creosoted timber trestles bridge over Bayou Pierre, State Aid Project 405, De Soto and Red River Parishes, Mansfield-Coushatta Highway, J. M. Fourmy, ch. engr.

Michigan—May 28, by State Hy. Dept. at office Comrs. Oakland Co., Pontiac, Bridge 632303, one 40 ft. span, and Bridge 632301, one 44 ft. span, both concrete girders, on Trunk Line 10, Federal Aid Project 97, G. C. Dillman, Lansing, ch. engr.

Wis., New Richmond—May 27, by State Hy. Comn. at office City Clerk, City Hall, Willow River Bridge, two 45 ft. 9 in. deck concrete girder spans, 30 ft. roadway, and two 6 ft. sidewalks, here, St. Croix Co. A. R. Hirst, Madison, highway engr.

BIDS RECEIVED

Pa., Phila.—See "Streets and Roads."

Calif., Sacramento — Sacramento Co. bridge over Paintersville Slough, incl. 1,267 cu.yd. of ½ to 5 in. concrete in piers and abutments, 396 cu.yd. 1- to 4-in. concrete in arches, erecting 500,000 lb. structural steel (furnished by county), etc., from Isham & Nystedt, 111 Kensington Way, Stockton, $132,000. Noted Apr. 24.

CONTRACTS AWARDED

N. Y., Buffalo — City, substructure for Stevenson Bridge over improved Cazenovia Creek Channel, to J. Johnson Constr. Co., 765 Abbott Rd., $37,200; superstructure, to Peckhan Constr. Co., Crosby Bldg., $20,900. Noted May 8.

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., reconstructing, renewal and protection of Elk St. and Elk-Abbott viaducts, to Independent Bridge Co., May Bldg., Pittsburgh, Pa., $225,200; also Van Rensselaer viaduct, to Amer. Bridge Co., 1509 Guardian Bldg., Cleveland, O., $48,660. Noted Apr. 3.

S. C., Chester—See "Streets and Roads."

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, one 26 ft. concrete span over Mud Creek, and one 100 ft. steel span, four 30 ft. and two 40 ft. spans over Collins River, Federal Aid Project 202, Warren Co., also bridges at Sta 1057, Sta 1064 Sta 1151, Federal Aid Project 2042, Tipton Co., to Montgomery & Parker Constr. Co., Rockport, Tenn., $47,112 and $48,873 respectively. Noted May 1.

O., Lisbon — Columbiana Co., 200 ft. concrete bridge on Lincoln Highway, Center Twp., to Cox & Hezlep, Lisbon. $25,004.

Ind., Indianapolis—Bd. Pub. Wks., constructing Kentucky Ave. bridge, concrete arch, to Mead-Balch Constr. Co., 441 Postal Station Bldg., $635,000. Noted Apr. 17.

Ia., Des Moines—City, 84 ft. bridge, two 42 ft. spans, over Keosauqua Way on University Ave., 1,550 cu.yd. concrete girders, 239,600 lb. reinforcing, to O'Rourke Eng. & Constr. Co., 1215 Mulberry St., $52,100. Noted May 15.

Kan., Great Bend—See "Streets and Roads."

Kan., Sedan—See "Streets and Roads."

Kan., Wellington—See "Streets and Roads."

Neb., Lincoln—Lancaster Co., 200 ft. concrete girder bridge, four 50 ft. spans, Federal Aid Project 155-A, to Martin-Day Constr. Co., 310 Little Bldg., $30,000.

Bridges (Continued)

Missouri — State Hy. Dept., Jefferson City, to Springfield Constr. Co., Springfield, 20 ft. rein.-con. slab span, etc., over stream, $13,319, 25 ft. rein.-con. deck girder span, etc., over stream, $2,114, 25 ft. rein.-con. deck girder span, etc., over creek, $1,966, 25 ft. rein.-con. deck girder span, over creek, $1,938, all Barton Co., to Public Works Constr. Co., Century Bldg., St. Louis, thirteen 20 ft. rein.-con. slab spans, etc., over drainage ditch, $18,-935, 20 ft. rein.-con. slab span, etc., over Fenton Creek Branch, $5,234, 50 ft. steel truss span, etc., over Fenton Creek, $9,485, 30 ft. I-beam span, etc., over ditch, $2,300; all St. Louis Co.; to Haller & Davis Boonville, 60 ft. steel truss span, etc., over Chouteau Creek, $14,816, three 20 ft. rein.-con. slab spans, etc., over stream, $5,888, one 180 ft. and two 80 ft. steel truss spans, etc., over Lamine River, $48,906, all Cooper Co.; to L. A. Woods Constr. Co., Smithville, two 12 ft. rein.-con. slab spans, etc., over Wichet Creek, $5,259, three 20 ft. rein.-con. slab spans, etc., on State Rd. from Kansas City to St. Louis, $6,462, three 20 ft. I-beam spans, etc., over Davis Creek, $6,080, five 30 ft. I-beam spans, etc., over Davis Creek drainage ditch, $9,374, 35 ft. rein.-con. deck girder span over Chicago & Alton R.R. tracks, $10,136 all Lafayette Co.; to Jones & Harlan, West Plains, four 20 ft. rein.-con. slab spans, etc., over creek, $5,198, three 20 ft. rein.-con. slab spans, etc., over creek, $3,752, Texas Co., to Tibbetts & Tibbetts, Olathe, Kan. 30 ft. rein.-con. deck girder span, etc., over Whitestone Creek, Callaway Co., $9,852, to Vincennes Bridge Iron Co., Vincennes, Ind., two 200 ft. and two 120 ft. steel truss spans, etc., over Meramec River, St. Louis Co., $89,403, to R. P. Sharp, Reeds Springs, 40 ft. rein.-con. deck girder span, etc., on State Rd. from Greenfield to Rennsboro, Dade Co., $4,043; to C. P. O'Reilly & Co., Wainwright Bldg., St. Louis, 60 ft. steel truss span over Muddy Creek, Linn Co., $12,266, to C. L. Johnson, Warrensburg, 35 ft. rein.-con. deck girder span over creek, Benton Co., $3,955. Noted May 8 and 15.

Tex., Baird—See "Streets and Roads."

Okla., Oklahoma City—Oklahoma Co., 4 span, 240 ft. rein.-con. bridge, etc., at 10th St., to Kansas City Bridge Co., 411 West 19th St., Oklahoma City, $79,132. Engrs. est. $90,000.

Arizona—See "Streets and Roads."

Calif., San Francisco — City and San Francisco Co., timber trestle bridge for Bay Crossing Pipe Line of Hetch Hetchy project, to L. F. Youdall, Commercial & Savings Bank Bldg., Stockton, $167,645. Noted May 15.

Que., St. Amedee de Peribonca—Lac St. Jean Co., two 200 ft. spans, one 131 ft. and one 80 ft. span bridges, to E. Plourde and J. Roy, St. Prime, $69,000.

Dams

PROPOSED WORK

Tex., Grand Saline—See "Waterworks."

BIDS DESIRED

N. Y., Saratoga Springs—See "Industrial Works."

Calif., Merced—May 31, by H. P. Sargent, secy. Merced Irrigation Dist., Exchequer Dam, power house, etc., on Merced River, 4 alternative bids (1) 57,000 cu.yd. open excav., mostly rock, 17,000 cu.yd. tunnel excav., 380,000 cu.yd. concrete, erecting 1,500 tons metal pipe, valves, gates, structural steel, etc., 300,000 bbl. cement, 58,000 ton railway ballast, alternative bids on either 25,000, 50,000 or 100,000 tons sand and gravel or crushed rock for railway structures (2) same as (1) except cement is not required (3) same os (2) except railway ballast, sand, gravel or crushed rock for railway structure are not required, (4) 760,000 tons sand, gravel or crushed rock and cobbles for dam and power house, 58,000 tons railway ballast and alternative bids on 25,000, 50,000 or 100,000 tons sand and gravel or crushed rock for railway structures. Noted May 8. R. V. Meikle, ch. engr.

BIDS RECEIVED

N. Y., Belmont—A. W. Brandt, comr. highways, Albany, May 9, dam and abutments on Belmont-Scio Highway 5476-A. Allegany Co., from Oatka Eng. & Constr. Co., Inc., Warsaw, $50,600. Engrs. est. $59,910.

Railways

BIDS DESIRED

California—May 31, by H. P. Sargent, secy. Merced Irrigation Dist., Merced, 16.79 mi. railroad from Merced Falls to Detwiler, track laying, ballasting, 1,000,000 cu.yd. excav., 200,000 ft. trestles, 6,500 cu.yd. concrete, 3,495 lin.ft. tunnels, and 3,320 cu.yd. concrete, 1,944 cu.yd. rock walls laid in cement mortar. District will furnish rails, ties, material for fastening rails and switches in place, gravel for ballast, timber for trestles and pipe for culverts, all other materials to be furnished by contractor. R. V. Meikle, ch. engr.

Calif., Merced—See "Dams."

BIDS RECEIVED

Missouri—Bd. Pub. Serv., 208 City Hall, St. Louis standard gage railroad at Howards Bend, St. Louis Co., 11,250 cu. yd. excav., 2,950 cu.yd. macadam, 2,400 cross ties, 5,242 ft. ties, etc., from Industrial Track Constr. Co., Granite Bldg., St. Louis, $26,562. Engrs. est. $32,000. Noted Apr. 24.

CONTRACTS AWARDED

Ontario—Temiskaming & Northern Ontario Ry., North Bay, train fill, ballasting and laying tracks from Mile 45 north of Cochrane to Mile 75, to C. D. French & Co., Cochrane. Engrs. est. $400,000. Noted Mar. 13.

Excavation, Drainage, Irrigation

PROPOSED WORK

Minn., Albert Lea — Freeborn Co. had plans prepared and will take bids about June 10, County Ditch 30. $24,000. Midwest Eng. Co., Albert Lea, engrs.

Okla., Marlow—Little Beaver D. D. 1, having surveys made draining and straightening 7 mi. Little Beaver Creek, Stephens Co. $35,000. H. J. Wilkins, 225 West Grand St., Oklahoma City, engr.

California — San Bernardino Co. (San Bernardino), Riverside Co. (Riverside), and Orange Co. (Santa Ana), plan election to vote on $1,000,000 or more bonds for Santa Ana River control improvements.

BIDS DESIRED

New Jersey—June 3, by State Bd. Commerce & Navigation, Trenton, dredging a beach channel in Little Egg Harbor Bay, Ocean Co., between public dock at Beach Haven and point south of state highway bridge over Manahawken Bay. V. Gelineau, dir.; adv. E. N.-R. May 22.

Wis., Jefferson—May 29, by Jefferson Co. Farm Drainage Bd., City Hall, Watertown, Farm Drain No. 3, 154,347 cu.yd. earth and 1,395 cu.yd. rock excav., and 3,000 lin.ft. 20 in. tiling. To exceed $15,-000. J. W. Purner, secy.

Ind., Bluffton—May 23, by Huntington Co., at office of C. M. Davenport, co. surv., R. H. Mossburg ditch, Liberty and Salamonie Twps. $23,553. A. H. Fry, supt. constr.

Ark., Lake Village—June 17, at office of Chicot Co. D. D. J. Sloss, ch. n., for contr. No. 1 Main Ditch No. 1, incl. clearing Boeuff River, 2,978,600 cu.yd. excav. clearing 360 acres and 4 mi. right of way, Main Dam 1, in Upper Mason Bayou, 1,000 cu.yd. muck ditch and 5,000 cu.yd. embankment; contr. 2, Main Ditches 2, 3 and 4, 1,270,000 cu.yd. excav.; Contr. 3, Main Dams 2, 3, 4, 5 and 6, 2,500 cu.yd. excav., 15,100 cu.yd. embankment; Contr. 6, clearing 11.5 mi. Mason Bayou.

Calif., Merced—May 28, by H. P. Sargent, secy. Merced Irrigation Dist., structures on Hammett Canal extension and canals on Robison tract, siphon under state highway, and structures on Arena Canal, incl. 140,000 ft. lumber in bridges, checks, drops and side gates, also 4 concrete siphons and one concrete pipe siphon. R. V. Meikle, ch. engr.

Ont., Cumberland—May 31, by W. W. Dunning, Cumberland, clearing, grubbing, 36,670 cu.yd. excav., etc. $25,000. S. E. Farley, 16 Rideau St., Ottawa, engr.

CONTRACTS AWARDED

Tex., Dallas—Republic Natl. Bank, Main St. and Exch. Pl., excavation for basement and sub-basement for 20 story, office and bank building, to T. A. Griffin, Nortn Texas Bldg., $30,000. Noted Apr. 17 under "Buildings."

Streets and Roads

PROPOSED WORK

Vermont—State Hy. Dept., Montpelier, rejected bids May 8, 2.7 mi. Burlington-Montpelier Rd., in South Burlington, Federal Aid Project 60A, alternate bids on bituminous macadam and rein.-con. Will readvertise. T. W. Dix, Montpelier, engr. Noted May 1.

Massachusetts—State Hy. Dept., Boston, plans constructing Quincy Pilgrim Highway. $450,000. W. F. Williams, state hy. comr.

Massachusetts—See "Bridges."

Mass., Boston—Plans constructing Estelle St. from Howard to Morton Sts., bituminous macadam. To exceed $25,000.

Mass., Quincy—Plans improving with bituminous macadam, various streets in Quincy, $50,000, also East Elm St., Wallaston, $10,000, P. F. O'Brien, city engr.

New York—A. W. Brandt, comr. highways, Albany, received no bids May 9, constructing and reconstructing 0.93 mi. Catskill-Athens Rd., Repair Contr. 3081, Greene Co. $35,229. Noted Apr. 24.

New York—A. W. Brandt, comr. highways, Albany, received one bid May 9 reconstructing 1.69 mi. Riverside-Chestertown, Repair Contr. 3082, Warren Co., (was withdrawn later by bidder), $86,249. Noted Apr. 24.

N. Y., Buffalo—G. B. Ricaby Co., Inc., 200 Pearl St., had plans prepared road work at Sturgeon Bay colony. To exceed $50,000. Harris & Hall, 110 Franklin St., engrs.

N. Y., Mohawk—Election May 24, $26,000 bonds, paving Orchard, Michigan, Devendorf, Warren and South Washington Sts.

N. Y., Oneida—Election June 2, $45,000 bonds, paving Elm and Warner Sts.

N. Y., Rome—Plans repairing Court, Embargo, Dominick and East Dominick Sts. $25,000-$30,000. F. L. Martin, mayor.

N. Y., Saranac Lake—Village Bd. plans opening and improving 4 streets, bitulithic macadam. $30,000-$35,000. D. S. Foster, village pres.

N. J., Trenton—Hamilton Twp. Com. plans curbing and laying sidewalks on several streets. $37,400. W. C. Hart, 409 Johnston Ave., twp. clk. Engineer not selected.

Pa., Phila.—See "Contracts Awarded."

W. Va., Alderson—Election June 3, $40,000 bonds paving streets. C. E. Statbon, recorder.

W. Va., Fairmont—Marion Co. postponed improving various projects, bids which were to be opened of May 14th, 20th and 22nd. B. H. Palmer, co. engr. Noted Apr. 1.

W. Va., Kenova—Plans election $200,000 bonds for paving streets.

Fla., Bartow—Polk Co. election May 31, $30,000 bonds improving 2¼ mi. Rds. 1 and 12; $30,000, 2¼ mi. Rds. 2 and 11; $138,-000, 9.4 mi. Rd. 10; $176,000, 11.75 mi. Rd. 9; $30,000, 2.3 mi. Rd. 8; $28,000 2 mi. Rds. 6 and 7; $40,000, 3½ mi. Rd. 4; $30,000, 2 mi. Rd. 5; $25,000, 2 mi. Rd. 3. W. D. Boyde, Bartow, engr.

Fla., Clearwater—Pinellas Co. election June 10, $93,350 bonds, vitr. brick or asphalt block, asphalt filler on 5 in. lime rock paving granite or concrete curb, and bridges on 2 mi. No. 1, Point Pinellas Rd.; $102,059 bonds, 3.05 mi. No. 2, Meximo Rd.; $117,899 bonds, 2.85 mi. No. 3, Tangerine Rd.; $111,348 bonds, 3.6 mi. No. 4, Forth St. south; $36,189 bonds, 1.25 mi. No. 6, Disbon Ave.; $169,104 bonds, 5 mi. No. 5, Lakewood Ave., all foregoing 16 ft. wide. Noted Mar. 20.

Fla., Gainesville — Alachua Co. election June 3, $70,000 bonds, constructing highways, in Special Rd. and Bridge Dist. 3; $120,000, Special Rd. and Bridge Dist. through Newberry; $110,000 New road and bridge district, brick, asphalt or asphaltic concrete on lime rock base, 16 and 16 ft.

Ala., Birmingham — Takes bids about July 20, paving with asphalt on concrete 6 blocks Ave. D and 20th Sts., Ensley, 30 ft., $67,250.

Ala., Tuscaloosa—Tuscaloosa Co. voted $600,000 bonds for roads. Noted Mar. 27

Miss. Starkville—Oktibbeha Co. election May 31, $35,000 highway improvements.

La., Homer — Claiborne Parish voted $800,000 bonds for road work. Noted Apr. 24.

Tennessee — State Dept. Hys. & Pub Wks., Nashville, soon takes bids grading and surfacing 8 mi. Knoxville-Blount Co. line Rd., 18 ft., Knox Co.; grading, etc., 7 mi. McNairy Co. line-Coffee Landing Rd., Hardin Co., and approximately 10 mi Columbia-Mt. Pleasant Rd., 18 ft., Maury Co. J. G. Creveling, highway comr. Noted Apr. 24.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, rejected bids May 9, surfacing 9.8 mi. Newport-North Carolina State line Rd., 16 ft., Federal Aid Project 23, Cooke Co.; bids not opened May 9 improving 9.52 mi. Davidson Co. line-Dickson Co. line Rd., 18 ft., Federal Aid Project 205, Cheatham Co., and bridge over Turners Creek and Harpeth Rivers, on same road, projects held in abeyance. J. G. Creveling, highway comr. Noted May 15.

Tennessee—State Hys. & Pub. Wks., Nashville, making surveys grading and surfacing probably gravel, 6 mi. Troy-Hornbeak Rd., Obion Co. J. G. Creveling, highway comr.

Tenn., Ripley — Lauderdale Co. voted $400,000 bonds improving county and state roads. Noted Apr. 24.

Streets and Roads (Continued)

Tenn., Savannah—Making surveys paving, 15,000 or 20,000 sq.yd. various streets, probably concrete. $30,000. Evans & Meade, Florence, Ala., engrs. Noted Apr. 24.

Ohio—Dept. Highways & Pub. Wks., Columbus, rejected bids paving 0.245 mi. Sect. F-1 Lima-Delphos Rd., Allen Co., rein.-con. Noted May 15.

O., Canton—Stark Co. plans improving 3.1 mi. West Massillon Rd., 18 or 20 ft. $75,000. Will mature in 1925. A. M. Wise, Court House, engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections and paving 3,330 ft. Champion Ave., 30 ft., brick $75,175, asphalt $61,964. R. H. Simpson, city engr.

O., Dennison—Soon takes bids paving North 3rd St., asphalt $25,140, brick $27,900.

O., Lisbon—Columbiana Co. takes bids about July 1, improving 1.862 mi. Wellsville-Salineville Rd., 18 ft., in Washington Twp. $65,766. L. C. Kirk, Lisbon, engr.

O., Steubenville—City and Jefferson Co. plan taking up and relaying Belgian block on reverse side, on concrete foundation, cement filler, on Market St. $60,000. V. N. Penn, Steubenville, engr.

O., Xenia—Greene Co. plans road over top of Huffman Dam, 11,000 sq.yd. concrete, 6,400 lin.ft. each concrete curb and gutter. $30,000. C. H. Eiffert, Miami Conservancy Dist., Dayton, maintenance engr.

O., Youngstown — Mahoning Co. soon takes bids improving Alliance-Salem Rd. Intercounty Highway 84, Sect. A, $29,155, Canfield-Poland Rd., Intercounty Highway 486, Sect. 2, $53,705.

O., Youngstown — Mahoning Co. plans improving Youngstown-Lisbon Rd., Intercounty Highway 82, Sect. 6. $44,225.

O., Youngstown — Mahoning Co. plans improving Salem-Warren Rd. Intercounty Highway 516, Sect. A, $49,378, and Midlothian Blvd., $51,191.

Ind., Bedford—Lawrence Co. plans grading and graveling 4.1 mi. Spice Valley Church Rd., 24 ft. $27,538; 3.8 mi. Lincoln Ave. Rd., 24 ft., $25,364; 4.3 mi. Washington Ave. Rd., 24 ft., $29,826; 4 mi. Bedford and Peerles Rd. 24 ft., $27,369 H. McIntire, Bedford, engr.

Ind., Brownstown — Jackson Co. plans paving Hughes Rd., 23,106 sq.yd. bituminous macadam. $38,702. E. B. Douglass, Brownstown, engr.

Ind., Evansville—Bd. Pub. Wks., plans resurfacing Fulton Ave. from Franklin to Water Sts., vitr. brick or sheet asphalt. $30,000. J. D. Saunders, city engr.

Ind., Ft. Wayne—Allen Co. plans grading and graveling 17,210 ft. Cassel Rd., 30 ft. $28,861. O. M. Darling, Ft. Wayne, engr.

Ind., Goshen — Elkhart Co. plans concrete paving 5,185 ft. and grading and graveling 4,261 ft. Twp. Rd. C-1, 16 ft. $35,150. C. L. Kinney, Goshen, engr.

Ind., South Bend—St. Joseph Co. having plans prepared grading and graveling 3.9 mi Godshall Rd., 18 ft. $43,401. P. R. Gillin, South Bend, engr.

Ind., Vincennes—Knox Co. plans paving 12,320 sq.yd. C. L. V. Tucker Rd., concrete on concrete. $26,500. W. D. Hanlon, Vincennes, engr.

Mich., Detroit—Had plans prepared grading and paving 23,700 sq.yd. Chalmers Ave., Sect. 2, 3½ in. sheet asphalt on 8 in. concrete. $142,000. G. Jerome, city engr.

Mich., Detroit—Had plans prepared paving with 3½ in. sheet asphalt on 8 in. concrete, 4,300 sq.yd. Chopin Pl. $25,760, 220 sq.yd. Gaylord St. $1,300, 6,100 sq.yd. Daniels Ave. $36,610, 2,110 sq.yd. Kentucky Ave. $12,650, 4,820 sq.yd. Luther Ave. $28,870, 3,400 sq.yd. Connors Ave. $20,075, 1,790 sq.yd. Holmur Ave. $10,690, 18,900 sq.yd. Mack Ave. $113,360, and 18,100 sq.yd. Harper Ave. $108,420. G. Jerome, city engr.

Mich., Gretna — Police Jury Jefferson Parish, election June 17, $500,000 bonds for road improvements in 7th, 8th and 9tn wards, incl. 11 mi. concrete highway from St. Charles Parish line to New Orleans, $40,000 per mi. (State Hy. Dept. and Jefferson Parish to share cost jointly), also another 4 mi. concrete highway from Shrewsbury over route of present gravel highway to Protection Levee, via Metairie Ridge, (latter to be borne by Jefferson Parish).

Mich. Lansing—Plans to pave Alley Block 243, Moores River Dr., Michigan, Isaac St. Joseph, Hillsdale, Cedar, Elm, Capitol, Lenawee, Woodlawn, Prospect, Lathrop, Avon, 8th, Franklin, Dakin and Middle Sts. O. E. Eckert, city engr.

Wis., Fond du Lac—Soon takes bids improving Linden Ave., 8,214 sq.yd. asphaltic concrete on present macadam, and 5,374 lin.ft. concrete curbing and gutter. $25,000 G. H. Stanchfield, City Hall, engr.

Wis., Two Rivers—Soon takes bids one and two course concrete, and one course vibrolithic concrete paving 19th, 11th, 14th Sts. To exceed $25,000. D. H. Ames, City Hall, engr.

Wis., West Bend—Plans concrete paving, etc., 5th and 6th Aves., Walnut, Poplar and Chestnut Sts. To exceed $25,000. C. P. Heipp, city clk. Engineer not selected.

Minn., Willmar—Kandiyohi Co. having plans prepared 11 mi. grading west of New London, 100,000 cu.yd. excav., $25,000; 13 mi. gravel surfacing between Raymond and Sunnyside, 13,000 cu.yd. gravel. M. L. Wadell, Willmar, engr.

Kan., Olathe—Johnson Co. plans grading and concrete surfacing 4.02 mi., Federal Aid Project 246. E. C. L. Wagner, Kemper Bldg., Kansas City, Mo., engr.

Kan., Winfield—Cowley Co. plans grading and paving with concrete or brick, 2.676 mi. Federal Aid Project 231-A, 28 ft. W. S. Ruggles, Jr., Winfield, engr.

S. D., Sioux Falls—Plans concrete paving, grading, laying sidewalks and curbing. $152,000. S. B. Howe, city engr.

Mo., St. Louis—Soon takes bids grading and paving 7,000 ft. various streets, 15 ft., concrete or vitr. brick on concrete. $59,900 to $93,500. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis — Making preliminary plans widening about 4 blocks Grand Ave. from 80 to 100 ft., about 5 blocks Goodfellow St. from 60 to 80 ft. $103,750. H. Bartholomew, Municipal Courts Bldg., engr.

Tex., Abilene—Election June 2, $50,000 bonds permanent paving various streets. $50,000. Address C. E. Combs, mayor.

Tex., Austin—Travis Co. making plans grading and surfacing with crushed stone base and 1½ in. bituminous topping 3.56 mi. Austin-Houston Highway, 18 ft. $113,000. O. Leonard, Box 256, engr.

Tex., Baird—Callahan Co. making plans paving 8.84 mi. road from here to Sect. 1, 18 ft. bituminous macadam. $157,000. Y. H. Webb, co. engr.

Tex., Belleville—Austin Co. soon takes bids grading and bridging 9.16 mi. State Highway 36, 26 ft. $34,500. H. Schroeter, Wallis, co. engr. Noted Mar. 13.

Tex., Dallas—City Com. takes bids in June paving Fitzhugh St. from McKinney St. to Highland Park with underpass at Missouri Kansas & Texas R.R. tracks. $1,000,000. E. A. Kingsley, city engr.

Tex., El Paso — El Paso Co. making plans grading and bituminous concrete surfacing 25.5 mi. State Highway 1 from Ysleta Fabens and from here to Montoya, 18 ft. $800,000. F. Wilson, co. engr.

Tex., Jasper—Jasper Co. making plans grading and gravel surfacing 5.82 mi. State Highway 45, 16 ft. $70,000. C. P. Hunter, co. engr.

Tex., Pleasanton—Atascosa Co. election soon $300,000 bonds, hard surfacing 13 mi. road from here to Jourdanton and Campbellton.

Tex., Rockport — Aransas City. election May 31, $250,000 bonds, roads. H. A. Harper, co. judge.

Tex., Tyler—Smith Co. making plans grading and surfacing 16.3 mi. State Highway 64, 18 ft., macadam. $157,000. D. K. Caldwell, co. engr.

Tex., Waxahachie—Ellis Co. voted $300,000 bonds constructing highway in Rd. Dist. 1. E. A. Spalding, co. engr.

Oklahoma—State election July 17, $400,000 bonds grading and concrete paving 30 mi. highways, 18 ft., in Hughes Co. J. M. Page, Oklahoma City, highway engr.

Oklahoma—State, election Aug. 5, $750,000 bonds grading and concrete paving 50 mi. highways in Logan Co. J. M. Page, Oklahoma City, highway engr.

Okla., Broken Arrow — Plans grading, curbing and paving 5 blocks 7th St. in Dist. 10, 5,600 sq.yd. concrete, etc. $27,500. Wood & Witten, Lynch Bldg., Tulsa, engrs.

Okla, Chandler — Plans improving 10 blocks 7th, 8th, 9th, 10th and 11th Sts., 13,000 sq.yd. waterbound macadam, 6,700 lin. ft. each curb and gutter. $38,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

California—State Highway Comn., Sacramento, plans widening highway between Richmond and Crockett, Contra Costa Co. To exceed $25,000. R. M. Morton, state highway engr.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving Chevy Chase Dr. between Glendale city limits and Sicomore Canyon Tract, 2,871 cu.yd. excav., shaping 5,663 sq.yd. each concrete and shaping, 2,551 lin.ft. shoulders, etc.

Calif., San Diego—Common Council having plans prepared improving Coast Blvd. south, and Jenner St., 103,728 sq.ft. 5 in. concrete; Mission Blvd., Pacific Ave. and Cass St., 444,971 sq.ft. 5 in. concrete, 19,098 lin.ft. 8 in. concrete curb; Normal Center and 11 other streets, 505,509 sq.ft. 2½ in bituminous with 1½ in. asphaltic concrete surface, 340,374 sq.ft. 4 in. concrete with 1½ in. asphaltic concrete surface, 6,080 sq.ft. 3 in. asphaltic concrete, 7,868 lin.ft. 6 in. and 1,680 lin.ft. 8 in. concrete curb, 1,788 sq.ft. concrete sidewalk. F. A. Rhodes, city engr.

Calif., San Diego — Bd. Supervs. San Diego Co. rejected bids grading Escondido-Del Mar highway.

Calif., San Diego—Had plans prepared improving 9th and 10th Sts., 95,869 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, 1,590 sq.ft. concrete sidewalk, etc F. A. Rhodes, city engr.

Calif., San Mateo — Making plans improving portion 3rd St., 750 cu.yd. excav., 12,500 sq.ft. 1½ in. asphalt on 4½ in. concrete, 1,000 lin.ft. concrete curb and gutter. C. F. Price, city engr.

Calif., Stockton—See Bridges.

Calif., Ukiah—Mendocino Co. had plans prepared improving Fairbanks Grade, 29,134 cu.yd. excav., 22,590 cu.yd. overhaul over 300 ft., etc. E. H. Smith, co. surv.

Que., Montreal—Plans paving and repaving with asphalt 2,000 ft. York and Cazelais Sts., 25, 34 and 35 ft. wide, $17,835, also 2,422 ft. concrete sidewalks on Mariette Letellier, and Callieres Sts., $12,275. H. Terreault, City Hall, engr.

Ont., Oshawa—Plans 35,000 sq.yd. concrete paving various streets. $110,000. W. C. Smith, city engr.

BIDS DESIRED

New Hampshire—May 27, by State Hy. Comn., Concord, paving ¾ mi. highway, bituminous macadam in Windham; 1 mi. highway, crushed gravel and macadam in Littleton; ¾ mi. highway, gravel, in Plymouth; ¾ mi. highway, rein.-con., in Lisbon; 42 span concrete bridge and approaches in Thornton. F. E. Everett, highway engr.

Vermont—May 27, by T. W. Dix, ch. engr., State Hy. Dept., Montpelier, 3.03 mi. road in Guilford, 4,670 cu.yd. broken stone base, 2,735 cu.yd. bituminous surface course, 77,370 gal. oil, asphalt, etc., Federal Aid Project 57A.

Massachusetts—May 27, by Dept. Pub. Wks. Div. of Highways, State House, Boston, 8,727 ft. section of highway, 20 ft., bituminous macadam, in town of Salisbury. To exceed $25,000. W. F. Williams, comr.

Mass., Dorchester (Boston, P. O.)—May 26, by Dept. Pub. Wks., City Hall, Boston, asphalt or bitulithic paving on Blue Hill Ave., from Canterbury St. to River St. here. $65,000. J. A. Rourke, Boston, comr.

Mass., East Boston (Boston, P. O.)—May 26, by Dept. Pub. Wks., City Hall. Boston, granite block paving in Border St., here. $30,000. J. A. Rourke, comr.

Massachusetts—June 3, by Dept. Pub. Wks. of Highways, State House, Boston, paving about 16,295 ft. section of highway, 20 ft., bituminous macadam, in Wareham. To exceed $50,000. W. F. Williams, comr.

Mass., Boston—May 25, by Dept. Pub. Wks., City Hall, asphalt or bitulithic paving, Fenway St. from Forsyth St. to Museum Rd. $25,000. J. A. Rourke, comr. Pub. Wks.

New York—June 3, by A. W. Brandt, comr. highways, Albany, constructing and reconstructing highways in Albany, Broome, Franklin, Greene, Herkimer, Onondaga, Ontario, Rockland, Saratoga, Schuyler, Sullivan, Warren and Yates Counties; adv. E. N.-R. May 22.

N. Y., New York—May 27, by H. Bruckner, pres. Bronx Boro., 3rd and Tremont Aves., paving where not already paved and repaving with granite blocks Prospect Ave., from East 149th to East 163rd Sts. and from 163rd St. to Boston Rd.

N. Y., New York—May 28, by E. Riegelman, Boro pres., Boro Hall, Brooklyn, repaving Concord St., Grade 1 granite on concrete, 86th St., Throop and De Kalb Aves., asphalt on concrete; cement sidewalks on Havemeyer and Withers Sts.; grading, curbing and flagging 15th Ave.

N. Y., St. George—May 29, by J. A. Lynch pres. Richmond Boro., Borough Hall, repaving with granite blocks Richmond Ave.

N. J., Freehold—June 4, by Bd. Chosen Freeholders Monmouth Co., rein.-con. paving 2.62 mi. Atlantic Highlands-Hendrickson Corner Rd. 58, Sect. 2. G. K. Allen, Jr., 60 Broad St., Red Bank, co. engr.

N. J., Mt. Holly—June 2, by Bd. Chosen Freeholders Burlington Co., improving Kings Highway, Moorestown and Chester Twps., Burlington Co. H. B. Smith, co engr.; adv. E. N.-R. May 22.

N. J., Westmont — May 27, by Haddon Twp. Comn., Fire House, 12,000 sq.yd.

Streets and Roads (Continued)

concrete pavement. $50,000. Remington & Vosbury, 509 Cooper St., Camden, engrs.

Pa., Meadville — May 27, at office D. Andrews, city clk. paving, curbing and guttering R. L. Phillips, city engr.; adv. E. N.-R. May 22.

Md., Baltimore — May 28, by Bd. Awards, concrete curb and combination concrete curb and gutter during 1924. B. L. Crozier, City Hall, highways engr.

Virginia—June 5, by State Hy. Comn., Richmond, constructing roads and bridges in following Projects: F-118-B, C and D, Route 33, S-248-A, Route 18. C. S. Mullen, ch. engr.; adv. E. N.-R. May 22.

West Virginia—June 3, by State Rd. Comn., Charleston, constructing following roads: Projects 3134, 137-B, 131, 3313, 3200, 3250, 3246, 2062, 3166, 3140, 3314, 3082-A-1, 3136-A, 3276, 3157, 3278-B, 1129, 3221, 62-R, 122-A, 3018, 3313, 3030, and bridges Projects 3033. E. B. Carskadon, secy.; adv. E. N.-R., May 22.

W. Va., Elkins — June 5, by H. C. Kesling, clk. Randolph Co., concrete surfacing, etc., Beverly-Fairmont Pike, 14 ft. roadway on Odd Fellows Home Rd., widening Harrison Ave., and constructing 14 ft. concrete highway on Sennaca Rd.

S. C., Florence—May 27, at office Florence Co. Comrs., Court House, constructing 3.5 mi. State Route 4, Federal Aid Project 217-B, 25,248 cu.yd. common excav., 8,776 cu.yd. sand clay surfacing, also rein.-con. bridge incl. four 22 ft. spans. J. M. Martin, Court House, engr.

S. C., Sumter — June 5, by Chamber Commerce Sumter Co. hard surfacing State Route 3, Federal Aid Project 228, 19,643 cu.yd. common excav., 40,013 sq.yd. sheet asphalt, 44,096 sq.yd. plain concrete base and header course, etc. $142,468. J. M. Martin, Court House, Florence, div. engr.

Georgia—June 6, by State Hy. Dept., East Point, constructing 1.544 mi. sand clay and gravel road and 2 timber bridges, Swainsboro-Waynesboro Rd., Federal Aid Project 387-A, Burke and Emanuel Counties. W. R. Neal, highway engr.; adv. E. N.-R. May 22.

Alabama—June 16, by State Hy. Dept., Montgomery, constructing 9.187 mi. part of Eutaw-Tuscaloosa Rd., Federal Aid Project 17, Greene Co., 26.03 acres clearing and grubbing, 89,086 cu.yd. borrow, 20,951 sta.yd. overhaul, 22,000 cu.yd. gravel, 14,454 lin.ft. ¾ in. galvanized cable guard rail, incl. 62,944 f.b.m. treated timber, 2,826 lin.ft. treated timber piles and 6 test piles for bridges, $200,000; 6.035 mi. Thomasville-Linden-Marengo Co. line Rd., Project 21-S, Clarke Co., 28.15 acres clearing, 57,402 cu.yd. earth and 12,000 cu.yd. excav., 3,257 sta.yd. overhaul, 7,518 lb. reinforcing, 11,946 lin.ft. ¾ in. galvanized cable guard rail, 14,600 cu.yd. gravel, 1 mi. haul, and 80,200 half mile units additional haul on gravel, etc., $100,000. W. S. Keller, highway engr.

Ala., Birmingham — June 10, by Bd. Revenue Jefferson Co. asphalt macadam paving 6 mi. Birmingham-Pratt City Rd., 10 ft., $82,100; asphalt paving 2 mi. Pratt-Ensley Rd., 10 ft., $32,000.

Ala., Huntsville—June 2, by Bd. Comrs. Madison Co., grading and surfacing 2.25 mi. Huntsville-Merrimack Rd., incl. bridges, 22,145 sq.yd. concrete, sheet asphalt, bituminous concrete, warrenite or tarvia on concrete or one course cement concrete material, 2,900 cu.yd. excav., 20,910 lb. reinforcing, 246 cu.yd. concrete, 960 ft. 12-in. pipe Co. Comrs., engrs.

Louisiana—June 5, by Bd. Comrs., 200 New Court Bldg., New Orleans, constructing, etc., 9.11 mi. State Project 338 A, Natchitoches-Shreveport Highway, Natchitoches Parish. J. M. Fourmy, Baton Rouge, ch. engr.

O., Clarington—June 2, paving 5,000 lin. ft. Main, Ferry, 3rd and Marietta Highways, brick and concrete. $80,000. H. C. Althar, Bellaire, engr.

O., Lisbon—July 1, by Columbiana Co., improving 3.01 mi. Summitville-Millport Rd., 18 ft., in Franklin Twp., cinder and stone, $30,000; 1.6 mi. Lisbon-Leetonia Rd., 18 ft., concrete, $26,500; 1.97 mi. Dungannon-Hanover Rd., 18 ft., in Hanover Twp., sandstone, $27,000. L. C. Kirk, Lisbon, engr.

O., Wooster—May 23, by Wayne Co., widening and paving about 2 mi. Orrville-Northern Highway I. C. H. 417, 16 ft., in Green and Baughman Twps., brick on concrete. $28,000.

Ind., Columbus—May 29, by City Council, paving 11,411 sq.yd. Jackson St., concrete on concrete. $29,668. G. Dickey, city engr.

Ind., Crown Point—May 25, by Comrs. Lake Co., grading and gravel surfacing 5.5 mi. C. E. Nelson Rd., 24 ft. $63,173. E. K. Wallace, Crown Point, engr. Noted May 15.

Ind., Evansville—May 23, by Bd. Pub. Wks., paving, guttering and curbing portions of Illinois, Delaware, Rowley, Sunset and Belle Meade Aves., alternate bids on asphalt, brick, concrete with asphaltic concrete. J. D. Saunders, City Hall, engr.

Ind., Ft. Wayne—June 3, by Comrs. Allen Co., paving 43,926 sq.yd. Scharpenberg Rd., bituminous macadam. $82,785. O. M. Darling, Ft. Wayne, engr.

Ind., Noblesville—May 24, by Comrs. Hamilton Co., 24,288 sq.yd. concrete paving on Crum Rd. $58,414. J. S. Shannon, Noblesville, engrs. Noted May 15.

Ind., Richmond — May 29, by Comrs. Wayne Co., paving 50,928 sq.yd. F. A. Brown Rd., bituminous macadam. $96,765. H. H. Horton, Richmond, engr.

Ind., Warsaw — June 2, by Comrs. Kosciusko Co., paving 59,724 sq.yd. Swartz Rd., concrete on concrete. $100,958. S. S. Boggs, Warsaw, engr.

Ind., Winchester — June 4, by Comrs. Randolph Co., paving with crushed stone 10,536 ft. Arvin Rd., 24 ft. $27,654. A. B. Purdy, Winchester, engr.

Michigan—May 27, by State Hy. Dept. at office Comrs. Ingham Co., Mason, grading and surfacing State Trunk Line Rd. 14-36, A and B, 25,492 cu.yd. excav., 56,144 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, ch. engr.

Michigan—May 28, by State Hy. Dept. at office Pentwater Twp. Clerk, Pentwater, shaping and surfacing 3.373 mi. State Trunk Line Rd. 11-25, Sect. B, Oceana Co. (Hart), 36,969 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—May 28, by State Hy. Dept. at office Comrs. Ingham Co., Mason, grading and surfacing 0.876 mi. Federal Aid Project 88, Sect. C, 4,271 cu.yd. excav., 10,273 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—May 29, by State Hy. Dept. at office Comrs. Eaton Co., Charlotte, grading and surfacing 3.841 mi. Federal Aid Project 100, Sect. B, 29,091 cu.yd. excav., 45,066 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—May 29, by State Hy. Dept. at office Comrs. Missaukee Co., Lake City, grading and gravel surfacing 1.256 mi. State Trunk Line Rd. 66-19, 6,535 cu.yd. earth excav., 11,950 sq.yd. one course gravel. G. C. Dillman, Lansing, ch. engr.

Michigan—May 29, by State Hy. Dept. at office Comrs. Eaton Co., Charlotte, grading and surfacing 4.333 mi. Federal Aid Project 100, Sect. A3, 27,736 cu.yd. excav., 50,844 sq.yd. concrete, bituminous concrete or sheet asphalt. G. C. Dillman, Lansing, ch. engr.

Michigan—May 29, by State Hy. Dept. at office Comrs. Dickinson Co., Iron Mountain, shaping and surfacing 1.068 mi. State Trunk Line Rd. 12-38 A, 6,410 sq.yd. concrete, and 5,190 sq.yd. special rein.-con. pavement. G. C. Dillman, Lansing, ch. engr.

Michigan—May 29, by State Hy. Dept. at office Comrs. Ingham Co., Charlotte, grading and surfacing 1.004 mi. Federal Aid Project 100, A and A2, Ingham Co., 11,486 cu.yd. excav., 12,102 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—May 29, by State Hy. Dept. at office Comrs. Dickinson Co., Iron Mountain, grading and surfacing State Trunk Line Rd. 12-38, B, 9,054 cu.yd. excav., 16,547 sq.yd. concrete. G. C. Dillman, ch. engr.

Michigan—June 2, by State Hy. Dept. at office Comrs. Kalkaska Co., Kalkaska, grading and surfacing 5.32 mi. State Trunk Line Rd. 66-17, Sect. A, 73,349 cu.yd. excav., 49,956 sq.yd. gravel. G. C. Dillman, Lansing, ch. engr.

Michigan—June 2, by State Hy. Dept., at office Comrs. Mason Co., Ludington, grading and paving 0.999 mi. State Trunk Line Rd. 11-61, Sect. C, Manistee Co., 7,701 cu.yd. excav., 10,553 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 2, by State Hy. Dept. at office Comrs. Mason Co., Ludington, grading and surfacing 7.493 mi. State Trunk Line Rd. 11-61 A, 79,128 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 2, by State Hy. Dept. at office Comrs. Ontonagon Co., Ontonagon, grading and surfacing 8.406 mi. State Trunk Line Rd. 28-10, Sect. A, 62,688 cu. yd. excav., 78,520 sq.yd. gravel. G. C. Dillman, Lansing, chn. engr.

Michigan—June 2, by State Hy. Dept. at office Mason Co., Ludington, grading and surfacing 8.268 mi. State Trunk Line Rd. 11-61, B, 14,727 cu.yd. excav., 87,773 sq. yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 2, by State Hy. Dept. at office Comrs. Kalkaska Co., Kalkaska, grading and surfacing 1.56 mi. State Trunk Line Rd. 66-17, Sect. B, 9,560 cu.yd. excav., 15,441 sq.yd. gravel. G. C. Dillman, Lansing, ch. engr.

Michigan—June 3, by State Hy. Dept., at office Comrs. Lenawee and Washtenaw Counties, Adrian, grading and surfacing 4.382 mi. Federal Aid Project 95 A, 26,603 cu.yd. excav., 46,276 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 3, by State Hy. Dept. at office Comrs. Ionia Co., Ionia, shaping and surfacing 3.345 mi. State Trunk Line Rd. 43-3, 31,675 sq.yd. gravel. G. C. Dillman, Lansing, ch. engr.

Michigan—June 3, by State Hy. Dept. at office Comrs. Montcalm Co., Stanton, shaping and surfacing 5.523 mi. State Trunk Line Rd. 43-4, 51,923 sq.yd. gravel. G. C. Dillman, Lansing, ch. engr.

Michigan—June 3, by State Hy. Dept. at office Comrs. Lenawee Co., Adrian, grading and surfacing 1.352 mi. Federal Aid Project 95 A, 6,431 cu.yd. excav., 12,448 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 4, by State Hy. Dept. at office Comrs. Huron Co., Bad Axe, grading and surfacing 0.496 mi. State Trunk Line Rd. 53-16, 3,989 cu.yd. excav., 10,121 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 16, by State Hy. Dept., at office Comrs. Eaton Co., Charlotte, grading and surfacing 1.062 mi. State Trunk Line Rd. 29-2 Sect. A, 4,004 cu.yd. excav., 12,460 sq.yd. asphalt, concrete or bituminous concrete G. C. Dillman, Lansing, ch. engr.

Mich., Saginaw—May 20, by City Clerk at office Commissioner Pub. Wks., paving 2.943 mi. Genesee Ave. from Holland to Webber Aves., and from Webber to Hess Aves. and State St. from Bond to Mackinaw Sts. H. H. Eymer, city engr.

Ill., Vandalia—May 29, at office of Secretary of Bd. Local Impvts., City Hall, improvements to 5th St. Paving Dist., brick on concrete, rock asphalt on concrete, Warrenite-bitulithic on concrete, or rein.-con.; adv. E. N.-R. May 22.

Wis., Port Washington—May 28, by A. Lynch, city clk., concrete paving and curbing 11,000 sq.yd. Spring St. and Grand Ave. $30,000. Jerry Donohue Eng. Co., North 8th St., Sheboygan, engrs.

Kan., Oskaloosa — June 10, by Clerk Jefferson Co., grading and surfacing Federal Aid Project 178-A, 16,356 sq.yd. brick or concrete, 149 lin.ft. curb, 9,386 lin.ft. curb and gutter, 6,114 cu.yd. excav., etc. R. C. Ham, co. engr.

Nebraska—May 29, by State Highway Dept., Lincoln, 26,500 sq.yd. paving, North Platte-Maywood Rd., Federal Aid Project 221-A. $66,250. R. L. Cochran, state highway engr.

Mo., Chillicothe—May 26, by City clerk, grading and surfacing 22 blocks 10th, 9th, Normal, Walnut, Springhill Sts., etc., brick on concrete, concrete or tarvia, concrete curbs and gutters. Noted May 8.

Ark., Atkins—May 29, by F. A. Williams, Dist. Atty., Bank of Atkins Bldg., improving roads Dist. 4, Pope Co., 72,300 cu.yd. excav., 25 acres clearing and grubbing, 3,340 lb. reinforcing, 1,395 ft. 12-in. to 24-in. concrete pipe, 38,000 sq.yd. sand and 55,000 sq.yd. 7-in. compact gravel. Ford & McCrea, 215 Gazette Bldg., Little Rock, engrs.

Ark., North Little Rock (branch of Little Rock)—June 5, W. W. Shepherd, Dist. Atty., Exchange Bank Bldg., Little Rock, grading, curbing, guttering and concrete and paving 26,000 sq.yd. in Baring Cross Sub-division, here. $85,000. H. R. Carter, Exchange Bank Bldg., Little Rock, engr.

Tex., Abilene—Taking bids paving 33,621 sq.yd. Sayers Blvd., Oak, Chestnut, South 9th and Leahy Sts., bitulithic, rock asphalt, brick and standard pavements. $90,000-$100,000. O. K. Hobbs, city engr.

Tex., Dallas—Forest Ave. Heights Development Co., G. A. Gamble, pres., Praetorian Bldg., taking bids paving, walks, sewers, etc. $500,000. Koch & Fowler, Central Bank Bldg., engrs.

Tex., Franklin — June 3, by J. Reid, judge Robertson Co. at Hearne, grading, etc., 10.87 mi. State Highway 6, 26 ft. $98,000. L. A. Peterman, Hearne, engr.

Tex., Sweetwater—June 9, by Comrs. Nolan Co. grading, etc. Maryneal-Roscoe Rd. $25,000. J. A. Focht, co. engr.

Calif., Oakland — City Council taking bids improving portion 13th Ave. between East 14th and East 28th Sts., etc., 262,467 sq.ft. grading, 10,515 ft. concrete curb, 1,219 ft. concrete curb with steel guard, 13,623 sq.ft. concrete gutter, 247,882 sq.ft. 5 in. concrete base with 1½ in. Warrenite-bituminous surface, etc. W. W. Harmon, city engr.

Streets and Roads (Continued)

Ont., Sandwich—May 26, by W. P. Coyle, clk. Essex Co., 2 mi. rein.-con. pavement, Front Rd. in Sandwich West. $150,000. J. J. Newman, Davis Blk., Windsor, engr. Prices wanted on all materials.

BIDS RECEIVED

Vermont — State Hy. Dept., Montpelier, May 8, improving Barton-West Burke Rd., in Sutton, 2,940 cu.yd. gravel surface, 12,356 cu.yd. earth and 1,000 cu.yd. rock excav., from D. W. Overrocker, Brattleboro, $33,538. Noted May 1.

Mass., Boston—Recut granite block pavement on Ruggles and Whittier Sts., to Highland Constr. Co., 5 Ulmer St., Roxbury (Boston P. O.), $26,589; bitulithic, repaving Shawmut Ave. from Castle to Roxbury Sts., to M. P. Goddis, 2-A Victoria St., Dorchester (Boston P. O.), $205,317.

New York—A. W. Brandt, comr. highways, Albany, May 9, **(e. e. means engrs. est.)**, constructing and reconstructing 3.24 mi. White Creek-North Hoosick, Repair Contr. 1410, Washington Co., from F. D. Miller & Co., Norwich, Conn., $146,027, e. e. $156,838; 3.6 mi. Batavia-Bergen, Highway 8179, Genesee Co., from Constantine Constr. Co., 7 Exchange St., Buffalo, $164,773, e. e. $196,022; 3.17 mi. Waverly-Owego, Repair Contr. 1408, Tioga Co., from Wieberg Bros., Corning, $143,253, e. e. $157,425; 6.75 mi. Wells-Speculator, Highway 5523-A, Hamilton Co., from J. J. Bellotte & Son Constr. Co., Troy, $282,783, e. e. $298,144; 8.98 mi. Old Forge-Eagle Bay, Highway 8180, Herkimer Co., from Foley & Van Auken, Thendara, $413,072, e. e. $372,632; 4.35 mi. Carthage-Rensselaer, Repair Contr. 1409, Rensselaer Co., from Fitzgerald Bros. Constr. Co., Inc., Proctor Bldg., Troy, $202,232, e. e. $205,681; 1.21 mi. Saratoga-Glens Falls, Repair Contr. 1405, Saratoga Co., from T. S. O'Brien, 313 Delaware Ave., Albany, $56,685, e. e. $61,576; 7.21 mi. Stone Arabia-Epgratah, Highways 1597, 1686 and 1504, Fulton Co., from S. B. Van Wagenen, Inc., Rondout, $340,171, e. e. $377,924; 2.89 mi. Dansville-Mt. Morris, Repair Contr. 1406, Livingston Co., from Twin City Constr. Corp., Tonawanda, $115,027, e. e. $124,948; 4.15 mi. Ninevah-Afton, Repair Contr. 1407, Chenango Co., from F. Lewis Sons, Afton, $140,393, e. e. $156,708. Noted Apr. 24.

N. Y., Binghamton—Bd. Contr. & Supply, paving with **(a)** concrete **(b)** vitr. brick **(c)** bitulithic **(1)** Congdon Pl. **(2)** Myrtle Ave. **(3)** Susquehanna St. **(4)** South St. **(5)** Centenary St. **(6)** Charlotte St., from Stento & Serafini, 84 Court St., **(a1)** $1,775 **(b1)** $2,335 **(a2)** $4,132 **(b2)** $5,444 **(a3)** $3,491 **(b3)** $4,891 **(a5)** $4,380 **(b5)** $5,180; Municipal Constr. Co., U. C. N. Bank Bldg., Utica, **(c1)** $2,277 **(c2)** $5,112 **(c3)** $4,385 **(c4)** $7,376 **(c5)** $5,201 **(c6)** $9,273; M. Barber, 180 Henry St., **(b4)** $9,135.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, paving Richmond Terrace, granite block, from J. J. Johnson Sons, 445 Bway., West New Brighton, $21,277; Bay St., from Vandbro Constr. Co., 24 Elizabeth St., West New Brighton, $132,978. Noted May 8.

Pennsylvania — State Dept. Hys., Harrisburg, **(R. means Route and A. Application)**, R. 184, Luzerne Co., from Freeland Constr. Co., 501 Amer. Bank Bldg., Hazelton, $67,363; R. 247, Fayette Co., from Hardman & Minns, Spencer, W. Va., $84,172; R. 204, Beaver Co., from S. B. Markley, 1301 Allegheny St., New Brighton, $37,022; R. 11 and 232, Wyoming Co., from H. B. Sproul Constr. Co., Inc., 218 Adams Ave., Scranton, $352,934; A. 1430, Chester Co., from Sutton Contg. Co., 1015 Chestnut St., Phila., $107,885; R. 343, A. 2335, Bradford Co., from Meredith, McVaugh & Webb, 1409 West 10th St., Erie, $131,783; R. 185, Schuylkill Co., from W. H. Murphy & Sons, 2100 State St., Harrisburg, $410,160; R. 325, Green Co., from Froemming Bros., Inc., 1326 Humboldt Ave., Milwaukee, Wis., $357,970; R. 119. Westmoreland Co., from Herrmann & Gass, 1305 Jefferson St., Latrobe, $173,975; A. 2207, Lycoming Co., from Continental Contg. Co., Knickerbocker Bldg., Baltimore, Md., $68,315; R. 205, Venango Co., from Connell Laub & Bracht, 808 North Main St., Dayton, O., $537,449. Noted May 1.

Pennsylvania—State Hy. Dept., Harrisburg, **(R. means route and A. Application)** R. 1, Butler Co., from C. Winters Constr. Co., Renfrew, $247,971; R. 183, A. 2118, Columbia Co., from J. Christiano, 301 South Shamokin St., Shamokin, $129,996; R. 98, Forest Co., from Penn Erie Constr. Co., Erie, $227,142; R. 335, A. 1036, from F. E. Fish, 116 Stockton St., Elkton, Md., $56,038; R. 380, A. 2685, Forest Co. from Hart & Anundson, Sheffield, $42,105; A. 31, Tioga Co., from J. C. Devine Co., Alliance, O., stone or gravel $189,351; A. 1557. Chester Co.. from Juniata Co., 410 Empire Bldg., Phila., $22,997; R. 203, A. 2016, Armstrong Co. and R. 98, Forest Co. from Gruenke Bros., 209 Deposit & Trust Bldg., New Castle, $214,744 and $246,037 respectively; R. 47, Blair Co., from H. P. Streicher Co., Inc., 319 Terminal Bldg., Toledo, O. $104,581. Noted May 1.

Pa., Phila.—Bureau Hys., Dept. Pub. Wks., grading Schedule A, from T. P. Lee, 5629 Cherry St., Georges Lane, Columbia, Montgomery, Morse and Peach Sts. $13,676, Lebanon, Malvern and 59th Sts. $15,252, Warrington and 70th Sts., $11,979; from E. A. Mullen, Inc., 5512 Vine St., Hanson and St. Bernard Sts., $3,714; Root Bros., Ridge Ave. and Righter St., Houghton and Lauriston Sts., $8,699; Byrne Bros., 335 Gates St., Mathias and Parker Sts., $3,934; E. Tourison, Jr., 1517 Bankers Trust Bldg., Weathan St., $14,202; asphalt repaving, Schedule B, from Eastern Paving Co., 401 Colonial Trust Bldg., Ellsworth St., also track area $34,897; Barber Asphalt Co., Colonial Trust Bldg., Haverford St. $41,464, Huntingdon St. $13,505, 10th St. $10,243; redressed granite block repaving Schedule C, from Mazzaola & Marano, 414 Gross St., Clifton, Drury, Naudain, Percy and Sheridan Sts., $14,228, Spruce St. (track area), $17,096; from United Paving Co., Frankford St. (track area), $18,532, York Rd. (track area), $33,941, 24th & 25th Sts. $9,146; from Dunlap & Williams, Ridge and Girard Sts., Frankford St. $67,759, 22nd St. $28,510; from Eastern Paving Co., 401 Colonial Bldg., Orthodox St. (track area), $31,507; steel repairs to bridge at 49th St. over West Chester Branch of Pennsylvania R.R., Schedule D, from Amer. Fabricated Steel Co., 2442 North Bordine St., $525.

O., Cleveland—Cuyahoga Co., May 7, improving Minor Rd. 2, 13,480 lin.ft. 4 in. drain tile gutter, 36,000 cu.yd. earth excav., 13,480 sq.yd. 8 in. concrete, from C. A. White, Willoughby, $52,753. Noted May 1.

O., New Philadelphia—Tuscarawas Co. improving 1.5 mi. Div. 1, Newport-Gilmore Rd., 18 ft., waterbound gravel and slag, from H. C. Schneider, New Philadelphia, $26,869 and $37,071 respectively; gravel, from L. Springer & Son, New Philadelphia, $29,328. Noted Apr. 3.

Indiana—State Hy. Comn., Indianapolis, surface treating State Aid Rds. 12 and 32, from R. H. King, Danville, $30,237, engrs. est. $31,936; State Aid Rds. 13, 21 and 23, from Burk Constr. Co., Newcastle, $30,412, engrs. est. $29,000; State Aid Rd. 10, Sect. K, from Bowyer Co., Newcastle, $42,758, engrs. est. $48,230; Federal Rd. 79, from Ellis & Scamahorn, Rockport, $36,818, engrs. est. $34,000; State Aid Rd. 10, Sect. Q and R, from C. R. Winks, Williamsport, $29,927, engrs. est. $36,142. Noted May 1.

Ind., Fort Wayne—Allen Co., bituminous macadam paving 3.99 mi. Marion Twp. Rd. 2, 18 ft., from C. W. Ehline, Monroeville, $28,868. Noted Apr. 27.

Ind., Rockville—Parke Co. hard surfacing Florida Twp. Rd., concrete, from Norman & DeVoto, Clinton, $39,550.

Ind., Rushville—Rush Co., concrete paving 8,676 ft. James Shannahan Rd., 18 ft., from Winslow & Hooten, Greenfield, $25,500. Noted May 8.

Ind., Terre Haute—Vigo Co., **(e. e. means engrs. est.)** concrete paving 1 mi. J. E. Bickel Rd., 18 ft., from Pigg & Snyder Constr. Co., Terre Haute, $25,463, e. e. $27,219; 12,230 ft. John White Rd., 18 ft., from Pfitzenmayer Constr. Co., Terre Haute, $50,738, e. e. $67,364; 11,220 ft. Fromme Rd., 18 ft., from John F. Kelley Co., Terre Haute, $51,886, e. e. $60,483. Noted May 8.

Wis., Wauwatosa—Bd. Pub. Wks., paving 54th St., Oak Hill, Melrose and Grand Aves., rein.-con., from Jacobus & Winding Constr. Co., State St., $32,134. Noted May 8.

Michigan — State Hy. Dept., at office Comrs. Muskegon Co., Muskegon, grading and surfacing 2.35 mi. State Trunk Line Rd. 24-26, 7,980 cu.yd. earth excav., 24,811 sq.yd. concrete, etc., from Whitlow & Nelson, Muskegon, $50.303. Noted May 1.

Michigan — State Hy. Dept. at office Comrs. Cass Co., Cassapolis, grading and surfacing State Trunk Line Rd. 40-5, Sects. A and B, Cass Co., 9,355 cu.yd. excav., 26,797 sq.yd. 7 in. standard concrete pavement, from J. E. Kaufman, Dowagiac, $48,498. Noted Apr. 17.

Michigan — State Hy. Dept., at office Comrs. Roscommon Co., Roscommon, grading and surfacing 6.474 mi. State Trunk Line Rd. 76-4, Sect. C, 23,154 cu.yd. excav., 60,719 sq.yd. gravel, 11,131 lbs. steel, etc., from H. M. Belknap, Tawas City, $50,584. Noted Apr. 17.

Michigan — State Hy. Dept. at office Comrs. Genessee Co., Flint, grading and surfacing 5.997 mi. Federal Aid Project 115, Sect. B, 28,896 cu.yd. excav., 70,133 sq.yd. concrete, and 6.357 mi. Federal Aid Project 115 Sect. A, 53,342 cu.yd. excav., 75,182 sq.yd. concrete, from States Impvt Co., La Salle St., Chicago, Ill., $151,222 and $160,665 respectively. Noted May 1.

Colorado — State Hy. Dept., Denver, gravel surfacing 3.03 mi. Federal Aid Project 226-A, La Plata Co., from Mishon Engler & Tessier, Durango, $22,223, engrs. est. $26,992; paving Federal Aid Project 283-A, Larimer Co., from F. C. Dreher, 525 Cooper Bldg., Denver, concrete $84,829, bituminous $86,987. Noted May 1.

Ariz., Tucson—Improving South 4th Ave. (1) 5 in. concrete (2) 1½ in. Warrenite on 2½ in. bituminous (3) 1½ in. asphaltic concrete on 2½ in. bituminous, from Pacific Constr. Co., Phoenix, (1) $66,004 (2) $57,520 (3) $57,250.

Calif., Los Angeles—Improving Ave. 36 between Washington Park and Gassell Ave., from Warren Constr. Co., 5544 Hollywood St., grading $29,750, concrete paving $0.245, bituminous base paving $0.12, warrenite $0.259.

Calif., Orange — Improving various streets, 640,000 ft. 6 in. and 41,010 ft. 5 in. concrete paving, curbs, walks, etc., from G. A. Simpson, San Fernando Bldg., Los Angeles, $138,600. Noted May 15.

Calif., Santa Barbara — Santa Barbara Co. paving Santa Ynez Valley Rd. System, 6 in. rock macadam, from A. J. Grier, 489 Chetwood St., Oakland, $296,890. Noted Apr. 24.

CONTRACTS AWARDED

Vermont — Dept. Highways, Montpelier, paving 0.7 mi. Barre-Montpelier Rd., Federal Aid Project 56A, 1,407 cu.yd. rein.-con., 2,300 cu.yd. earth excav., to J. E. Flood, Hudson Falls, N. Y., $28,446. Noted May 1.

Vt., Barre—City, concrete paving 1 mi. road adjoining Federal Aid Project 56A, to J. E. Flood, Hudson Falls, N. Y. Noted May 1.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, May 7, asphalt paving Lott Ave., to Borough Asphalt Co., 1301 Metropolitan Ave., $3,587, 48th St., to M. J. O'Hara Contg. Co., 717 65th St., $3,420, 64th and 81st Sts., to Cranford Co., 52 9th St., $8,956 and $9,616 respectively; grading, curbing and flagging New York Ave., to F. Persicano, 350 Fulton St., $1,802, Rockaway Parkway, etc., to Harrison & Bernhardt, Central Ave., $11,043, 16th Ave., to Galio Contg., 745 Dean St., $6,892, 46th St., to C. Bennett Contg. Co., 44 Rutland St., $15,054. Noted May 1.

N. Y., Lockport—Niagara Co. resurfacing Slayton Settlement Rd., to J. M. Murray, Le Roy, $36,693. Engrs. est. $40,403.

N. Y., New York—J. Miller, pres. Manhattan Boro, Municipal Bldg., granite block repaving 10th Ave., to J. Meehan & Son, 74 Cortlandt St., $274,548, West 180th St., to Asphalt Constr. Co., 208 Bway., $26,606; grading, curbing and flagging West 184th St., etc., to J. McCarthy, 551 Exterior St., $4,164. Noted May 15.

N. J., Princeton—Boro. Council, concrete paving 1,845 ft. University Pl., to Utility Constr. Co., 5 Spring St., New Brunswick, $27,470. Noted Apr. 10.

Pennsylvania—State Hy. Dept., Harrisburgh, concrete roads: 11,951 sq.yd. Application 2659, Bucks Co., to Ross & Whalen, 471 Southard St., Trenton, N. J., $43,778; 66,777 sq.yd. Route 71, Butler Co., to Rood Constr. Co., Butler, $343,145; 66,040 sq.yd. Route 146, Montgomery Co., to Union Paving Co., 30th and Locust Sts., Phila., $267,894; 36,580 sq.yd. Route 226, Lehigh Co., to General Paving Co., Allentown, $162,660.

Pa., Johnstown—Paving to Crissey Constr. Co., Johnstown, 18,696 sq.yd. brick on concrete, $124,179; to F. Zipf & Sons, Johnstown, 7,476 sq.yd. brick on concrete and 6,588 sq.yd. concrete $98,849; to Bell-Bockel Co. Inc., 543 Vine St., 10,060 sq.yd. brick and 5,618 sq.yd. concrete $111.695, 7,161 sq.yd. brick and 8,943 sq.yd. concrete $130,155.

Pa., Phila. — Bureau Highways, Dept. Pub. Wks., City Hall, 10,800 sq.yd. redressed granite block repaving on Frankford St. and furnishing 1,800 tons asphalt surface and 1,400 tons asphalt binder, to Union Paving Co., 30th and Lancaster Sts., $49,107 and $18,096 respectively; 17,499 tons crushed stone, to Birdsboro Stone Co., Land Title Bldg. $49,436. Bids on 5,451 tons crushed slag rejected. Noted May 15.

Pa., Washington—Washington Co. constructing 8,939 ft. McMurray Rd., to Hardy & Rankin, Canonsburg, $74,487; 10,350 ft. 84 Rd., to J. Herd, Washington, $83,519; 3,600 ft. Pike Run Rd., to Donora Constr. Co., Donora, $39,699; 5,280 ft. McClames Bridge-Meadowlands Rd., to W. K. Reed & Co., Waynesburg, $45,475; 9,400 ft. Short Creek Rd., to Petriello Bros., Brownsville, $75,015.

Maryland — State Rds. Comn., Baltimore, concrete paving 2 mi. highway in

Streets and Roads (Continueed)

Prince George Co., Contr. P-50, to Christhilf & Ensey Co., 1625 Ridgely St., $74,885, 1.35 mi. in Caroline Co., to Kaufman Constr. Co., Denton, $39,200, 2 mi. in Wicomico Co., Contr. Wi-25, to P. D. Phillips & Bro., Salisbury, $72,396, 1 mi. in Harford Co., Contr. H-37, to G. A. Atkinson, Port Deposit, $40,444, 1.55 mi. in Allegany Co., Contr. A-26, to Wallace Constr. Co., Fairmount, W. Va., $75,806; gravel surfacing 2 mi. in Prince George Co., Contr. P-45, to H. S. Swann, La Plata, $31,721. Noted May 1.

Maryland—State Rds. Comn. Baltimore, concrete paving 2.14 mi. highway in Baltimore Co., Contr. B-62, to Gosnell, Russell & Co., Frederick, $55,501; 0.25 mi. in Dorchester Co., Contr. D-30, to Smith & Renshaw, East New Market, $13,000; 1.2 mi. in Somerset Co., Contr. S-19, to Hannamon-Burroughs Co., Salisbury, $69,000. Noted May 1.

Md., Baltimore — Bd. Awards grading, curbing and paving 22,200 sq.yd. Contr. 256-OANA, asphalt on concrete, to American Paving Co., Montebello Ave. $93,829. Noted May 15.

West Virginia—State Rd. Comn., Charleston, **(P. means Project)** paving with bituminous macadam 7.18 mi. Philippi-Taylor Co. line Rd., P. 3184, Philippi Co., to R. W. Shafer Co., Chamber of Commerce Bldg., Columbus, Ga., $217,461, 6.24 mi. Martinsburg-Kearneysville Rd., P 3221 and 3026, Berkley and Jefferson Counties, to Moore & Lesley, Staunton, Va., $167,500, 2.7 mi. Wellsburg-Pennsylvania State line Rd., P. 3251, Brooke Co., to Consolidated Eng. Co., Wheeling, $48,109, 0.59 mi. approach to Hartland Bridge, P. 3037-A, Clay Co., to A. Keathley, Professional Bldg., Charleston, $20,496, 8.15 mi. Ravenseye-Greenbrier Co. line Rd., P. 130, Fayette Co., to W. J. Weakland Co., Citizens Natl. Bank Bldg., Charleston, $284,495, 4.8 mi. Alta-Clintonville Rd., P. 127-B, Greenbrier Co. and 4.2 mi. Buckeye-Millpoint Rd., P. 132, Pocahontas Co. to G. R. Hill & Co., Amer. Bank Bldg., Knoxville, Tenn., $158,900 and $105,201 respectively, 5.6 mi. Durbin-Randolph Co. line Rd., P. 132, Pocahontas Co., to Echols Constr. Co., Marlinton, $63,842; with concrete 1.65 mi. Shepherdstown Rd., P. 3217-A, Jefferson Co., to J. S. Swartsel, Staunton, Va., $130,238; grading and bituminous macadam paving 0.9 mi. Nitro-Country Club Rd., Putnam Co., to Smith & Bender, Nitro, $34,360, 4.31 mi. Elmore-Pineville Rd., P. 3248-B, Wyoming Co., to Rosenbaum Bros., Pocahontas, Va., $130,238, with vitr. brick 0.53 mi. Morgantown Rd., P. 2146, Monongalia Co., to Cisler & Morse, Marietta, O., $49,350; grading 1.1 mi. Leafbank-Grantsville Rd., P. 3165, Calhoun Co., to D. H. Harlow, Spencer, $26,211, 5.94 mi. Normantown-Calhoun Co. line Rd., P. 3111, Gilmer Co., to Sutton Constr. Co., Ashland, Ky., $177,739, 5.11 mi. Glenville-Weston Rd., P. 3278-A, Lewis Co., to Carvin & Powers, Charleston, $61,785, 6.06 mi. Hillsboro-Greenbrier Co. line Rd., P. 136-A, Pocahontas Co., to Cohen Constr. Co., Oceana, $81,355, 4.42 mi. Scary-Winfield Rd., P. 3299, Putnam Co., to J. O. McDermott & Sons, Ambrosia, $38,337, 10 mi. Kanawha Co. line Rd., P. 3075-D, Jackson Co., to Messenger & Hager, Huntington, $220,858, 10.8 mi. Diana-Cleveland Rd., P. 3279-A, Webster Co., to W. C. Markle Constr. Co., Clay, $274,799, 2.05 mi. Summersville-Duffy Branch Rd., P. 3293-B, Nicholas Co. and 8.03 mi. Camden-on-Gauley-Calvin Rd., P. 3293-A, Nicholas Co., to Lookout Constr. Co., Lookout, $28,927 and $108,423 respectively; grading and surfacing with bituminous macadam 7 mi. Bulltown-Lewis Co. line Rd., P. 3071, Braxton Co. and grading 4.4 mi. Franklin-North Mountain Rd., P. 3175-B, to J. J. Battershill & Sons, Charlottsville, Va., $162,804 and $72,792 respectively; paving with bituminous macadam 2.2 mi. Elkins-Parsons Rd., P. 3211-A, Randolph Co. and grading 3.9 mi. Pleasantsville-Hanging Rock Rd., P. 134, Hampshire Co., to Branham, Edwards & Dayton, Clarksburg, $49,320 and $86,260 respectively, all foregoing roads 18 ft. Noted Mar. 27 and Apr. 3.

W. Va., Wheeling — Vitr. brick paving McColloch St., to Coss & Otto, Wheeling, $82,848. Noted Apr. 24.

S. C., Chester—Chester Co. top soiling 3.2 mi. State Route 7, Federal Aid Project 235 A to W. C. Peay, Jr., Fort Mill, $26,662; creosoted timber bridge, twenty-four 14 ft. spans, to W. B. Boyle Co., Sumter, $10,576.

S. C., Moncks Corner—Berkeley Co. sand clay surfacing 10 mi. State Route 31, State Project S-517, to W. M. Thompson, Burlington, N. C., $46,483.

S. C., Saluda—Saluda Co. top soiling 13.22 mi. State Route 392, State Project S-516, to J. F. Blakenship, Greenwood. $51,085. Noted May 1.

Fla., Apalachicola—Franklin Co., grading, etc., 19 mi. Sects. A, B and C, State Rd. 10, to Newell Contg. Co., Ave. A, Birmingham, Ala., $49,000. Noted Feb. 28.

Fla., Bradentown—Manatee Co., surfacing 21½ mi. North Palmetto and Gulf Shore Special Rd. & Bridge Dists., asphaltic oil and slag, including 2 years upkeep, to Finley Method Co., Bradentown, and Graham Bldg., Jacksonville, $55,115. Noted May 1.

Fla., Tavares—Lake Co. paving road from Eustis to Tavares, asphaltic concrete on lime rock, to C. R. Scott Co., Clearwater, $58,047.

Ala., Florence — Lauderdale Co. paving with Alabama rock asphalt 7,000 ft streets, 24- and 50-ft., to Uvalde Paving Co., Insurance Bldg., Dallas, Tex., $191,000. Noted Mar. 13.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, grading, etc., 5.23 mi. Lenoir-Knox Co. line Rd., 18 ft., Federal Aid Project 207, Loudon Co., to R. L. Peters Constr. Co., Holston Natl. Bank Bldg., Knoxville, $53,633, 4.72 mi. Haywood Co. line-Fayette Co. line Rd., 18 ft., Tipton Co. and 5.25 mi. Bells-Madison Co. line Rd., 16 ft., Crockett Co., incl. several bridges, to D. M. Sparksman & Co., Dyersburg, $38,107 and $47,048 respectively; surfacing with cement concrete 5 mi. Manchester-Beech Grove Rd., 9 ft., State Aid Project 151-B, Coffee Co., to Citizens Eng. & Constr. Co., Savannah, Ga., $65,872; grading and surfacing with bituminous macadam 5.35 mi. Hartsville-Sumner Co. line Rd., 14 ft., State Aid Project 166, Trousdale Co., to Jefferson County Constr. Co., Louisville, Ky., $55,787. with bituminous macadam on giant macadam 12.62 mi. McMinnville-Rock Island Rd., 18 ft., Warren Co., to Warren County Constr. Co., Nashville, $346,364, with bituminous macadam and limestone on giant macadam 7.35 mi. Cookeville-Overton Co. line Rd., 16 ft., State Aid Project 123-B, Putnam Co., to Foster Creighton Co., 4th and 1st Natl. Bank Bldg., Nashville, $167,710. J. G. Creveling, highway comr. Noted May 15.

Ohio—Dept. Highways and Pub. Wks., Columbus, to Andrews Asphalt Paving Co., 717 Rentschler Bldg., Hamilton, paving with sheet asphalt 3.014 mi. Cincinnati-Dayton Rd., Sect. X-1, 1.045 mi. Sect. X-2, and 2.53 mi. Sect. W-2, Butler Co., $114,806, $49,840 and $103,656 respectively; to W. M. Gray, 408 Fairwood Ave., Columbus, bituminous macadam asphalt paving 4.368 mi. Sect. A and 5.475 mi. Sect. E, Toledo-Grand Rapids Rd., Wood Co., $113,869 and $114,739 respectively; to L. G. Rockholt, West Mansfield, 3.101 mi. Sect. H-1, Marysville-Marion Rd., Union Co., surface treated with waterboound macadam, $56,165. Noted May 15.

O., Akron—Improving Fifth Ave., to V. Olsen Contg. Co., Akron, $28,996, engrs. est. $30,000; grading and laying concrete sidewalks on Murray Ave., to Hollinger & Davidson, Akron, $26,860, engrs. est. $27,500.

O., Cleveland—Paving 8,650 sq.yd. Angelus Ave., asphalt, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $42,790; 17,350 sq.yd. Huron Rd. and East 55th St., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $22,717 and $50,906 respectively; Foulk Ave., vitr. brick, to Gould & Maybach, 16311 Saranec Rd., $7,717; Mapleside Ave., vitr. brick, to River Constr. Co., Mapleside Ave., $2,375; East 112th St., vitr. brick, to Enterprise Paving & Constr. Co., 8444 Bway., $17,810; Heath and Raymond Aves., vitr. brick, to A. M. Pejsa Paving Co., 3161 Derbyshire Rd., $4,202; 10,240 sq.yd. East 137th and East 152nd Sts., vitr. brick, to Baldwin Bros., 4500 Euclid Ave., $7,449 and $53,168 respectively. Noted May 15.

O., Lisbon—Columbiana Co. improving 0.32 mi. Elysian Way, 18 ft., concrete, Liverpool Twp., to Allison-Harris Co., East Liverpool, $25,032; engrs. est. $30,000; grading 2.23 mi. Summitville-Gaver Rd., 30 ft., to H. C. Armstrong, Lisbon, $25,981, engrs. est. $27,500.

O., Mansfield—Secretary Bd. Control, to G. B. Herring & Son, 132 South Main St., paving North Diamond St. $42,094, North Bowman St. $17,636, East 5th St. $9,594, all brick; to F. Gandert & Son, 104 South Diamond St., paving East 1st St., brick, $19,583, South Glenn Ave., brick, $5,331, Buffalo and Elizabeth Sts., concrete, $6,356; to R. Au, resurfacing McPherson St., concrete, $17,803. Noted Apr. 17.

O., New Philadelphia—Tuscarawas Co. improving Newport-Gilmore Rd., Div. 1, with slag, to H. C. Schneider, $37,071. Engrs. est. $40,000. Noted May 22.

O., Steubenville — Jefferson Co., cold patching 9 highways, to C. C. Haulage Co., Columbus, asphalt $36,947, tar $35,902; paving Sect. B Rayland-Mt. Pleasant Rd., to Wolfe & Wolfe, Smithfield, $33,637.

O., Washington C. H.—Fayette Co., resurfacing 60 mi. road, tar and asphalt, to T. D. Van Camp & Sons, Hartman Bldg., Columbus, $97,000.

Ind., Albion—Noble Co. concrete paving Krieger Rd., to Meredith Constr. Co., Indianapolis, $32,880. Noted May 1.

Ind., Ft. Wayne — Allen Co., concrete paving 15,522 sq.yd. Yaste Rd., to Moellering Constr. Co., Cook Rd., $52,173.

Ind., South Bend—Brick paving 0.92 mi. Johnson St., 30 ft., to H. N. Barnes, South Bend, $48,567.

Ind., Wabash—Wabash Co., **(e. e. means engrs. est.)**, hardsurfacing 18,078 ft. Lee Carr Rd., 18 ft., to Pike Constr. Co., Wabash, $88,560, e. e. $94,005; concrete paving 9,502 ft. Albert Betchold Rd., 18 ft., to Brumfield & Son, Wabash, $42,000, e. e. $49,412, 16,261 ft. Thomas Betchold Rd., 18 ft., to Kennedy Constr. Co., Wabash, $61,700, e. e. $74,557, 19,861 ft. Huffman Rd., 18 ft., to Northern Constr. Co., Wabash, $100,500, e. e. $103,379. Noted May 15.

Ind., Warsaw—Kosciusko Co., concrete paving 26,941 ft. Turner Rd., 18 ft., to E. A. Gast, Warsaw, $116,500. Engrs. est. $151,678. Noted May 15.

Michigan — State Hy. Dept., at office Comrs. Wexford Co., Cadillac, grading and surfacing State Trunk Line Rd. 42-1, A and B, 14,861 cu.yd. excav., 26,805 sq.yd. gravel, to J. A. Swanson, LeRoy, $22,177. Noted May 15.

Michigan — State Hy. Dept., at office Comrs. Iron Co., Crystal Falls, grading and surfacing State Trunk Line Rd. 12-42, Sect. B, 20,712 sq.yd. bituminous macadam, to Iron Co. Road Comn., Crystal Falls, $39,513. Noted May 15.

Michigan—State Hy. Dept., Lansing, will construct 1.337 mi. Federal Aid Project 70, Sects. B and C, Oakland Co., 0.939 mi. will be 20 ft. and 0.398 mi. 40 ft., concrete, by day labor. $50,000.

Michigan — State Hy. Dept., Lansing, grading and surfacing Federal Aid Project 113 C, Kent Co., 70,851 cu.yd. excav., 162,545 sq.yd. concrete pavement, to G. P. Schail, Muskegon, $365,123. Cement furnished by State $129,851.

Michigan — State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 20-22, Mason Co., and 0.512 mi. State Trunk Line Rd. 11-37, Mason Co., to L. Goldberg, Scottville, $16,495 and $15,345 respectively. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Calhoun Co., Marshall, grading and surfacing 2.072 mi. State Trunk Line Rd. 29-12, 29,929 sq.yd. concrete, etc., to Rockford Constr. Co., Rockford, O., $66,178. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Ontonogan Co., Ontonagon, grading and surfacing State Trunk Line Rd. 26-12, Ontonagon Co., 69,653 cu.yd. excav., 19,933 tons stamp sand to Smith-Sparks Constr. Co., Houghton, $115,446. Noted May 15.

Michigan—State Hy. Dept., Lansing, to Hill & Belknap, East Tawas, 4.002 mi. State Trunk Line Rd. 25-13, Schoolcraft Co., 49,177 cu.yd. excav., 37,492 sq.yd. one course gravel, $61,981, 4.994 mi. State Trunk Line Rd. 25-12, Chippewa Co., 46,879 sq.yd. one course gravel, $32,245, 14,185 mi. State Trunk Line Rd. 25-8, Schoolcraft Co., 132,478 sq.yd. one course gravel, $91,832, 5.932 mi. State Trunk Line Rd. 25-7, Schoolcraft Co., 65,473 cu.yd. excav., 55,552 sq.yd. one course gravel, $93,268, 13.284 mi. State Trunk Line Rd. 25-15, B and C, Chippewa Co., 125,131 sq. yd. one course gravel, $88,829, 12.912 mi. State Trunk Line Rd. 25-5 A and B, Alger Co., 121,204 sq.yd. gravel $86,391. Noted May 15.

Michigan — State Hy. Dept., Lansing, grading and surfacing State Trunk Line Rd. 24-25, A 2 and B, Isabelle Co., 11,918 cu.yd. excav., 12,140 sq.yd. concrete, to Holmes & Bartling, Alma, $34,459. Noted May 1.

Ill., Elmhurst—For 65,000 sq.yd. asphaltic concrete on concrete, 51,000 lin.ft. curb and gutter, 5,000 sq.ft. sidewalk adjusted, etc., to Standard Paving Co., 326 West Madison St., Chicago, $307,000. Engrs. est. $300,000. Noted Apr. 24.

Wisconsin—State Hy. Comm., Madison, grading and concrete surfacing Chilton—Hilbert Rd., Project 1049, Calumet Co., to F. Radloff, Plymouth, $33,966, grading and bridging, etc., Portage-Kilbourn Rd., Project 360-B, Columbia Co., to M. Fisch, Kilbourn, $60,844. Noted May 15.

Wis., Madison—Bd. Pub. Wks. at office H. C. Buser, city clk. grading site for Nine Spring Sewage Disposal Works, in town Blooming Grove, to N. Quinn, Madison, $39,780. Noted May 1.

Ia., Des Moines—Paving Park Ave. and Southwest 13th St., to Wright Constr. Co., 211 Flynn Bldg., 17,000 sq.yd. vibrolithic concrete at $2.35 and 7,385 sq.yd. at $2.48.

Streets and Roads (Continued)

Ia., Oelwein—Paving various streets to Western Paving Corp., 1st and Nebraska Sts., Sioux City, 72,000 sq.yd. sheet asphalt at $2.69 per sq.yd., and 33,800 lin.ft. concrete curb and gutter, at $0.96.

Minn., Ortonville—Big Stone Co., (1) Job 2401, State Rd. B, 7 mi. grading, 37,400 cu.yd. excav., 36,000 cu.yd. overhaul, 870 ft. portable culverts (2) Job 2402, State Rd. A, 5 mi. grading, 48,000 cu.yd. excav., 1,100 lin.ft. portable culverts: grading to Monson Constr. Co., Moorhead, (1) $11,004 (2) $16,220; concrete culverts to Elk River Concrete Products Co., Elk River (1) and (2) $2,606; metal culverts to Berger Mfg. Co., 1701 North East Bway., Minneapolis, $1,105. Noted Apr. 17.

Kan., Emporia—Lyon Co., grading and surfacing 2.003 mi. Neosho-Rapids Spur Rd., Federal Aid Project 224-A, 21,148 sq. yd. one course concrete, 1:2:3½ mix, 11,277 cu.yd. grading, 14,667 lb. reinforcing, to Stamey Constr. Co., Hutchinson, $66,120. Engrs. est. $69,443. Noted Apr. 10.

Kan., Ft. Scott — Grading and paving with bituminous filled brick 3.897 mi. Federal Aid Project 208-A, Barbour Co., to T. L. Thogmartin & Sons, Ft. Scott, $149,632, 125,000 gal. bitumin furnished and applied, to J. H. Crosgrove & Son, Olathe, $14,919. Noted Apr. 3.

Kan., Great Bend—Barton Co. will construct 1.297 mi. Project 158, Sects A and B, 2,840 cu.yd. excav., 16,220 cu.yd. borrow, 4,582 lin. ft. guard rail, also six 16 ft., one 20 ft. and one 40 ft. bridges, by day labor, under supervision B. S. Allen, co. engr. $27,688.

Kan., Sedan—Chautauqua Co., grading and paving Federal Aid Project 201-A, 5,262 cu.yd. excav., 19,628 cu.yd. borrow, 269 cu.yd. mass concrete, 25,730 lb. reinforcing, 25,916 sq.yd. rein.-con., etc., to H. R. Amerman, 248 North Market St., Wichita, $86,448; Bridge 1, Federal Aid Project 201-B, 191 cu.yd. concrete, 19,430 lb. reinforcing, etc., to Hibben & Green, Independence, $5,398, Bridge 2, 407 cu.yd. concrete, 27,032 lb. reinforcing, 147,600 lb. structural steel, etc., to Pioneer Constr. Co., New York Life Bldg., Kansas City, Mo. Noted Mar. 27.

Kan., Wellington—Sumner Co. grading and concrete surfacing 2.335 mi. Belle Plain Rd., Project 235-9, 18 ft., to Stewart & Richie, Wichita, $82.933; bridges, to Yancy Constr. Co., Abilene, $4,386. Noted Apr. 1.

Missouri — State Hy. Dept., Jefferson City, grading, to L. A. Woods Constr. Co., Smithville, Kansas City-St. Louis Rd., Lafayette Co., 3.865 mi. $40,405, 3.856 mi. $32,271, 4.055 mi. $26,582, 4.204 mi. $38,757, 4.883 mi. $33,337, 4.05 mi. $24,784, to Haller & Davis, Boonville, same road Cooper Co., 1.89 mi. $19,431, 4.215 mi. $49,761, 4,827 mi. $23,234, to Springfield Constr. Co., Springfield, Lamar-Minden Mines Rd., Barton Co., 3.463 mi. $9,565, 4.006 mi. $7,866, to Tibbetts & Tibbetts, Olathe, Kan., 4.297 mi. Williamsburg East and West Rds. $27,585, and 4.981 mi. Callwood-Williamsburg Rd., $26,329, both Callaway Co., to Jones & Harlan, West Plains, Dunn-Cabool Rd., Texas Co., 2.509 mi. $16,157, 2,652 mi. $17,138, to Thomas & Johnson, Doniphan, Doniphan-Fairdealing Rd., Ripley Co., 2.756 mi. $11,594 and 2 372 mi. $8,662, to Kelly and Underwood, Granby, 4.951 mi. Washburn South Rd., $24,803, 3.314 mi. Seligman North South Rds., $17,243, both Barry Co., to C. L. Johnson, Warrensburg, 3.161 mi. Cole Camp West Rd., Benton Co. $15,888, to R. P. Sharp, Reed Springs, 1.15 mi. Greenfield-Pennsboro Rd., Dade Co., $12,794, to E. C. Johnson, Carrollton, 1.25 mi. Washington Rd. East, Franklin Co., $11,099, to Tolbert Bros., Stoutland, 3.625 mi. Fordland-Seymour Rd., Webster Co., $9,729, to Louring & Lingo, Amy, 2.301 mi. Cabool-Houston Rd., Texas Co., $8,296, to C. P. O'Reilly & Co., Wainwright Bldg., St. Louis, 3.386 mi. Linneus-Laclede Rd., Linn Co., $24,280; gravel surfacing to Easley Bros., Aurora, Stockton Rd. east and west, Cedar Co., 3.453 mi. $16,002, 1.074 mi. $14,530, to C. C. Hayward, Shelbina, 1.136 mi. Paris-Shelbina Rd., Monroe Co., $7,939, to C. W. Knox, Jackson, 1.268 mi. Gravel Hill West, Cape Girardeau Co., $10,485, to Kiefner & Geile, Perryville, 1.8 mi. St. Marys South Rd., St. Genevieve Co., $27,738, to H. A. Worman, Pittsfield, Ill., 1.94 mi. Perryville North Rd., Perry Co. $33,792, to Layton Constr. Co., Muscatine, Ia., 4.019 mi. Kahoka East and West Rds., Clark Co., $23,356, to C. Jobe, Clarksburg, 0.634 mi. Jefferson City-Kansas City Rd., Morgan Co., $7,287, to W. A. Reynolds, Marble Hill, 1.666 mi. Fredericktown West Rd., Madison Co., $21,102; concrete surfacing, to Tibbetts & Tibbetts, Olathe, Kan., Williamsburg Rd. East and West, Callaway Co., 4.297 mi. $133,862, 4.981 mi. $155,170; asphalt surfacing to E. C. Johnson, Carrollton, 1.25 mi. Washington Rd. East, Franklin Co., $15,576. Noted May 8 and 15.

Arkansas — Comrs. Little Rock-Hot Springs Hy. Dist., Little Rock, to Houston Constr. Co., 1209½ Capitol Ave., Houston, Tex., paving 100,000 sq.yd. Red Gates-Benton Rd., at $2.00 per sq.yd.; to Koss Constr. Co., Box 632, Desmonies, Ia., 350,000 sq.yd. Benton-Hot Springs Rd., at $2.17 per sq.yd.; to L. Johnson, Joplin, Mo., steel work on bridges, $16,000; to Oliver Constr. Co., 322 West Markham St., Little Rock, foundations and culverts, $61,000. Owner furnishes sand and gravel and contractor buys cement.

Ark. Camden — Improving 18,480 ft. Shady Grove, Washington Heights and other streets, 4 ft. sidewalk, 1 part cement and 2 part sand on 1 part Marquette cement and 5 parts gravel, to A. G. Trude, Camden, at $0.19 per sq.ft. $3,000 extra for grading. Noted Dec. 6.

Ark., Little Rock—Improving streets in Dist. 355, 6,000 cu.yd. excav., 12,900 lin. ft. concrete curbing, 14,100 sq.yd. asphaltic concrete on concrete, 8,300 sq.yd. 6 in. concrete gutters, etc., to Connelly Paving Co., Southern Trust Bldg.

Ark., Rogers—Improving Dist. 6, 6,700 cu.yd. grading, 7,000 lin.ft. concrete curb and gutter, 24,000 sq.yd. 3-in. vertical fibre brick on concrete, 3,800 lin.ft. 10- to 27-in. vitr. clay storm sewer, etc., to Kaw Paving Co., 616 N. E. Bldg., Topeka, Kan., $100,853. Engrs. est. $100,000. Noted Apr. 17.

Tex., Baird—Callahan Co. grading and bituminous surfacing 9.62 mi. Sect. A, Bankhead Highway, Federal Aid Project 52-A, 18 ft., to Tibbetts Constr. Co., Mineral Wells, $159,436; concrete bridges on same, to McCall-Eng. Co., Amicable Bldg., Waco, $55,863. Noted May 15.

Tex., Crowell — Paving 13,980 sq.yd. various streets, 3 in. vertical fibre brick, to Jordan Constr. Co., Plainview, $52,928. Noted May 1.

Tex., Ft. Worth—Grading, paving, curbing and guttering East 1st, 2nd, 4th, 5th, 12th and 16th Sts., to J. F. Wills, 115 Bryan St., $25,900.

Tex., Goose Creek — Improving various streets, 25,000 cu.yd. excav., 20,000 cu.yd. shell, 36,000 sq.yd. bituminous topping, etc., to Sherman-Youmans Co., West Bldg., Houston, $90,000.

Okla., Tulsa—Paving with asphalt on concrete 7,860 sq.yd. in Dist. 540, 7,394 sq.yd. Dist. 544, and 859 sq.yd. Dist. 547, to H. L. Kannady Co., 1122 South Lewis St., $39,203, $45,769 and $4,171 respectively; with concrete 898 sq.yd. Dist. 542, 1,915 sq.yd. Dist. 503 and 732 sq.yd. Dist. 545, to Tibbets & Pleasant, Inc., 209 North Nogales St., $3,010, $8,060 and $2,382 respectively; with vibrolithic concrete 1,863 sq.yd. Dist. 546, to Western Co., 814-15 Daniels Bldg., $8,967; 6,110 ft. 8 in. vitr. tile sanitary sewer Dist. 202, to Foster & Roach, Tulsa, $16,888.

Nevada—State Highway Dept., Carson City, to K. Hodgman, Reno, 18.02 mi. highway from Campbell Creek Ranch to Summit of Railroad Pass, Lander Co., 66,000 cu.yd. excav. $0.45, preparing 18.02 mi. subgrade and shoulders $300, 21,000 cu.yd. load and screen gravel $1.15, 40,000 yd. mi. haul gravel $0.45, 21,000 cu.yd. spread gravel $0.15, 45 cu.yd. concrete $50, etc., total $91,158 engrs. est. $113,776; to F. Coolidge, Fallon, 10.16 mi. from Eureka to east county line, Eureka Co., 63,000 cu. yd. excav. $1, preparing 10.16 mi. subgrade and shoulders $350, 11,000 cu.yd. loading and screening gravel $1, 17,300 yd. mi. hauling gravel $0.55, 11,000 cu.yd. spreading gravel $0.20, 280 cu.yd. concrete $60, 594 lin.ft. 15 in. corrugated metal pipe $2.25, 828 lin.ft. 18 in. corrugated metal pipe $2.75, etc., total $115,585, engrs. est. $98,009; 13.65 mi. from west county line to Pancake Summit, White Pine Co., 70,000 cu.yd. excav. $0.50, preparing 13.65 mi. subgrade and shoulders $350, 15,000 cu.yd. loading and screening gravel $1.25, 24,400 yd. mi. hauling gravel $0.55, 15,000 cu.yd. spreading gravel $0.20, 42 cu.yd. concrete $60, 640 lin.ft. 15 in. corrugated metal pipe $2.30, 916 lin.ft. 18 in. corrugated metal pipe $2.80, 272 lin.ft. 24 in. corrugated metal pipe $3.80, etc., total $86,608, engrs. est. $102,888. Noted Apr. 24.

Arizona—State Highway Dept., Phoenix, constructing Prescott-Phoenix Highway, from White Spar to Congress Junction, Federal Aid Project 72, Yavapai Co., to Phoenix-Tempe Stone Co., Home Builders Bldg., Phoenix, 33,038 cu.yd. excav. roadway $0.85 per cu.yd., 110,830 cu.yd. excav. borrow $0.40. 1,807 cu.yd. excav. structures $1, 2,565 cu.yd. excav. ditches and channel changes $0.85, 27,996 cu.yd. surfacing $0.60, 1,623,768 sta.yd. surfacing overhaul $0.0125, 607 cu.yd. Class A concrete $19, [illegible] cu.yd. Class B concrete $18, 184 cu.yd. Class C concrete $16, 225 cu.yd. cement rubble masonry $10, for structures over 20 ft. clear span 532 cu.yd. concrete $25, 140 lin.ft. steel cylinders $40, etc., total $201,819. Noted May 1.

Calif., Bakersfield—Kern Co. improving Rd. 269, extension of 4th St. in Taft, willite, (contractor to furnish all materials, county to furnish roller), to California Constr. Co., Brower Bldg., $29,600. Noted May 15.

Calif., Burbank — Grading and paving Pioneer Ave., 5 in. concrete, to G. A. Simpson, Olson Bldg., $109,100. Noted Apr. 24.

Calif., Gilroy—Improving various streets, Warrenite pavement, to Southwest Paving Co., Washington Bldg., Los Angeles, $464,845. Noted May 8.

Calif., Glendale—Improving Sonora and 5th Sts., to E. L. Fleming, 324 West Dryden Ave., 274,000 sq.ft. grading $0.05 per sq.yd., 8,540 lin.ft. curb $0.50, 4,596 lin.ft. 8 in. vitr. pipe sewer $1, 149,650 sq.ft. 3 in. macadam $0.105, etc., total $39,881. Noted May 8.

Calif., Los Angeles—Improving Canoga Ave. between Ventura Blvd. and Drumetz Rd., to G. R. Curtis, 2440 East 26th St., grading $90,000, 26,519 ft. heavy curb $0.75, 283,262 sq.ft. walk $0.25, storm drains $1,500, street lighting system $13,500, 30,887 ft. light curb $0.65. Noted May 8.

Calif., San Diego—To California Constr. Co., Union Bldg., improving Woolman Ave. and N St., 206,196 sq.ft. 1½ in. Warrenite on 3 in. bituminous $0.20, 7,817 sq.ft. concrete sidewalk $0.25, 1,571 lin. ft. concrete curb $0.75, culverts $7,210, total $52,065. Noted Mar. 6.

Calif., San Diego—Improving Reynard Way, State and Goldfinch Sts., 40,066 sq.ft. paving, 2 in. sheet asphalt on 4 in. concrete, 144,738 sq.ft. 5 in. concrete, 2,237 lin. ft. concrete curb, 1,783 sq.ft. concrete sidewalk, to D. H. Ryan, 1615 Fern St., $47,441.

Que., Lasalle — Macadam and concrete pavements throughout city, to Kennedy Constr. Co. Ltd., 310 Shaughnessy Bldg., Montreal, $50,000.

Que., Lasalle—Grading and foundation in Bronx Parc, to McDonald, Dibblee & Devito, Jolicoeur St., Montreal, $19,200; concrete curbing and paving 3,601 ft. Dolmuny Terrace, Sterling, Strathyne and Rothesay Aves., bituminous macadam, to Leger & Charlton, 951 Rivard St., Montreal, $11,300; concrete paving 1,262 ft. St. Patrick Rd., to A. Jewett, St. Luke St., Montreal, $6,100. Noted May 8.

Industrial Works

PROPOSED WORK

Mass., Everett — Repair Shop — Boston Electric Ry., Park Sq. Bldg., Boston, plans shop, here. To exceed $40,000. E. Mahler, purch. agt.

Mass., Worcester — Plant — Worcester Lawn Mower Co., Freemont St., plans 2 brick additions. $60,000. Private plans.

Conn., New Britain — Factory — Stanley Rule & Level Co., 111 Elm St., having plans prepared 3 story, 60 x 89 ft. addition. $45,000. Private plans.

Conn., Waterbury — Plant — Waterbury Farrell Fdry. & Machine Co., 425 Bank St., plans 60 x 100 ft. addition. $50,000. F. A. Webster, 51 West Main St., archt.

N. Y., Rochester—Plant—Rochester Gas & Electric Co., 34 Clinton Ave. N., plans heating plant, Lawn and James Sts. $300,000. H. Russell, genl. mgr.

N. Y., Tully—Factory—W. A. Cardner Box Co., Lincoln Ave., plans rebuilding factory, recently destroyed by fire. $50,000.

Pa., Phila.—Power Plant—See "Buildings."

Ala., Birmingham—Factory—One Minit Cerial Corp., (newly organized company), Birmingham, plans 3 story, 100 x 150 ft. factory. $300,000. Engineer and architect not named.

Ky., Louisville — Plant — Engelhart & Sons, 805 West Main St., having plans prepared by A. G. Tafel, Coleman Bldg., 5 story, 80 x 100 ft., 14th and Magazine Sts. To exceed $50,000.

Ky., Wilmore—Power Plant—Asbury College plans rebuilding power house plant, recently destroyed by fire. About $40,000.

Ind., Elwood — Plant — Sellers Cabinet Co., North 13th St. and Pennsylvania R.R.,

Industrial Works (Continued)

plans 2 story brick addition, plain foundation. $40,000.

Ind., Jeffersonville—Shop—Howard Ship Yard plans 55 x 300 ft. machine shop. $50,000.

Ind., Logansport—Plant—Swift & Co., 76 West Monroe St., Chicago, plans 3 story and basement, 70 x 106 ft., rein.-con. and brick, here. $100,000. Private plans.

Ill., Galesburg—Plant, etc.—A. Rinella, 131 South Kellogg St., plans 2 story and basement, 50 x 100 ft. cold storage plant and warehouse, rein.-con. and brick, plain foundation, East Simmons St. $50,000.

Wis., Milwaukee — Factory — Kepec Co. plans 1 story, brick and timber, plain foundation, Holton St. $40,000-$50,000. W. Pohl, 476 4th St., pres. Engineer and architect not selected.

Wis., Milwaukee—Factory—Smith Engineering Wks., 1154 32nd St. plans 1 story, brick and steel, plain foundation, Lake St. $50,000 or more. H. Smith, secy. Engineer and architect not selected.

Neb., Omaha — Plant — Cudahy Packing Co., 1321 Jones St., plans addition. $300,000.

N. D., Grand Forks—Plant—City having plans prepared by A. L. Mullergren, engr., Gates Bldg., Kansas City, Mo., electric light and power plant. $110,000 bonds voted initial development. Ultimate cost $500,000. Noted Mar. 13.

Mo., Mountain Grove—Power Plant—See "Unclassified."

Tex., Fort Worth — Oil Refinery — Gulf Refining Co., Diamond Hill, plans cracking plant and other refinery additions. $1,000,000. Private plans.

Tex., Houston—Sawmill—Thompson-Katz Lumber Co., West Bldg., plans sawmill, Camp Logan. $50,000. Engineer and architect not announced.

Tex., Weatherford—Planing Mill, etc.—Milmo Lumber Co. plans planing mill and lumber yard. $100,000.

California—Cement Plant—Columbia Cement Co., c/o F. A. Ballin, pres., Bartlett Bldg., Los Angeles, plans cement plant, 1,500 bbl. daily capacity, along San Diego & Arizona R.R. near Imperial valley line. $1,000,000.

Calif., Burbank—Creamery—P. M. Anderson, et al., 205 West San Fernando St., plans creamery, Alameda St. To exceed $40,000.

Calif., Fresno—Factory—Standard Embroidery Co., 909 L St., plans factory, probably rein.-con., Collins and Mariposa Sts. $45,000. L. L. DeCosta, mgr.

Calif., Los Angeles—Service and Storage Plant—Mack International Motor Truck Co., 1628 East 7th St., having plans prepared by J. M. Cooper, Marsh-Strong Bldg., 1 story, 200 x 450 ft., and 2 story, 200 x 500 ft., rein.-con., Alameda St. To exceed $350,000. Noted Jan. 24.

Ont., Kitchener—Plant—J. M. Schneider, 148 Queen St. S., having plans prepared by J. C. Kloehm, 59 Irwin St., 3 story and basement, 80 x 200 ft. rein.-con., brick and steel, plain foundation, Queen St., $200,000.

BIDS DESIRED

Mass., Willimansett — Manufacturing — Lockwood, Greene & Co., engrs., 24 Federal St., Boston, taking bids 1 and 2 story, 180 x 220 ft., concrete and steel, for B. F. Perkins & Sons, Inc.

Conn., Danbury—Power House—McLachlan Mfg. Co., taking bids 1 story, power house. $55,000. Fletcher-Thompson Co., Fairchild Ave., Bridgeport, engrs.

Conn., Waterbury — Factory — Plume & Atwood Mfg. Co., 470 Bank St., taking bids 5 story, 50 x 150 ft. addition. $100,000. Private plans. Noted Mar. 20.

N. Y., Ogdensburg—Foundry—Coplan Steel Co., c/o A. H. Coplan, taking bids 84 x 352 ft., concrete and steel. $75,000. Noted Feb. 28.

N. Y., Saratoga Springs—Power Plant, etc.—June 17, by Bd. Supervs. Saratoga Co., hydro-electric power plant, dam, and fire protection system, at Homestead Sanitarium. J. R. Whitney, clk.; adv. E. N.-R. May 22.

Pa., Harrisburg—Power Plant—June 10, by Dept. Property and Supplies, Capitol Bldg., alterations and extensions to power plant in Capitol Building, incl. Contrs. 11, 12, 13, 14 and 15. A. W. Bruner, 101 Park Ave., New York City, archt.; adv. E. N.-R. May 22.

Ind., Anderson — Plant — Hughes-Curry Packing Co. taking bids 2 story and basement, 70 x 144 ft., West 8th St. $100,000. Noted May 15.

Wis., Milwaukee—Plant—M. Fernekes, archt., 915 Chestnut St., taking bids 4 story, 60 x 85 ft., brick and concrete, plain foundation, Muskego St., for Retailers Tallow & Calf Skin Assn., c/o J. Herman, 2322 State St. $60,000.

Minn., Detroit—Power Plant—May 26, by E. J. Bestick, city clk., 1 story, 40 x 120 ft., brick addition to power plant. $45,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, engr. Noted Apr. 24.

Tex., Houston—Repair Shops—Southern Pacific R.R., Southern Pacific Bldg., taking bids car repair shops, Englewood Yards. $500,000. J. M. Hull, ch. engr.

Calif., Merced—Power House—See Dams.

BIDS RECEIVED

N. Y., New York — Housing Station — Dept. Plant & Structures, Municipal Bldg., May 13, rein.-con., brick and steel, plain foundation, 139th St. and Harlem River, from W. W. Constr. Co., Inc., 15 East 40th St., $648,800. Noted May 8.

Ky., Louisville—Foundry—Standard Sanitary Mfg. Co., 6th and A Sts., 1 story, 140 x 180 ft., 6th St., from L. W. Hancock Constr. Co., Louisville Trust Bldg., $90,000. Archts. est. $100,000.

CONTRACTS AWARDED

N. Y., Brooklyn—Repair Shop—Transit Comn., 49 Lafayette St., New York, furnishing and erecting structural steel for electrical repair shop, at Coney Island Yard, here, to J. P. Clarke, 2416 Grand Central Terminal Bldg., New York, $66,737. Noted May 15.

N. Y., Syracuse—Gas Station—Syracuse Lighting Co., 421 South Warren St., gas station, to United Gas Impvt. Contg. Co., Broad and Arch Sts., Phila., Pa. Archts. total est. $3,000,000.

N. J., Trenton—Mill—J. W. Roeblings Sons Co., 612 South Broad St., 2 story, 138 x 300 ft., brick and steel addition, to J. W. Ferguson Co., 152 Market St., Paterson, $200,000.

Pa., Bloomsburg — Mill — Magee Carpet Co. 2 story and basement, 70 x 180 ft., rein.-con. and steel, plain foundation, to Shoemaker Constr. Co., Harrisburg. Archts. est. $200,000. Noted Apr. 17.

Pa., Phila.—Plant—Wirt & Knox Mfg. Co., Sedgeley, 23rd and York Sts., 2 story and basement, 94 x 95 x 147 ft., brick and steel, plain foundation, to W. F. Newberry Co., Otis Bldg. Archts. est. $75,000.

Pa., Phila. — Plant — Pennsylvania Salt Mfg. Co., Weidner Bldg., will build 1 story, 94 x 198 ft., rein.-con. and brick, plain foundation, East 15th and Weccocoe Sts. by day labor. $40,000. Private plans.

Md., Baltimore—Plant—Carriage & Toy Co., 636-40 West Pratt St., rebuilding plant to replace one recently destroyed by fire, to Consolidated Eng. Co., 243 Calvert Bldg., $40,000.

N. C., Swannanoa—Beacon Mfg. Co., Purchase St., New Bedford, Mass., cotton mill, 200,000 sq.ft. floor space, here, to M. C. Tuttle Co., 862 Park Sq. Bldg., Boston, Mass.

Ky., Louisville — Workshop — Kentucky School for Blind, Frankfort Ave., 2 story, 35 x 108 workshop, to J. F. Russell Constr. Co., M. E. Taylor Bldg. Archts. est. about $75,000. Noted Apr. 1.

O., Bedford—Factory, etc.—B. L. Marble Chair Co., 4 story, 30 x 72 ft., and 4 story 80 x 208 ft., factory and office, brick and steel, to H. K. Ferguson Co., 4900 Euclid Ave., Cleveland. Archts. est. $200,000. Noted May 1.

O., Geneva—Factory—Champion Hardware Co., 3 story and basement, rein.-con., to G. A. Rutherford Co., 2725 Prospect Ave., Cleveland, $125,000. Noted Apr. 10.

Mich., Detroit—Plant—Hupp Motor Car Co., 3501 East Milwaukee St., general contracts, 1 story, 50 x 150 ft., steel block test building, incl. tunnels, etc., and 1 story, 100 x 120 ft., steel storage building, to Everett Winters Co., 1024 Book Bldg. $50,000 and $75,000 respectively.

Ill., Decatur—Car Shop and Storehouse—Wabash Ry., Railway Exch., St. Louis, Mo., 1 story, 190 x 344 ft. car shop, and 2 story, 80 x 450 ft. storehouse, brick and steel, to Dwight P. Robinson & Co., Inc., 125 East 46th St., New York City. Archts. est. $500,000.

Ill., Rockford—Factory—Rockford Brass Wks., factory and foundry, to Holm-Page Co., Kishwaukee St. Archts. est. $70,000.

Ill., Sterling—Factory—Peerless Level & Tool Co., 100 x 127 ft., brick, to Schmidt Bros. Constr. Co., Sterling. $50,000. Noted Mar. 20.

Wis., Oshkosh—Factory—Oshkosh Corrugated Box Co., 1 story, 90 x 100 ft., brick and timber, plain foundation, to Fluor Bros. Constr. Co., 52 Otter St. Archts. est. $42,000.

Neb., Beatrice—Plant—Swift & Co., c/o L. Swift, pres., 76 West Monroe St., Chicago, 3 story and basement, 96 x 146 ft., to Lehr Constr. Co., 1710 Frederick Ave., St. Joseph, Mo., $120,000. Noted May 8.

Mo., St. Louis—Factory—City Dairies Co., 2313 Washington Ave., general contract 2 story and basement, 100 x 165 ft., rein.-con. and brick, Laclede St., to Gamble Constr Co., 620 Chestnut St. Archts. est. $100,000.

Tex., Dallas — Packing Plant — Dallas Packing Co., 2911 Rock Island St., will build 2 story, brick and concrete, by day labor. $60,000. Private plans.

Tex., Fort Worth—Factory, etc.—W. F. George, 2316 5th Ave., 2 story, 100 x 100 ft., brick and concrete paint shop and automobile body factory, Taylor St., to Quisle & Andrews, Cotton Exch., $45,000.

Okla., Tulsa—See "Streets and Roads."

Calif., San Francisco — Factory — San Francisco Assn. for the Blind (Blindcraft) 432 Sutter St., 3 story, rein.-con., Howard and 7th Sts., to Barrett & Hilp, 918 Harrison St., $112,150. Noted May 8.

Ont., Ottawa—Bakery—Standard Bread Co., Hillson Ave., rein.-con. and brick, plain foundation, to Ross-Meaghes, Albert St. Noted Feb. 21.

Buildings

PROPOSED WORK

Mass., Arlington (Branch of Boston)—Fire Station—Town plans fire alarm station, Massachusetts Ave. and Bway. $150,000. Engineer and architect not selected.

Mass., Boston — Court House — Pub. Building Dept., City Hall, having sketches made by O'Connell & Shaw, 134 Newbury St., court house on Chestnut Hill Ave. and Academy Hill Rd. $225,000. F. Kneeland, supt.

Mass., Boston — Dormitory — Harvard Medical Alumni Assn., Longwood Ave., having plans prepared by Coolidge & Schattuck, Ames Bldg., 4 story, 120 x 200 ft., Longwood Ave. $1,000,000. Noted Sept. 27.

Mass., Boston — Mercantile — W. M. Ewatt, 200 Devonshire St., (owner and engr.), preparing preliminary plans, 10 story, Stuart St., near Berkley St. $1,000,000. Pettingell-Andrews Co., lessee.

Mass., Boston—Mercantile—G. J. Wilson, Westland Ave., plans mercantile building, Huntington Ave. near Forsyth St. To exceed $150,000. Engineer and architect not selected.

Mass., Boston—Sanatorium—City having plans prepared by Maginnis & Walsh, 100 Boylston St., brick sanatorium, Harrison Ave. and East Concord St. $250,000.

Mass., Cambridge — College — Harvard University, plans 13 buildings which include power plant (1st unit of 17 buildings), on site opposite stadium on Brighton side of Charles River as Graduate School of Business Administration $5,000,000. Total cost. $8,000,000. Engineer and architect not selected.

Mass., Charlestown (Boston, P. O.)—Bd. Educ. plans remodeling and constructing addition to Warren School for Junior High School, School and Bartlet Sts., $200,000 or more. Engineer and architect not selected.

Mass., Charlestown (Boston P. O.) — Municipal—City plans municipal building. To exceed $150,000. Engineer and architect not selected.

Mass., Haverhill — School — Dept. Pub. Wks. plans school, fireproof, Ward 5, $500,000. Morse & Chase, 25 Washington Sq., archts.

Mass., Marblehead—Club House—Eastern Yacht Club, had plans prepared by A. H. Bowditch, 44 Bromfield St., Boston, rein.-con. and brick. N. F. Ayer, 77 Franklin St., Boston, commodore.

Mass., Rosindale (Boston P. O.)—School—School Dept., plans 3 story and basement, 40 x 160 ft., and 80 x 110 ft., rein.-con., brick and stone addition to Washington Irving School in Charles Sumner Dist. $400,000. H. Walker & Sons, 120 Boylston St., Boston, archts.

Mass., Roxbury (Boston P. O.)—Schools—City of Boston plans high school for girls and high school for boys, each 36 rooms, here.

Mass., South Boston (Sta. Boston)—School—School Comn. plans elementary school, 8th and Mercer Sts., Shartleff Dist. To exceed $150,000. Architect not selected.

Mass., Springfield—School—School Bd. plans elementary school, Hancock St., $350,000. Engineer and architect not selected.

Buildings (Continued)

Mass., Swampscott — Church — First Congregational Church, having sketches made by Smith & Walker, 80 Boylston St., Boston, church. $150,000.

Mass., Whitinsville—Church—Episcopal Church Society plans new rein.-con., brick and stone. C. C. Coveney, 184 Boylston St., Boston, archt. To exceed $150,000.

Mass., Winchester—Church and Parish House — Second Congregational Church, having sketches made by F. A. Bourne, 177 State St., Boston, rein.-con. and granite. $150,000.

Mass., Worcester—Apartment—Leavitt & Katz, c/o L. W. Briggs Co., archts., 313 Main St., plan 3 story, Main St., $250,000.

Mass., Worcester—Church—St. Josephs Church plans new church. $150,000. O. E. Nault, 48 Hamilton St., archt.

Mass., Worcester—Church, etc.—Wesley Methodist Church Society, had plans prepared by Coolidge & Carlson, 89 State St., Boston, church, chapel and parish house, rein.-con. and stone, Main St. $300,000. H. O. Brewer, chn. building comr.

Conn., Stafford—High School—Town having revised plans prepared by F. I. Cooper Corp., archts., 172 Tremont St., Boston, Mass., 2 story, 140 x 160 ft., brick, Main St. $150,000.

N. Y., Canton—County—Building Com. St. Lawrence Co. rejected bids county building. Will readvertise. $150,000-$160,000. Address A. J. Hanmer, Massena, chn. S. D. Williams, Ogdensburg, archt. Noted Apr. 3.

N. Y., Gouverneur—High School—Bd. Village Trustees, W. H. Loomis, pres., plans high school to replace one recently destroyed by fire. $200,000 to $250,000.

N. Y., Ilion—School—Bd. Educ. plans new school, to exceed $150,000. Engineer and architect not selected.

N. Y., New York—Laboratories—Columbia University, Morningside Heights, having plans prepared brick, steel and stone, plain foundation, on campus. $2,375,000. Private plans. N. M. Butler, pres.

N. Y., New York — Office — New York Life Insurance Co., 346 Bway., having plans prepared by Cass Gilbert, 244 Madison Ave., brick, steel, stone, plain foundation, Madison Ave. and 26th St. $10,000,000. This corrects report in May 1 issue.

N. Y., New York—School—Church of St. Anns, c/o E. F. Fanning, archt. and engr., 522 5th Ave., having plans prepared, 6 story, brick, steel and stone, plain foundation, 314 East 110th St. $275,000.

N. Y., Rochester—City Hall—Common Council plans new city hall, South Fitzhugh and Spring Sts. To exceed $1,000,000.

N. Y., Rome—High School—Voted $400,000 bonds new high school, Turin St. F. L. Martin, mayor. Noted May 1.

Pa., Hazleton—Church—St. Johns Greek Roman Catholic Church having plans prepared by P. B. Sheridan, Markle Bank Bldg., 1 story and basement, 61 x 126 ft. brick and steel, $160,000.

Pa., Phila.—Chapel, Dormitory etc.—Divinity School of Protestant Episcopal Church, 42nd and Locust Sts. having plans prepared by Zantzinger, Bone & Medary, Otis Bldg., chapel, dormitory, power plant, deanery and 2 faculty houses, (5 units of proposed group 14 units), 42nd and Spruce Sts. $1,000,000.

Pa., Phila. — Wards, etc. — Trustees Childrens Home Hospital, Franklin and Thompson St., plans additions to wards, nurses home and power plant. Raised $222,901 for project. Engineer and architect not selected.

Pa., Pittsburgh—Store and Apartment—Builders Service Co., Magee Bldg., making plans 7 story and basement, 46 x 58 ft., brick, tile and steel, 5th Ave. and Chesterfield St. $200,000. Private plans.

Pa., Pittsburgh—Store—J. M. Roberts & Son Co., 435 Market St., having plans prepared by G. M. Rowland, Bakewell Bldg., 5 story and basement, 37 x 80 ft., steel, concrete, granite and hollow tile, 429-31 Wood St. $200,000. Blum & Weldon, Bakewell Bldg., engrs.

Md., Baltimore—Bank—Old Town Natl. Bank, H. O. Redue, pres., Gay and Exeter Sts., plans 3 story, brick and concrete, plain foundation, Fallsway and Gay Sts. $250,000. Engineer and architect not selected.

W. Va., Parkersburg—Schools—Election May 27, $575,000 bonds for 3 new schools, auditorium, gymnasiums, shops, etc. C. C. Dutton, secy. Bd. Educ.

Ky., Louisville—Church—Crescent Hill Methodist Episcopal Church, Frankfort Ave., having plans prepared by P. Moosemiller, c/o Bankers Mortgage Co., Kenyon Bldg., 2 story and basement, brick and stone, Frankfort St. and Peterson Ave.

O., Cleveland — Apartment — Cleveland Properties Co., c/o R. M. De Fassella, Discount Bldg., having plans prepared by J. F. Bontempo, 308 Euclid Ave., 3 story and basement, brick, East 118th St. $250,000.

O., Columbus—Apartment—C. F. Bowen, 344 East State St., had plans prepared by Bassett & Tresselt, Central Natl. Bank Bldg., 11 story and basement, 45 x 62 ft., rein.-con. and brick, East State St. $350,000.

O., East Cleveland (Cleveland, P. O.)—Temple—East Cleveland Masonic Temple Co., c/o J. R. Moxon, treas., c/o Doan Savings & Loan Co., 5517 Euclid Ave., Cleveland, plans brick, on 160 x 197 ft. site, Belmore Ave. $150,000. Engineer and architect not selected.

O., New Philadelphia—Exchange, etc.—Tuscarawas County Telephone Co., plans 3 story and basement, 40 x 95 ft. exchange and office building, and 40 x 95 ft. garage and warehouse, Tuscarawas Ave., also 7 or 8 mi. underground cable. $235,000.

O., Zanesville—Science—Muskingum College, having sketches made by Babbitt, Snyder & Matthews, New Hayden Bldg., 16 East Broad St., Columbus, 3 story and basement, brick and concrete, known as Zanesville, Hall, on campus. $200,000.

Ind., Richmond — School — Bd. School Trustees plans 2 story and basement, brick, $200,000. Architect not selected.

Ind., South Bend—Hotel—H. H. Hayden, 726 East Cedar St., plans 3 story and basement, 50 x 200 ft., rein.-con. and brick, West Colfax Ave. $250,000. I. Cohen, 708 Bway., Gary, archt.

Mich., Detroit — Clubhouse — Wolverine Athletic Club, 1156 Penobscot Bldg., plans 12 story, 350 rooms, rein.-con., brick and steel, plain foundation, Bates St. $2,000,000. Architect not selected.

Mich., Detroit—Lodge—Arbiter Society, E. Krause, secy., 5970 Crane Ave., having plans prepared by G. Davis, 3252 Helen Ave., 2 story and basement, 102 x 171 ft., rein.-con., brick and steel, plain foundation, Mack and Seminole Aves., $155,000.

Mich., Detroit—Mercantile—P. R. Rossello, archt., 406 Congress Bldg., preparing plans 8 story and basement, 60 x 100 ft., brick, steel and rein.-con., plain foundation, Montcalm St. $275,000. Owners name withheld.

Mich., Detroit — Monastery — Holy Redeemer Church, 1721 Junction Ave., having plans prepared by Donaldson & Meier, 1312 Penobscot Bldg., 2 story and basement, 125 x 138 ft., brick, stone and steel, plain foundation, Dix and Junction Aves. $200,000.

Mich., Flint—School—Bd. Trustees Union School Dist., H. M. Comins, secy., 909 Flint P. Smith Bldg., having plans prepared by Malcomson & Higginbotham, 1217 Griswold St., Detroit, 2 story and basement, 110 x 240 ft., rein.-con., brick and steel, plain foundation, Fenton Rd.

Mich., Muskegon—School—St. Michaels Parish having plans prepared by H. L. Mead, Grand Rapids, 3 story and basement, 13 rooms and gymnasium, rein.-con., brick, stone and steel, plain foundation. $175,000.

Ill., Alton—City Hall—City plans rebuilding 3 story and basement, to replace one recently destroyed by fire. $215,000.

Ill., Alton—High School—Bd. Educ. having plans prepared by J. M. Pfeiffenberger, Alton, 2 story and basement, brick, stone and concrete. $200,000. Noted May 31, 1923.

Ill., Fairmount — Clubhouse — See "Unclassified."

Ill., Granite City—Y. M. C. A., Masonic Temple Bldg., having preliminary plans prepared, rein.-con., brick and stone. $300,000. Engineer and architect not selected.

Ill., Pekin—High School—Pekin Community High School, c/o H. J. Rust, pres., 717 Park Ave., rejected bids 2 story, 75 x 270 ft., and 150 x 260 ft., brick and concrete. Will readvertise. J. W. Royer, Flat Iron Bldg., archt.

Wis., Kenosha—Clubhouse—F. O. E. No. 1055, c/o A. Schmitz, pres., 657 Symmonds St., had plans prepared by C. O. Augustine, 1063 Howland Ave., and soon takes bids 2 story and basement, 72 x 100 ft., concrete and brick addition, plain foundation. $150,000.

Wis., Milwaukee—Apartment—I. Goldman, 512 Mitchell St., plans 8 story and basement, 95 x 127 ft., brick and concrete, plain foundation, Astor St. $[illegible]00,000. Engineer and architect not selected.

Minn., Minneapolis—Club—Gymal Doled Club, 3549 Emerson Ave. S., L. Nathanson, pres., having plans prepared by Liebenberg & Kaplan, 617 McKnight Bldg., 3 story and basement, 54 x 165 ft., rein.-con., brick, tile and stone, 9th St. near 2nd Ave. S. $175,000.

Neb., Fremont—Library—Midland College c/o J. F. Krueger, plans library, 2 dormitories and administration buildings, $500,000. Davis & Wilson, 515 Security Mutual Bldg., archts.

Neb., Grand Island—High School—Bd. Educ. having plans prepared by Kirschke & Baker, Ryan Bldg., Senior High School, 3 story and basement, E shaped, 270 ft. long, stone and concrete. $350,000.

Neb., Omaha—High School—Election in November to vote on $2,750,000 bonds, grade and high schools. Noted May 1.

Neb., Omaha — Office — Omaha World Herald having preliminary plans prepared by T. R. Kimball, 836 World Herald Bldg., 4 story and basement, 60 x 142 ft. rein.-con. and brick.

Neb., Omaha—Seminary—Mt. St. Marys Seminary, 15th and Castellar Sts., plans seminary, 72nd St. and Underwood Av. $350,000. Engineer and architect not selected.

Neb., Omaha—Store and Apartment—J. A. Anderson plans store and apartment, 24th and Leavenworth Sts. $150,000.

Mo., Jefferson City—High School—Voted $400,000 bonds, new 3 story and basement high school, and improvements to grade schools. Noted Apr. 24.

Tex., Abilene—School—Election June 2, $150,000 bonds, schools. M. L. Sellers, city secy.

Tex., Dallas—Apartment—R. McDonald, Park Hotel, having plans prepared by Mid West Co., Southland Life Bldg., apartment, Hall and Oaklawn Sts. $150,000.

Tex., Dallas—Church—First Methodist Church Congregation, M. C. Cameron, chn. Building Com., 3800 Stratford, having plans prepared by R. H. Hunt Co., 1301 Southwestern Life Bldg., 2 story and basement, 160 x 232 ft., brick, steel and rein.-con., Ross & Harwood Sts. $50,000.

Tex., Dallas—Office—J. M. Dawson and associates, 605 Insurance Bldg., having plans prepared by Lang & Witchell, archts., 300 Amer. Exch. Natl. Bank Bldg., 14 story, 90 x 106 ft., rein.-con., concrete, stone, tile and brick, Wood and Browder Sts. $800,000.

Tex., Dalworth Park—School—International School of Industrial Arts, J. M Scales, secy., Magnolia Bldg., Dallas, plans 12 concrete buildings. $500,000. Engineer and architect not announced.

Tex., Ft. Worth—Auditorium—Womans Club, Penn Ave., plans 3 story and basement, brick and concrete. $150,000. Engineer and architect not announced.

Tex., Madisonville — Lodge — Masonic Bodies plan 2 story and basement, brick. $150,000. Engineer and architect not announced.

Tex., McAllen — College, etc. — Baptist Church, c/o Baylor University, Waco, plans 2 and 3 story, college, administration and dormitory buildings, rein.-con., brick and stone. $150,000 each. Engineer and architect to be announced soon.

Tex., Mineral Wells—Schools—Defeated $250,000 bonds schools. Noted May 1.

Tex., Port Neches—School—Bd. Educ. having plans prepared by R. H. Hunt & Co., Southwestern Life Bldg., Dallas, 3 story and basement, brick and concrete. $150,000.

Tex., San Antonio — College Library — Methodist Episcopal Church South, Nashville, Tenn., plans 2 story, brick or concrete, West Side, here. $150,000. Engineer and architect to be selected soon.

Tex., San Antonio—Dormitory—Methodist Episcopal Church South, Nashville, Tenn., plans 2 story and part basement, rein.-con., brick or stone, West Side, here. $250,000. Engineer and architect to be selected soon.

Tex., Wichita Falls—Club—Elks Lodge had plans prepared by C. J. Pate, City Natl. Bank, 3 story, 50 x 150 ft., brick and concrete. $150,000.

Okla., Oklahoma City—Hotel—Thompson Bros., 1004 Mid-Continent Bldg., having plans prepared by A. Olson, 202 Mid-Continent Bldg., 12 story, 60 x 140 ft., rein.-con. and steel, plain foundation, Grand St. $500,000.

Okla., Oklahoma City—Station and Office—St. Louis-San Francisco R.R. Co., St Louis, Mo., having preliminary plans prepared 10 story and basement, 110 x 230 ft., brick, plain foundation, Hudson St.

Buildings (Continued)

here. $1,000,000. F. G. Jonah, Frisco Bldg., St. Louis, Mo., engr.

Calif., Anaheim — School — Anaheim Union High School Dist. defeated $200,000 bonds for school. Noted May 1.

Calif., Bell — Apartment, Store and Theatre—T. J. De Vaughn, Jones Bldg., Huntington Park (branch of Los Angeles), having plans prepared by J. T. Zeller, Currier Bldg., Los Angeles, 2 story and basement, 120 x 215 ft., brick, here. $150,000.

Calif., Los Angeles—Hotel—F. Horowitz, et al., c/o R. M. Bates, Jr., archt., Brack-Shops Bldg., having plans prepared 4 story and basement, 50 x 180 ft., brick, Alvarado St. $165,000.

Calif., Los Angeles—Hotel and Store—Syndicate composed of M. Pickford, et al., c/o K. Macdonald, Jr., archt., Brack-Shops Bldg., having plans prepared 12 story and basement, brick, concrete and steel, Hollywood Blvd. $1,000,000.

Calif., Los Angeles — Hotel and Store — J. P. Widney, 3901 Marmion Way, having plans prepared by Morgan, Walls & Clements, Van Nuys Bldg., 3 story and basement, 50 x 125 ft., brick and steel.

Calif., Oakland — Courthouse — Alameda Co. defeated $4,500,000 bonds for courthouse. Noted Apr. 10.

Calif., Oakland—Hospital—Alameda Co. voted $1,800,000 bonds completing Highlands hospital. G. E. Gross, clk. Bd. Supervs. H. H. Meyers, Kohl Bldg., San Francisco, archt. Noted Apr. 10.

Calif., San Bernardino—Courthouse—San Bernardino Co. defeated $850,000 bonds for courthouse. Noted Mar. 27.

Calif., San Diego—High School—Bd. Educ. had plans prepared by T. C. Kistner & Co., 537 Spreckels Bldg., 2 story, 195 x 300 ft., brick, El Cajon Ave. $250,000.

Calif., San Pedro—Warehouses—Petroleum Export Corp., Pacific Electric Bldg., Los Angeles, having plans prepared six 6 story, 100 x 300 ft., rein.-con. warehouses, here. Private plans.

Calif., Santa Monica—City Hall—Plans election to vote on from $400,000 to $500,000 bonds for city hall.

Calif., Santa Monica — School — Santa Monica City School Dist. having plans prepared by F. D. Rutherford, Mills-Fraser Bldg., fireproof, to contain 24 rooms. $150,000 or more.

Que., Montreal—Hall—J. F. D'Aray, St. James St., plans 10 story, concert hall, bachelor quarters, city club rooms, etc., Mountain St. $1,100,000. Engineer and architect not selected.

Ont., Toronto—College—St. Hildas College, D. Seager, provost, Trinity College, plans 3 story and basement, rein.-con., brick and steel, plain foundation. $300,000. Engineer and architect not selected.

BIDS DESIRED

Mass., Arlington—School—St. Agnes Roman Catholic Church, Bedford and Chestnut Sts., taking bids and opens same about June 1, 2 story, 82 x 144 ft., rein.-con. and brick. $175,000. Maginnis & Walsh, 100 Boylston St., Boston, archts.

Mass., Worcester—Hospital—I. O. O. F. Grand Lodge of Massachusetts, taking bids for hospital, Randolph St. $150,000. W. C. Collette, 1080 Boylston St., Boston, archt.

N. Y., Brooklyn—Municipal—June 14. by E. Riegelmann, boro pres., Boro Hall, 10 to 12 story, brick and steel, plain foundation, Court and Joralemon Sts., $6,000,000. McKenzie, Voorhies & Gmelin, 342 Madison Ave., New York, archts. and engrs. Noted Jan. 3.

N. Y., Greigsville—School—June 16, by Bd. Educ. Union Free School Dist. 7, York and Leicester towns, Livingston Co., at office of Principal, Greigsville, constructing annex to present school. F. S. Whitney, clk.; adv. E. N.-R. May 22.

N. Y., Hudson Falls—Store and Apartment—May 26, by Hudson Falls Realty Co., 4 story, 40 x 110 ft., brick and steel, plain foundation, Main St., for Park Pl. Co., Inc. C. D. McCall, Masonic Bldg., archt. and engr.

N. Y., Mt. Pleasant—Hospital—June 2, by F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, White Plains, Grasslands Hospital, here. Walker & Gillette, 128 East 37th St., New York City, archts.; adv. E. N.-R. May 22.

N. Y., New York—Apartment—S. Lipman, c/o C. B. Myers, archt. and engrs., 31 Union Sq., will build 6 story, brick, steel and stone, plain foundation, Hudson St. Work will be done by separate contract with owner supervising. $350,000.

N. Y., New York—School—June 10, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, P. S. 19, Katonah Ave., Bronx Boro., for Bd. Educ., 500 Park Ave.

N. J., Asbury Park—High School—June 18, by Bd. Educ., high school. $1,000,000. E. A. Arend, Kinmonth Bldg., archt. Noted Apr. 24.

N. J., Atlantic City—Clubhouse—May 31, by V. B. Smith, archt., Guarantee Trust Bldg., 4 and 5 story, 75 x 150 ft., brick and steel, concrete pile foundation, South Virginia Ave., for Elks Lodge 276. Noted Feb. 7.

N. J., Newark—School—June 9, by Bd. Educ., Essex Co. Vocational Schools, 475 High St., Newark, vocational school, University Pl. between Myrtle and Columbia Aves., here. Guilbert & Betelle, Chamber Commerce, Newark, archts.; adv. E. N.-R. May 22.

D. C., Wash.—School—May 27, by Dist. Comrs., addition to Janney School, Albermarle St. between 41st and 42nd Sts. $160,000.

Pa., Allentown—Exchange—May 27, by J. I. Windrim, archt., Commonwealth Bldg., Phila., 3 story and basement, 91 x 117 ft., brick and stone, plain foundation Hall and Chestnut Sts., here, for Bell Telephone Co., 17th and Parkway Sts., Phila. $300,000.

Pa., Clymer—Church—May 31, by St. Anthonys Roman Catholic Church, J. J. Creshner, pastor, 2 story and basement, 42 x 112 ft., brick, plain foundation, Morris St. $150,000. W. V. Justus & Co., Clearfield, archts.

Pa., Hazelton—Church—May 23, by P. B. Sheridan, and P. H. Knoblock, archts., Markle Bank Bldg., 1 story, basement and tower, 67 x 160 ft., steel and granite, plain foundation, for St. Gabriels Roman Catholic Congregation. $400,000. J. S. Fagan, pastor.

Miss., Meridian—Schools—May 22, by Bd. Educ., new Junior High School, and remodeling other school buildings. H. M. Ivy, secy. Noted Apr. 3.

Ky., Ashland — Station — Chesapeake & Ohio R.R. Co., 823 East Main St., Richmond, Va., taking bids and opens same about May 26, passenger station. $150,000. F. Q. Cabell, ch. engr. Noted Oct. 11.

O., Cleveland—Clubhouse—M. C. Rousseau, archt., Buckley Bldg., taking bids altering and constructing 2 story, brick and steel, 2612 Prospect Ave., for Knights of Columbus, c/o W. J. Birmingham, chn. building com., 1119 Superior Ave. $150,000.

O., Columbus—Engineering—June 2, by C. Steeb, secy. Bd. Trustees Ohio State University, 2 story, 60 x 120 ft., rein.-con., brick and steel, on campus. $175,000.

O., Mansfield—Bank and Office—June 5, by Althouse & Jones, archts., taking bids 10 story, brick, steel and concrete, for Citizens Natl. Bank. $350,000.

Wis., Burlington — School — June 10, by School Bd., N. E. Karcher, clk., 2 story and basement, brick, tile and concrete plain foundation. $200,000. Oppenhamer & Obel, Bellin Bldg., Green Bay, archts. Noted Mar. 27.

Wis., Milwaukee — Apartment — May 26, by M. Tullgren & Sons, archt., 425 East Water St., 3 story and basement, 60 x 90 ft., brick, tile and concrete, plain foundation, Pleasant St., for E. F. Martin, 492 11th Ave. $150,000.

Kan., Kansas City—Church—June 2, by C. E. Keyser, archt., 421 Portsmouth Bldg., auditorium, balcony and basement, 96 x 123 ft., rein.-con. and native stone, 7th and Washington Sts., for Methodist Episcopal Church. $150,000.

Ark., Pine Bluff—High School—June 5, by H. B. Strange, secy. Bd. Educ., Citizens Bank Bldg., 2 story and basement, rein.-con. and brick, M. Sellibman, Citizens Bank Bldg., archt.

Mo., Caruthersville—Court House—June 3, by Pemiscot Co., c/o F. Baird, co. clk., 3 story, rein.-con., brick and stone. H. H. Hohenschild, 401 Odd Fellows Bldg., St Louis, archt. Noted Nov. 15.

Mo., Caruthersville—High School—June 3, by Caruthersville School Dist. 18, 2 story and basement, 75 x 145 ft., concrete, brick and stone. $150,000. H. H. Hohenschild, 401 Odd Fellows Bldg., St. Louis, archt. Noted Jan. 10.

Tex., Dallas—Auditorium—July 1, by R. H. Hunt & Co., archts., Southwestern Life Bldg., brick and concrete, on campus, for Southern Methodist University., $300,000.

Colo., Denver—Store—June 5, by Fisher & Fisher, archts., U. S. Natl. Bank Bldg., 6 story, 76 x 125 ft., rein.-con. and terra cotta, Champa and 16th Sts., for May Co. Department Store. $1,000,000.

Ore., Astoria — Store and Office — Clark Kendall & Co., 5th and Stark Sts., (representing owner), taking bids 6 story, 100 x 200 ft., rein.-con. and terra cotta, Commercial, Duane and 12th Sts. $300,000. Bennis & Herzog, Chamber of Commerce Bldg., archts. and engrs.

Ore., Eugene—Apartment—I. T. Wulfe, archt. and engr., 216 Ry. Exch. Bldg., Portland, taking bids 4 story and basement, 52 x 100 ft., rein.-con. and stucco, plain foundation, Willamette St., here, for H. W. Taylor, Eugene. $150,000.

Calif., Huntington Park (branch of Los Angeles)—Store and Hotel—J. F. McSwain, 119 East Bellgrave St., taking bids 3 story and basement, 60 x 100 ft., brick, Zoe Ave.

Calif., Stockton — Auditorium — City Council, A. L. Banks, clk., taking bids and opens same about June 23, 400 to 500 tons steel, also general contract, etc., for auditorium. $450,000 total cost. Noted Apr. 10.

Que., Montreal — School — May 26, by Catholic School Comrs., St. Ambroise School, De Normanville St. J. O. Marchand, 294 St. Catharine St. E., archt.

BIDS RECEIVED

N. Y., New York—High School—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, May 13, addition to High School of Commerce, West 65th St. and Amsterdam Ave., here, from Stevenson & Cameron, Inc., 35-37 West 25th St., $930,627. Noted Apr. 24.

N. Y., New York—Market—E. J. O'Malley, comr. Pub. Markets, Municipal Bldg., May 14, wholesale market and storage building, Exterior and East 152nd Sts., for Bronx Terminal Market, from Niewenhouse Co., Inc., 316 East 161st., $2,841,986. Noted Apr. 17.

La., New Orleans — School — Orleans Parish School Bd., City Hall, constructing McDonough School 28, 3 story, 65 x 116 ft. Esplanade and White Sts., from J. V. and R. T. Burkes Co., Carondelet Bldg., $249,000. Noted Apr. 24.

Ky., Dayton—High School—Bd. Educ., new high school, from J. R. Stevens Co., 106 Odd Fellows Bldg., Cincinnati, O., $150,000. Noted Mar. 31.

O., Loudonville—High School—L. Kipling, clk. Bd. Educ. May 8, 2 story and basement, 116 x 135 ft., rein.-con. and brick, from Zecher & Miller, Sandusky, $115,200. Noted Mar. 6.

Mich., Quinnesec — Schools — Bd. Educ., two 2 story and basement, brick and tile, plain foundation, from G. A. Gustafson Co., Iron Mountain, $311,500.

Wis., Shorewood (Milwaukee P. O.)—High School—School Dist. 4, 2 story and basement, 95 x 180 ft. (1st unit) brick, tile and concrete, plain foundation, Oakland Ave., general contract from Paul Riesens Sons, 1012 Humboldt Ave., Milwaukee, $170,266. Noted May 1.

Minn., Minneapolis—Hospital—State Bd. Control, St. Paul, May 16, 3 story and basement, and sub-basement, rein.-con., brick and tile, State U, from L. Fleisher Co., 505 Plymouth Bldg., $274,697. Noted Apr. 26.

Calif., Los Angeles—High School—Bd. Educ., Foshay Junior High School, 1, 2 and 3 story and basement, brick, general contract, from North Pacific Constr. Co., Detwiler Bldg., $243,225. Noted Apr. 24.

CONTRACTS AWARDED

N. H., Portsmouth—Bank—Natl. Bank, additions to bank, to E. A. Abbott & Co., 3 Park St., Boston. Cost plus basis. (Archt. est. $150,000.)

Mass., Boston—Mercantile—Teleston Estate, c/o J. F. Cullen, archt., 10 Bosworth Ave., 4 story, 75 x 200 ft., rein.-con. and steel, 604 Atlantic Ave., to Semple & Clark, 44 Bromfield St.

Mass., Boston—Office and Store—School St. Trust, c/o T. M. James, archt., 3 Park St., 11 story, 85 x 102 ft., rein.-con. and marble, School St., to W. A. and H. A. Root, Park Sq. Bldg. Archts. est. $1,000,000.

Mass., Northampton—Hospital—Comn. of Massachusetts Dept. Mental Diseases, State House, Boston, 2 ward buildings, rein.-con. and brick, here, to Morrissey-Stowell Co., 137 State St., Springfield. $184,571.

Mass., Roxbury (Boston, P. O.)—High School—School House Dept., City Hall, Boston, brick and stone, Warren, Townsend and Harrishof Sts., to T. O'Connor & Co., 218 Main St., Cambridge. $1,437,130. Noted Mar. 6.

Conn., Stamford—Store and Office—F. B. Gurley, 135 Atlantic Ave., 8 story and

Buildings (Continued)

basement, 35 x 108 ft., brick and stone, Main and Atlantic Sts., to C. M. Cruickshank, 14 East 42nd St., New York City. Archts. est. $350,000.

N. Y., Bronxville—Apartment—Syndicate headed by A. W. Lawrence, c/o Walker & Gillette, archts., 128 East 37th St., brick, steel and stone, plain foundation, Millburn St. and Parkway Rd., to Hegeman-Harris Co., 185 Madison Ave. Archts. est. $500,000.

N. Y., Buffalo—School—Bd. Educ., 1400 Telephone Bldg., P. S. 71, 2 story and basement, 190 x 215 ft., rein.-con. and brick, Lang Ave., to G. Schaaf, 258 Kingsley St., $389,000. Noted Apr. 10.

N. Y., Fort Edward—School—Bd. Educ., general contract 3 story, 80 x 120 ft., brick and steel, plain foundation, to W. Donivan, Dolgeville, $140,645. Noted May 8.

N. J., Asyla (Grenloch P. O.)—Hospital—Camden Co., Camden, general contract for group of buildings for tuberculosis hospital, here, to Sinclair & Griggs, Medical Arts Bldg., Phila., $1,012,000; plumbing and drainage, to N. Connelly, 1404 North 18th St., Phila., $93,776; heating and ventilating, to Camden Heating Co., 8 Market St., Camden, $64,750; concrete tunnel, to J. D. Jacques, 79 Euclid Ave., Woodbury, N. J., $45,409. Noted May 15.

N. J., Dover — Theatre and Store — H. Baker and R. F. Woodhall, Dover, brick, steel and stone, plain foundation, to E. M. Waldron, 27 Central Ave., Newark. Archts. est. $150,000.

N. J., Newark—Hospital—Essex Co., 3 story, 50 x 450 ft. and 2 story, 80 x 450 ft., brick, steel and stone, plain foundation, Overbrook St., to James Mitchell, Inc., Bergen Ave., Jersey City, $709,254; heating and ventilating, to Stewart & Farrell, 269 Camden St., $87,742. Noted Apr. 19.

N. J., Secaucus (branch of Weehawken)—Asylum—Hudson Co., (Jersey City), brick, steel and stone, plain foundation, here, to W. H. and F. W. Cane Co., 10 Journal Sq., Jersey City, $3,367,111.

Pa., Harrisburg—High School—General contract 1, 2 and 3 story, H shaped, stone and brick, plain foundation, on 420 x 500 ft. plot, 6th and Division Sts., to S. W. Shoemaker & Son, Commonwealth Trust Bldg., $577,876.

Pa., Jersey Shore—School—Jersey Shore Bd. Educ., Main and Walnut Sts., general contract 3 story and basement, 110 x 120 ft., brick and steel, Allegheny St., to C. M. Thompson & Co., Towanda, $154,865, work must be done within one year. Noted Apr. 24.

Pa., Mt. Carmel—School—Our Mother of Consolation, 2½ story and basement, 62 x 150 ft. brick and stone, plain foundation, to E. R. Bastress & Co., Mt. Carmel, $200,000. Noted Mar. 20.

Pa., Phila.—Hospital Buildings, etc.—W. Krusen, dir. Pub. Health, 584 City Hall, to F. W. Mark Constr. Co., Commercial Bldg., general construction of buildings, dormitories, extensions and alterations to power house, at Phila. Hospital for Insane at Byberry, 35th Ward, $572,650, landscape work, $91,850, building connecting corridors, extending dining room and kitchen, also power house at Phila. Institute for Feeble Minded at Byberry, 25th Ward, $1,111,864; to N. Connelly, 1404 North 18th St., plumbing in 4 cottages for Institute for Feeble Minded $56,444, and plumbing in 2 dormitories at Insane Hospital $36,988; to Mechanical Equipment Co., 214 South 12th St., heating and mechanical equipment in cottages $224,893 and dormitories $145,051; to W. V. Pangbourne & Co., 1927 West Montgomery St., electric work in cottages $77,980 and in dormitories $27,000. Noted May 15.

Pa., Windber—School, etc.—School Bd., general contract 2 story and basement, 56 x 162 ft. and 66 x 87 ft., school and gymnasium, brick and stone, to Wilson Constr. Co., Trust Bldg., Johnstown. Archts. est. $150,000. Noted Mar. 27.

W. Va., Clarksburg — Church — Church of Immaculate Conception, 65 x 160 ft., Maple Ave. and West Pike Sts., to E. A. Wehr, Highland Bldg., Pittsburgh, Pa., $250,000. Noted Apr. 17.

Ala., Birmingham — Office — Bankers Mortgage-Bond Co., 10 story, 75 x 120 ft., rein.-con., brick and terra cotta, 3rd Ave. and 21st St., to Smallman-Brice Constr. Co., 1115 Ave. E, $500,000.

Ala., Tuscaloosa—School—City, 1 story, 12 room, brick and stone, 10th St., to E. Cline, Amer. Trust Bldg., Birmingham, $150,000.

Ky., Dayton—High School—Bd. Educ. school building, to J. R. Stevens Co., Odd Fellows Bldg., Cincinnati, O. Archts. est. $150,000. Noted Mar. 31.

O., Cleveland—Apartment—C. A. Hansen, 1865 East 71st St., 3 story and basement, brick, 1903 East 70th St., to L. Duchon, 515 Ulmer Bldg. Archts. est. $300,000. Noted Sept. 13.

O., Elyria—Station—New York Central R.R., West 3rd St. and St. Clair Ave., Cleveland, 2 story, brick, steel and concrete, here, to Walsh Constr. Co., 19 South La Salle St., Chicago. Archts. est. $300,000. Noted Apr. 3.

O., Springfield—Temple—Masonic Temple Assn., 3 story, rein.-con., brick and stone, plain foundation, High St., to H. R. Blagg Co., 1229 East 3rd St., Dayton, $401,979. Noted Apr. 10.

O., Zanesville—Warehouse—Mosaic Tile Co., 4 story, 80 x 140 ft., fireproof, to R. H. Evans Co., Naghten St., Columbus, $115,000. Noted May 8.

Ind., Indianapolis—Office—Reserve Loan Life Insurance Co., 419 North Pennsylvania Ave., 4 story, 68 x 195 ft., concrete, stone, brick and steel, 431 North Pennsylvania St., to W. P. Jungclaus Co., 825 Massachusetts Ave. Archts. est. $250,000. Noted Mar. 20.

Ind., South Bend—Dormitory—Sisters of Holy Cross, 4 story and basement, 150 x 350 ft., rein.-con., brick and steel, to H. G. Christian Co., 305 South Notre Dame Ave. Archt. est. $900,000.

Mich., Caro—School—Bd. Educ. 2 story and basement, brick, steel and rein.-con., plain foundation, general contract to Miller-Uhlman Co., Bay City, $150,000. Noted Feb. 21.

Mich., Detroit — Hotel — L. W. Tuller, Tuller Hotel, 13 story and basement, 60 x 110 ft., rein.-con., brick and steel, plain foundation, Montcalm St. and Park Ave., to O. Misch Co., 159 East Columbia St. Archts. est. $1,150,000. Noted Sept. 6.

Mich., Highland Park—School—Bd. Educ., 2 story and basement, 120 x 200 ft., brick, steel and rein.-con., plain foundation, 2nd Ave., to F. H. Goddard, 2130 Franklin St., Detroit, $275,000. Noted Apr. 24.

Wis., Superior — Hotel — Citizens Hotel Co., general contract, 6 story and basement, 100 x 121 ft., concrete, brick and steel, concrete pile foundation, to Fleisher Constr. Co., 1000 Builders Exchange, Minneapolis, Minn., $256,000. Noted Nov. 8.

Minn., Hibbing—School—School Bd. general contract for 2 story and basement, 102 x 178 ft., rein.-con. and brick, concrete pile foundation, Brooklyn St., to Dohm Constr. Co., Hibbing, $128,000. Total $150,000

Minn., St. Paul — School — Dept. Educ., City Hall, Apr. 29, 3 story and basement, 160 x 200 ft., rein.-con., brick and steel, Albert St., and Parcal Ave., general contract to P. A. Swenson & Co., 340 Endicott Bldg. $278,795. Noted May 8.

Colo., Denver — Grade School — School Dist., general contract 2 story, 116 x 190 ft., 11th Ave. between Bryant and Decatur Sts., to L. C. Pakiser, 4545 Thompson Court, $107,381.

Calif., Inglewood—Theatre and Store—A. Bennett, 75 x 150 ft., brick and steel, to Genl. Constr. Co., 203 East Harvard St., Glendale. Noted Jan. 3.

Calif., Los Angeles—Garage—Westlake Fireproof Garage Co., c/o Norenberg & Johnson, archts., Railway Bldg., will build 6 story and basement, 55 x 150 ft., rein.-con., Westlake Ave., by day labor. Noted Apr. 3.

Calif., Los Angeles—Hotel and Store—S. Monteleone, Security Bldg., will build 4 story and basement, 34 x 150 ft., brick, Santee and 9th Sts., by day labor.

Calif., Oakland — Warehouse, etc. — Alaska Packers Assn., Wells Fargo Bldg., San Francisco, superstructure for 160 x 700 ft. warehouse, etc., timber and corrugated iron for terminal building, here, to H. J. Christensen, 17th St. and Telegraph Ave. Noted May 8 under "Unclassified."

Calif., Oak Park (Sacramento P. O.)—Theatre, Store and Office—M. T. Jorgensen, archt., 110 Sutter St., San Francisco, brick, here, to McGillivray Constr. Co., Folsom Blvd. and 56th St., Sacramento, $150,000. Owner's name withheld. Noted May 15.

Calif., San Francisco—Store and Office—United Holding Co., c/o W. A. Stephen, archt., 351 Kearny St., 4 story and basement, rein.-con., Mission and Julia Sts., to J. L. McLaughlin, 251 Kearny St., $175,000. Noted May 15.

Que., Cartierville — Home — Sisters of Home for Incurables, 5 story, 52 x 1,600 ft., rein.-con and brick, Gouin Blvd., to A. Boileau, Granier St., Montreal, $2,500,000. Noted May 15.

Que., Montreal—Bank—City and District Savings Bank, St. James St., 5 story, 65 x 176 ft., rein.-con., brick, steel and stone addition, Notre Dame St., to A. Quinlan & Co., 1165 Greene Ave., $150,000. Noted Apr. 24.

Que., Montreal—Church—Parish of St. Madeleine, Outremont, 65 x 220 ft., 187 ft. high, rein.-con. and steel, general contract to A. and D. Boileau, 245 McDougall St., $200,000, steel structure to Dominion Bridge Co., Lachine.

Que., Montreal—Church—St. François of Solano, 469 Jeanne D'Arc Ave., 2 story, 74 x 182 ft., rein.-con., brick and stone, Dandurand St., to J. J. Brodeur, 14 Cherrier St., $150,000. Noted Feb. 28.

Que., Montreal — Church — St. Margaret Mary Parish, 478 Papineau Ave., 1 story, 91 x 224 ft., rein.-con. and stone, Ontario St. E., to A. and D. Boileau, 245 McDougall Ave., $250,000.

Que., Outremont—Convent—Community Holy Name of Jesus and Mary, 5 story, 55 x 1,500 ft., rein.-con., stone, brick and granite, Courcellette and Maplewood Aves., to A. Boileau, Granier St., Montreal, $600,000. Noted May 8.

Alaska, Ketchikan—Hotel—C. Ingersoll, Ketchikan, 5 story, 95 x 100 ft. rein.-con., to J. B. Warrack Constr. Co., 1428 North 34th St., Seattle, Wash. Archts. est. $500,000.

Federal Government Work

PROPOSED WORK

N. Y., Brooklyn—Floor—Spec. 4978—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans new floor in Naval Hospital.

Pa., Hog Island—Compass Station—Spec. 4976—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to compass station.

Ky., Uniontown—Steel—U. S. Engineer plans to purchase 247 tons structural steel for Dams 49 and 50, Ohio River.

Kan., Leavenworth—Shops and Warehouse — Treas. Dept. U. S. Penitentiary plans 2 story and basement, 50 x 150 ft., concrete and brick shops and warehouse.

Neb., Omaha—Bank—U. S. Treas. Dept., Kansas City, Mo., plans 6 story and basement, 66 x 132 ft., brick and steel, 17th and Dodge Sts.

Calif., Mare Island—Ward—Spec. 4979—Bureau of Yards & Docks, Navy Dept., Wash., D. C., plans pyschiatic ward here.

Cuba, Guantanamo—Steel Water Tank—Spec. 4977—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans steel water tank.

H. T., Pearl Harbor—Storehouse—Spec. 4975—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans storehouse and ammunition filling house.

BIDS DESIRED

N. Y., Dunkirk—Breakwater—June 16, by U. S. Engineer Office, Buffalo, N. Y., stone superstructure on breakwater, harbor, here; adv. E. N.-R. May 22.

Pa., Dubois—Post Office—June 12, by Treas. Dept. at office J. A. Wetmore, Superv. Archt., Wash., D. C., 60 x 95 ft., concrete and brick post office, here; adv. E. N.-R. May 22.

Pa., Phila. — Tower — June 12, by Supt. Lighthouses, Phila., furnishing metal work for c.i. tower for Harbor of Refuge; adv. E. N.-R. May 22.

Pa., Pittsburgh—Dump Scows—June 18, by U. S. Engineer, furnishing 2 steel dump scows; adv. E. N.-R. May 22.

Md., Annapolis — Tube Building—Spec. 4973—May 28, by Bureau Yards & Docks, Navy Dept., Wash., D. C., tube transmitter building.

Md., Salisbury—Post Office—June 17, at office Supervising Architect, Treas. Dept., Wash., D. C., post office, here.

Fla., Jacksonville—Dredging, etc.—June 10, by U. S. Engineer Office, War Dept., Wash., D. C., dredging 34,000 cu.yd. soft material and 15,000 cu.yd. rock at Boca-ceiga Bay, and constructing jetty at St. Petersburg.

Fla., St. Petersburg—Jetty—See "Dredging in Jacksonville, Fla."

Ky., Owensboro—Buckets—U. S. Engineer, P. O. Box 72, Louisville, taking bids and opens same about May 26, one ¾ yd. standard dredging type and one 1 cu.yd. rehandling type clam shell buckets, f.o.b. Owensboro.

Ill., Chicago—Derrick Boat—June 5, by U. S. Engineer Office, War Dept., Wash., D. C., one 8 x 33 x 120 ft. steel derrick boat.

Ill., Chicago—Steel Barge—June 2, by U. S. Engineer Office, War Dept., Wash., D. C., one 5 x 26 x 80 ft. steel barge.

BIDS RECEIVED

N. J., Woodbury—Post Office—Treas. Dept. at office Supervising Architect, Wash., D. C., post office here from E. Zimmerli, State College, $46,400 and $6,500 for limestone cornice or $3,600 for terra cotta. Noted Apr. 24.

Ky., Louisville—Pumps—U. S. Engineer, P. O. Box 72, three 15 in. rope driven, centrifugal water pumps, from Farrar Pump & Mchy. Co., 406 Market St., St. Louis, Mo., $1,725. Noted May 1.

Ky., Owensboro—Rip-rap Stone—U. S. Engineer, P. O. Box 72, Louisville, furnishing 2,500 tons rip rap stone for Dam 46.

Federal Government Work (Continued)

Ohio River, from Webster Stone Co., Irvington, $1.92 per ton. Noted May 1.

CONTRACTS AWARDED

Del., Wilmington — Excavating — U. S. Engineer, excavating in inland waterway from Delaware River to Chesapeake Bay, to Arundel Corp., Pier 2, Pratt St., Baltimore, Md., $230,000. Noted Mar. 20.

Ala., Florence — Turbines — U. S. Engineer, Florence, 4 hydraulic turbines for Wilson Dam, to Newport News Shipbuilding & Dry Dock Co., Newport News, Va., $415,400. Noted Mar. 27.

O., Sandusky—Dredging—U. S. Engineers Office, Buffalo, N. Y., dredging in Sandusky Harbor, to Great Lakes Dock & Dredge Co., Williamson Bldg., Cleveland, $252,000. Noted Apr. 24.

Mich., Detroit—Derrick Boat—U. S. Engineer, Detroit, steel derrick boat to Marine Iron Shipbuilding Co., 11th Ave. W., Duluth, Minn., $47,720. Noted Apr. 17.

Wash., Puget Sound — Magazine — Bureau Yards & Docks, Navy Dept., Wash., D. C., subsurface magazine at Navy Yard, to Parker & Wood, Bremerton, $4,725 (60 days). Noted Mar. 27.

Unclassified

PROPOSED WORK

Lighting System—Boston, Mass.—Plans installing new lighting system in South End Dist., incl. entire length of Shawmut Ave.

Playgrounds — Boston, Mass. — Park Comrs., 33 Beacon St., plan playground for Jefferson School, Roxbury, $85,000, and extension and improvements in William Eustis Playground, $100,000.

Coal Handling Plant—Salem, Mass.—Salem Terminal Corp., plans to fill in and construct 400,000 sq.ft. sea wall, wharf, bridge, etc., at Philips Wharf. C. H. Tenny & Co., 200 Devonshire St., Boston, engrs.

Underpass — Wilbraham, Mass. — State Hy. Dept., Boston, plans underpass under railroad, here. $110,000.

Parks, etc.—Buffalo, N. Y.—City plans developing parks and playgrounds, incl. sewers, irrigation, steel foot bridge, concrete walks, concrete swimming pool, wading pool, etc. $183,000. J. Meahl, City Hall, comr.

Bulkheads, etc.—Spring Lake, N. J.—Boro plans bulkheads, jetties and placing back fill for protection of beach front from Union to South Aves., also at Monroe Ave. $60,000 with State aid. Engineer not selected.

Ball Park Stands — Phila., Pa. — Amer. League Baseball Club of Phila., 21st and Lehigh Sts., making plans double decking with steel, right and left pavilions and north bleachers. $350,000. P. M. Sax, Penfield Bldg., engr.

Park Improvements, etc.—Lake Wales, Fla. — Election June 2, $195,000 bonds: $50,000 for park improvements, $25,000 Crystal Park improvements, $15,000 athletic field, $55,000 golf course, $50,000 floating debt.

Supply Base—New Orleans, La.—Bd. Port Comrs., 200 New Courthouse Bldg., takes bids about June 1, 400 ft. addition to old army supply base, Poland St., $375,000.

Transmission Line—Tennessee—Tennessee Electric Power Co., Hamilton Natl. Bank Bldg., Chattanooga, plans 3 mi., 110,000 volt transmission line from Ridgedale to Georgia state line connecting with Georgia Power Co., also transformers, stations, towers, etc. $100,000.

Park Improvements—Cleveland, O.—City plans improvements to Gordon Park, incl. repairs to bathhouse, bridge, walks, diving platform, pier, new shelter house and removing submerged rocks. S. Newman, City Hall, engr.

Underground Cable—New Philadelphia, O.—See "Buildings."

Race Track, etc.—Fairmount, Ill.—Fairmount Jockey Club, c/o P. Cohn, East St. Louis, plans 1 mi. race track, concrete and steel grandstand to seat 15,000, also club house, stables, etc. From $500,000 to $750,000.

Electrical Distribution—Mountain Grove, Mo.—Had plans prepared 50 mi. electrical distribution system, incl. 500-800 hp. power plant. $125,000. Alexander Eng. Co., Springfield, engr.

Subway—Nevada, Mo.—City making preliminary plans concrete subway under tracks Missouri Kansas Texas and Missouri Pacific rails on Walnut St. Railroads and city to share cost. $225,000. Private plans.

Underpass — Dallas, Tex. — "Streets and Roads."

Stadium — Fort Worth, Tex. — Texas Christian University plans concrete and steel stadium, 25,000 capacity. $250,000. E. M. Waites, pres. Engineer and architect not selected.

Dock Sheds — Houston, Tex. — Houston Navigation Dist. plans 3 concrete dock sheds, one 460 ft. other two 480 ft. long. $100,000. E. A. Tucker, Court House, engr.

Stadium—Denver, Colo.—Plans athletic stadium, probably at city park. $600,000. W. N. Blayney, 1729 Arapahoe St., chn. Stadium Com. Architect not selected.

Wharves, etc. — Sacramento, Calif. — Southern Pacific R.R. Co., 65 Market St., San Francisco, having plans prepared rebuilding wharves and docks, recently destroyed by fire, here. $250,000. G. W. Boschke, ch. engr.

Subway—Stockton, Calif.—Plans election to vote on $100,000 bonds for subway. W. B. Hogan, city engr.

Fire Alarm System, etc.—Stockton, Calif.—Plans election to vote on $346,000 bonds, fire alarm system and equipment. W. B. Hogan, city engr.

Park Improvements, etc.—Stockton, Calif.—Plans election to vote on $137,900 bonds, purchase of additional sites, and improve for park and recreation centers. W. B. Hogan, city engr.

Amusement Pier, etc.—Venice, Calif.—Electric Pier & Amusement Co., Merritt Bldg., Los Angeles, having plans prepared by O. D. Clark, Chapman Bldg., Los Angeles, 700 x 1,200 ft., frame and concrete pier, and 200 x 600 ft. swimming pool, here. To exceed $750,000.

BIDS DESIRED

Waterproofing Track Floors—Brooklyn, N. Y. — May 29, by Transit Comn., 49 Lafayette Ave., New York, reconstructing waterproofing of track floors at stations of Route 39, Sect. 2, Brooklyn Boro, Agreement "CZ."

Heating and Ventilating Apparatus — Brooklyn, N. Y.—May 28, by W. H. Gompert, supt. school buildings, Flatbush Ext. and Concord St., heating and ventilating apparatus in addition to Erasmus Hall High School, Bedford Ave. Noted May 15.

Steel — New York, N. Y. — June 2, by Transit Comn., 49 Lafayette St., furnishing and erecting structural steel for inspection shed at 239th St. yard, Bronx Boro.

Heating System—Ogdensburg, N. Y.—May 28, by State Hospital Comn., Albany, heating work, additions and alterations to heating system incl. additional boiler capacity, at St. Lawrence State Hospital, here. S. W. Jones, Albany, state archt.; adv. E. N.-R. May 22.

Fire Protection System—Saratoga Springs, N. Y.—See "Industrial Works."

Heating and Ventilating—Baltimore, Md.—May 28, by Bd. Awards, heating and ventilating in Gwynns Falls Park Junior High School. $50,000. H. G. Perring, Hearst Tower, superv. engr. Pub. Impvt. Comn. Noted May 15 under "Buildings."

Stadium — Louisville, Ky. — Du Pont Manual Training High School taking bids and opens same about June 15, stadium on Eastern Parkway. $65,000 to $75,000. Noted Dec. 1.

Athletic Field—Milwaukee, Wis.—May 29, by F. M. Harbach, secy. School Bd., 10th and Prairie Sts., grading, building running tracks, etc., for South Division High School. $40,000.

Grandstand—West Allis, Wis.—June 2, by J. D. Jones, comr. State Dept. of Agriculture, Madison, rein.-con. addition to grandstand, seating capacity 12,000, at State Fair Park, here, $100,000. A. Peabody, Madison, engr. Noted Apr. 10.

BIDS RECEIVED

Bleachers, Concrete Wall, etc.—Boston, Mass. — City, erecting concrete bleachers and grading Barry playground in Charlestown, also concrete wall and grading Cherry St. playground, South End, from J. C. Coleman & Sons Co., 1620 Tremont St., Roxbury (Boston P. O.), $21,748 and $3,300 respectively.

Tunnel—Seattle, Wash.—Bd. Pub. Wks., May 9, completing 1st Ave. S. tunnel under Duwamish River, from J. L. Smith, Pioneer Bldg., driving tunnel 356 ft. $560, lining tunnel 539 cu.yd. $60, grout 50 cu.yd. $30, 20 cu.yd. concrete block $50, 3 m. planking $60, total $235,025. Noted Mar. 20.

CONTRACTS AWARDED

Heating and Ventilating Apparatus — New York—Bd. Educ., 500 Park Ave., New York City, heating and ventilating apparatus, etc., in masters house, dormitory buildings, infirmary, power house, etc., for Parental School on westerly side of road between Flushing and Jamaica, about 1,700 ft. south of North Hempstead Turnpike, Flushing, to Austin Eng. Co., 121 West 42nd St., New York City, $64,378. Noted May 15.

Heating and Ventilating Apparatus — Brooklyn, N. Y. — Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 202, Hegeman Ave., here, to Raisler Heating Co., 129 Amsterdam Ave., New York, $136,525; in P. S. 206, Ave. V, here, to Alvord & Swift, Grand Central Terminal Bldg., New York, $135,756. Noted May 15.

Heating and Ventilating Apparatus — Jamaica, N. Y. — Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 116, Wren Pl., here, to Alvord & Swift, Grand Central Terminal Bldg., New York, $100,756. Noted May 15.

Heating and Ventilating Apparatus — New York, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in P. S. 71, Roberts Ave., to Alvord & Swift, Grand Central Terminal Bldg., $100,756. Noted May 15.

Power Development—Watertown, N. Y.—Power Corp. of New York and Northern New York Utilities, Inc., Light and Power Bldg., power development on Beaver River at Soft Maple Dam, 2 earth dams, excavating for forebay, spillway and power house, and power house foundations, to U. G. I. Contg. Co., Broad and Arch Sts., Phila.; two 10,000 hp. turbines, to W. Cramp & Sons Ship & Engine Building Co., Richmond and Norris Sts., Phila. Total cost $2,000.000. Noted May 8.

Heating and Ventilating—Newark, N. J.—See "Buildings."

Sea Wall and Fill—West Palm Beach, Fla.—Palm Beach Investment Co., sea wall and fill, Almena and Pershing Park Lake addition, incl. 40,000 cu.yd. hydraulic dredgework; sea wall to D. E. O'Hara, West Palm Beach, $15,000; fill to A. S. Andrews, West Palm Beach, $10,000.

Ferry House, etc.—New Orleans, La.—Bd. Port Comrs., New Court Bldg., concrete and steel ferry house, foot Canal St., to J. Reiss, Carondelet Bldg., $94,000. Noted May 8.

Street Lighting System—Los Angeles, Calif.—See Streets and Roads.

Street Lighting System — Los Angeles, Calif.—Ornamental street lighting system, Park Ave. between Jefferson and Slauson Aves., to Walker & Martin, 402 West Wilshire St., Fullerton, $68,331.

Material and Equipment

BIDS DESIRED

Paving Blocks—Boston, Mass.—May 26, by Dept. Pub. Wks., City Hall, 1,500,000 new granite paving blocks. J. A. Rourke, comr. Pub. Wks.

Asphalt Macadam Binder, etc.—Brooklyn, N. Y.—May 28, by E. Riegelman boro pres., Boro Hall, Brooklyn, 75,000 gal. asphaltic macadam binder for hot application, 4,000 cu.yd. 2½ in. and 1,200 cu.yd. ¾ in. broken stone and 1,060 cu.yd. broken stone screenings.

Cement—New York, N. Y.—May 27, by H. Bruckner, pres. Bronx Boro., 3rd and Tremont Aves., furnishing 3,000 bags cement.

Concrete mixer — Columbus, O. — F and Y Constr. Co., 332 East State St., in market for concrete mixer, 7 cu.ft. capacity, and 1 hoisting machine, reversible sheave.

Sand Sucking Outfit—Kenosha, Wis.—F. A. Carlson, dir. parks, taking bids sand sucking outfit for dredging lagoons.

Asphaltic Road Oil, etc. — Milwaukee, Wis.—May 28, by Central Bd. Purchases, City Hall, 18 cars special asphaltic road oil, 81,000 ft. wire and cable.

Street Roller, etc.—Milwaukee, Wis.—May 26, by Central Bd. Purchases, City Hall, two 5 ton gasoline road rollers, three 1 bag concrete mixer, 70,000 paving bricks, and 1 carload hard sand-stone paving blocks.

Cement—Merced, Calif.—May 31, by H. P. Sargent, secy. Merced Irrigation Dist., 350,000 bbl. cement, delivery to begin about Sept. 1, 15,000 to 30,000 bbl. per month. R. V. Meikle, ch. engr.

BIDS RECEIVED

Switchboard, etc.—Cleveland, O.—City, switchboard and switchboard equipment, from Westinghouse Electric & Mfg. Co., Pittsburgh, Pa., $40,858. Noted May 1.

CONTRACTS AWARDED

Truck—Minneapolis, Minn.—F. S. Gram, city purch. agt., one 3½ ton truck, to O. M. Nelson Co., 1317 Harmon Pl., $4,495; two 2½ ton trucks, one to General Motors Truck Co., 30 North 8th St., $4,000, and one to Mack International Motor Truck Corp., 2234 University Ave., St. Paul, $4,519. Noted Apr. 24.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: June 3.

Roads and Bridges

Charleston, W. Va.

Sealed proposals will be received by the State Road Commission of West Virginia at its office in Charleston, West Virginia, until ten o'clock A.M. on the 3rd day of June, 1924, and said proposals will be opened and read immediately thereafter at the Kanawha County Court House, Charleston, W. Va., for the construction of the following bridges and sections of State Road:

Project 3134—Kanawha County—2.2 miles of the Lock Six-Tyler Mountain Road for grading and draining. Certified check $1,200.

Project 137-B—Monroe County—5 miles of the Wolf Creek-Sinks Grove Road, for grading and draining. Certified check $3,000.

Project 131—Pocahontas County—2.0 miles of the Marlinton-Buckeye Road for paving with Bituminous Macadam. Certified check $2,500.

Project 3313—Summers County—0.9 miles of Hinton-Tug Creek Road, for grading and draining. Certified check $1,400.

Project 3200—Logan County—6 miles of the Blair-Hetzel Road for grading and draining. Certified check $4,000.

Project 3250—Mason County—3 miles of the Point Pleasant-Leon Road, for grading and draining. Certified check $2,000.

Project 3246—Putnam County—1.5 miles of the Country Club-Poca Road, for grading and draining. Certified check $1,100.

Project 2062—Brooke County—3.5 miles of the Wellsburg-Pennsylvania State Line Road for cleaning and surface treatment with tar and limestone chips. Certified check $500.

Project 3166—Calhoun County—and Project 3322—Calhoun and Gilmer Counties—7 miles of the Arnoldsburg-Stumptown Road for grading and draining. Certified check $4,000.

Project 3140—Marshall County—0.5 miles of the Ramp Hollow Road, for paving with concrete. Certified check $800.

Project 3314—Tyler County—3 miles of the Sistersville - Middlebourne Road for grading, draining and paving with Bituminous Macadam. Certified check $4,000.

Project 3163-A-1—Tyler County—1 mile of the Centerville Road for paving with Bituminous Macadam. Certified check $1,000.

Project 3082-A-1—Wetzel County—0.25 miles of River Road north of New Martinsville, for paving with concrete. Certified check $1,000.

Project 3162-A—Wetzel County—3 miles of the New Martinsville-Wileyville Road for grading and draining. Certified check $1,600.

Project 3276—Barbour County—1.5 miles of the Philippi-Clarksburg Road for grading, draining and paving with Bituminous Macadam. Certified check $2,000.

Project 3018 and 3313—Barbour County—4 miles of the Philippi-Junior Road for cleaning and cold surface treatment. Certified check $500.

Project 3157—Braxton County—Gassaway Bridge No. 932—Concrete substructure and approach fills. Certified check $1,200.

Project 3278-B—Lewis County—8 miles of the Weston-Gilmer County Line Road for grading and draining. Certified check $3,000.

Project 1129—Preston County—1.6 miles of the Albright-Bruceton Mills Road, for cleaning and cold surface treatment. Certified check $500.

Project 3221—Berkeley County—Opequon Bridge No. 957—Concrete substructure only. Certified check $500.

Project 62-R—Hardy County—0.8 miles of Main Street of Moorefield for Rock Asphalt Surface Course. Certified check $500.

OFFICIAL PROPOSALS

Project 122-A—Mineral County—1.6 miles of the Northwestern Turnpike for paving with Bituminous Macadam. Certified check $1,200.

Project 3030—Morgan County—4.6 miles of the Berkeley Springs-Martinsburg Road for paving with Bituminous Macadam. Certified check $6,000.

Project 3033—Randolph County—Two bridges over Ralston Run Nos. 865 and 866—Concrete through girders 40 foot spans each. Both in one contract. Certified check $600.

Proposals will be received only upon State Standard forms in accordance with plans, specifications and estimates of quantities therefor, which standard forms, plans, specifications and estimates of quantities may be obtained from the office of the Division Engineer in whose territory the proposed construction is located, or from the office of the State Road Commission at Charleston, West Virginia.

Each proposal must be accompanied by a certified check for the amount noted.

The right is reserved to reject any or all proposals.

THE STATE ROAD COMMISSION OF
WEST VIRGINIA,
E. B. CARSKADON, Secretary.

Bids: June 13.

Bridge

West Chester, Pa.

Bids will be received by the Controller of Chester County, at his office in the Court House, West Chester, Pa., up until 11 o'clock a.m. Standard Time, on Monday, June 16, 1924, and then publicly opened, for the construction of a reinforced concrete bridge over French Creek on the line of Gay Street in Phoenixville, consisting of twelve spans aggregating 928 ft. between abutments.

Plans and specifications may be had upon application to the Chief Clerk to the County Commissioners and the payment of five (5) dollars for each set, or may be seen at the office of Henry H. Quimby, Consulting Engineer, 3920 Girard Ave., Philadelphia.

The Commissioners reserve the right to reject any or all bids.

Certified checks accompanying proposals must be handed to the Clerk to the County Commissioners one hour before the time stated above.

DAVID M. GOLDER, Controller.

Bids: June 18.

Sewers and Water System

Union City, Tenn.

The Mayor and Aldermen of Union City, Tennessee, will receive sealed proposals at the City Hall at Union City, Tennessee, until 2 p.m., June 18th, for the furnishing of all labor and material and constructing approximately four miles of sanitary sewers, including three reinforced concrete settling basins; laying approximately 4½ miles of 4", 6" and 8" water mains; furnishing a compressor, certain pumping equipment, a feed water heater, and steam superheaters.

Certified check 5% of bid. The right is reserved to reject any and all bids.

For Instructions to Bidders, Synopsis of Specifications, and Form of Proposal, address W. D. KEISER,
Recorder,
Union City, Tennessee.

OFFICIAL PROPOSALS

Bids: June 4.

Completion of Sewerage System

Sayreville, N. J.

Sealed proposals will be received by the Borough Council of the Borough of Sayreville, N. J., at the Borough Council Chambers, Borough Hall, Sayreville, N. J., on Wednesday, June 4th, 1924, at the hour of 8 o'clock P.M., Daylight Saving Time, (7 o'clock P.M., Standard Time), for the completion of a sewerage system in the Borough of Sayreville exclusive of sewage pumping stations.

This work will in general consist roughly of:

2.63	miles of 8-inch vitrified tile pipe sewers, varying between 0 and 22 feet in depth, with appurtenances.
1.00	mile of 10-inch vitrified tile pipe sewers, varying between 0 and 14 feet in depth, with appurtenances.
57	manholes, varying between 0 and 22 feet in depth.
0.13	mile of 8-inch cast iron outfall sewer.
0.26	mile of 6-inch cast iron force main.
0.28	mile of 10-inch cast iron force main, together with other and appertaining construction.

All of said work to be done in accordance with the plans, profiles and specifications prepared by Waldo S. Coulter, Consulting Engineer, 114 Liberty Street, New York, N. Y., which said plans, profiles and specifications were adopted by the Borough Council of the Borough of Sayreville, at the meeting held on Wednesday, February 20, 1924, and which said plans, profiles and specifications are now on file in the office of the Borough Clerk, Borough Hall, Sayreville, N. J., where they may be seen by prospective bidders, or a set of Information for Bidders, Form of Proposal, Form of Contract, specifications, plan, and profile, can be secured from Waldo S. Coulter, Consulting Engineer, by the payment of Four Dollars ($4.00) in cash, none of which will be returned. All bids must be made on the form of proposal attached to the Information for Bidders, and must be enclosed in a sealed package or envelope.

Each bidder must accompany his bid by a certified check for Three Thousand dollars ($3,000.00) payable unconditionally to the Treasurer of the Borough of Sayreville, as a guarantee that the bidder will within ten days from the date of notice of award of the contract to him, furnish the Borough with the required bond and execute the contract.

Each bidder must accompany his bid with a certificate from a surety company, stating that such surety company will provide said bidder with a bond of the form and in the sum required. The successful bidder will be required to furnish a surety company bond to the Borough of Sayreville, for the faithful performance of the contract and protection of labor and materials furnished in said contract according to statutory requirements, in a sum at least equal to the estimated cost of the work, said bond to be approved by the Borough Attorney.

The Mayor and Borough Council reserve the right to reject any or all bids, if in their opinion it is to the best interest of the Borough so to do.

All of said work must be completed on or before the first day of December, 1924.

FRANK P. KOLB,
Borough Clerk.

Approved:
FRANK HARTMAN, Mayor.
THOMAS H. HAGERTY,
Borough Attorney.
WALDO S. COULTER,
Consulting Engineer.

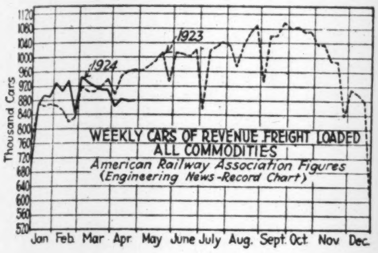
CONSTRUCTION NEWS

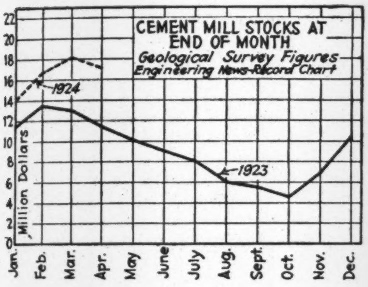
Engineering News-Record, May 29, 1924

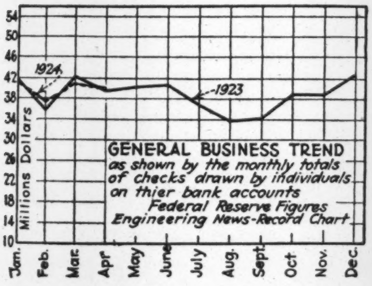
The Construction Barometer

Current Situation One of Curtailed Production, Small Quantity Buying and Few Price Changes — Car Loadings and Public Contract Letting Gain

CAUTION is the prevailing element in the current market. The situation is one of curtailed production, small-quantity buying and few changes in prices. The upward trend in volume of construction during April evidently resulted from lower construction cost, as shown by the chart. Since the first week in May, however, there has been a steady decline in contract letting with the possible exception of a slight gain in public awards, mostly for buildings. Latest reports show that revenue freight loadings, while somewhat under a year ago, are heavier than last month and also greater than during May, 1920, '21, and '22. The general trend of trade and industry. with the exception of building, is downward and few signs point to an immediate change in the situation.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
May 8	$30,319,000	$38,829,000	$69,148,000
May 15	21,484,000	25,500,000	46,984,000
May 22	35,046,000	13,689,000	48,735,000
3 weeks	$86,849,000	$78,018,000	$164,867,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

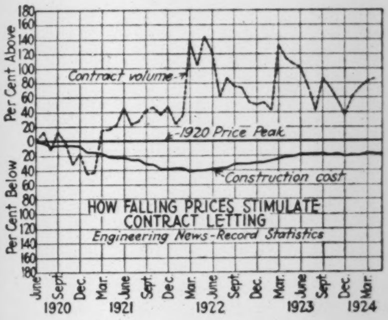
Week Ended	No.	Public Work	No.	Private Work
May 8	10	$2,637,000	47	$19,111,000
May 15	9	2,261,000	38	20,937,000
May 22	19	12,021,000	24	8,348,000
3 weeks	38	$16,919,000	109	$48,396,000

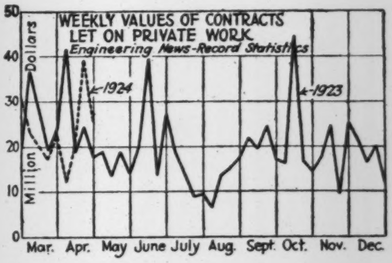
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

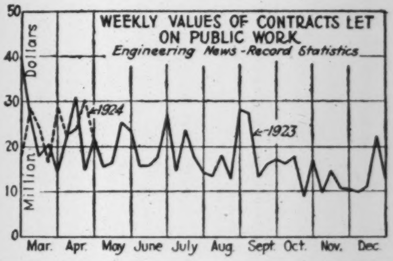
			Public		
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
May 8	35	45	96	40	198
May 15	38	44	98	41	214
May 22	30	41	111	41	248

FEW PRICE CHANGES DURING PAST WEEK

	Quoted on May 29 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.10 @2.25	$2.10 @2.35	May 15
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	60.00	61.00	May 15
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.56	.55	Apr. 24







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
May 19	Milwaukee, Wis.	May 29
June 2	Pennington, N. J.	May 29
June 3	Weldon, N. C.	May 29
June 4	Kimberly, Wis.	May 29
June 6	Denver, Colo. Adv. May 8 to 29.	May 15
June 6	Fulton, N. Y. Adv. May 22 and 29.	May 22
June 6	Garfield Heights, (Cleveland P. O.), O.	May 29
June 6	New York, N. Y.	May 29
June 9	Hawthorne, Calif.	May 29
June 11	Coushatta, La.	May 29
June 12	Cleveland, O.	May 15
June 12	Athens, Wis.	May 29
June 14	Tucumcari, N. M. Adv. May 15 to 29.	May 15
June 17	Glenmore, La.	May 29
June 19	Lewisburg, Tenn. Adv. May-22 and 29.	May 29
June 19	Lewisburg, Tenn.	May 29
June 24	Tampa, Fla. Adv. May 22 and 29.	May 22
June 26	Durham, N. C. Adv. May 22 and 29.	May 29
July 2	Jackson, Mich. Adv. May 29.	May 29

SEWERS

Bids Close		See Eng. News-Record
May 24	Columbus, O.	May 8
May 26	Sunbury, Pa.	Apr. 10
June 2	Cleveland Heights (Warrensville P. O.),	May 29
June 3	Columbus, O.	May 29
June 3	Manasquan, N. J. Adv. May 29.	May 29
June 3	Pismo Beach, Calif	May 29
June 4	Philadelphia, Pa	May 22
June 4	Sayreville, N. J.	May 22
June 4	Brooklyn, N. Y.	May 29
June 5	Sanford, S. C.	May 29
June 6	Portland, Me.	May 15
June 6	Garfield Heights, (Cleveland P. O.) O.	May 29
June 12	Inverness, Miss.	May 29
June 10	Royal Oak, Mich. Adv. May 29.	May 29
June 18	Union City, Tenn. Adv. May 15 to 29.	May 15

WASTE DISPOSAL

Bids Close		See Eng. News-Record
June 9	Sewickley, Pa. Adv. May 22 and 29.	May 29

BRIDGES

Bids Close		See Eng. News-Record
May 29	Michigan	May 29
June 2	New Jersey Adv. May 29.	May 22

Bids Close		See Eng. News-Record
June 3	West Chester, Pa.	May 22
June 3	Louisiana	May 29
June 3	Muncie, Ind.	May 29
June 5	Key West, Fla.	May 8
	Adv. May 8 to 29.	
June 6	Milford, O.	May 15
June 9	Alabama	May 15
June 9	Perryville, Ill.	May 29
June 10	Florida	May 29
June 10	Montana	May 29
June 12	Albany, Ore.	May 15
June 18	Philadelphia, Pa.	May 22
	Adv. May 22 and 29.	
June 27	Seattle, Wash.	May 15
	Adv. May 15 to 29.	

EXCAVATION, DRAINAGE IRRIGATION

May 29	Orleans, Mass.	May 29
May 31	Danville, Ill.	May 8
May 31	Cumberland, Ont.	May 22
June 3	New Jersey	May 22
	Adv. May 15 to 29.	
June 7	Vancouver, Wash.	May 29
June 9	Corinth, Miss.	May 29
June 11	New York	May 29
	Adv. May 29.	
June 14	Newbern, Tenn.	May 29
June 17	Lake Village, Ark.	May 22

STREETS AND ROADS

May 27	Framingham, Mass.	May 29
May 29	Quincy, Mass.	May 29
May 31	East St. Louis, Ill.	May 29
June 2	Huntsville, Ala.	May 15
June 2	Highland Falls, N. Y.	May 15
	Adv. May 8 to 22.	
June 2	Clarington, O.	May 22
June 2	Mt. Holly, N. J.	May 22
	Adv. May 15 to 29.	
June 2	Warsaw, Ind.	May 22
June 2	Michigan	May 22
June 2	Huntsville, Ala.	May 22
June 2	Hancock, Md.	May 29
June 2	New Jersey	May 29
June 2	Cleveland Heights (Warrensville P. O.), O.	May 29
June 3	Denver, Colo.	May 29
June 3	Illinois	May 29
June 3	Upper Darby, Pa.	May 29
June 3	Columbus, O.	May 29
June 3	Franklin, Tex.	May 22
June 3	Massachusetts	May 22
June 3	Michigan	May 22
June 3	West Virginia	May 22
June 3	Rushville, Ind.	May 15
June 3	Carrizo Springs, Texas	May 15
June 3	Pennsylvania	May 15
	Adv. May 15 to 29.	
June 3	West Virginia	May 22
June 3	Fort Wayne, Ind.	May 22
June 3	New York	May 22
	Adv. May 15 to 29.	
June 3	New York, N. Y.	May 29
June 3	Long Island City, N. Y.	May 29
June 3	North Caldwell (Newark), N. J.	May 29
June 4	Delaware	May 15
June 4	Winchester, Ind.	May 22
June 4	Freehold, N. J.	May 22
	Adv. May 22 and 29.	
June 4	Michigan	May 22
June 4	Brooklyn, N. Y.	May 29
June 4	Saluda, S. C.	May 29
June 4	St. George, N. Y.	May 29
June 5	New York, N. Y.	May 29
June 5	Louisiana	May 22
June 5	Virginia	May 22
June 5	North Little Rock, Ark.	May 22
June 5	Key West, Fla.	May 8
	Adv. May 8 to 29.	
June 5	Elkins, W. Va.	May 22
June 5	Sumter, S. C.	May 22
June 6	Georgia	May 22
June 6	Cincinnati, O.	May 29
June 6	Waxahachie, Tex.	May 29
June 6	Vincennes, Ind.	May 29
June 6	Goshen, Ind.	May 29
June 9	St. Paul, Minn.	May 29
June 9	South Bend, Ind.	May 29
June 9	Alabama	May 15
June 9	Sweetwater, Texas	May 22
June 9	California	May 29
June 9	Hawthorne, Calif.	May 29
June 9	Los Angeles, Calif.	May 29
June 9	Michigan	May 29
June 10	Michigan	May 29
June 10	Montana	May 29
June 10	Birmingham, Ala.	May 22
June 10	Oskaloosa, Kan.	May 22
June 10	Maryland	May 29
	Adv. May 29.	
June 10	Ft. Wayne, Ind.	May 29
June 10	Hot Springs, Ark.	May 29
June 10	Kentucky	May 29
June 12	Atlantic City, N. J.	May 29
June 12	Louisiana	May 29
June 16	Alabama	May 22
June 16	Michigan	May 22
June 16	Akron, O.	May 29
June 16	California	May 29
June 17	Morehead City, N. C.	May 29
	Adv. May 29.	
June 17	Shenandoah, Pa.	May 29
	Adv. May 29.	
June 18	Independence, Kan.	May 29
June 18	Pecos, Tex.	May 29
June 20	Baird, Tex.	May 29
June 20	Wichita, Kan.	May 29
June 24	Howard, Kan.	May 29
July 1	Lisbon, O.	May 15
July 1	Lisbon, O.	May 22

INDUSTRIAL WORKS

June 2	Kewanee, Ill.	May 29
June 2	Philadelphia, Pa.	May 29
June 3	Bloomsburg, Pa.	May 29
June 3	Neilsville, Wis.	May 29
June 10	Harrisburg, Pa.	May 22
	Adv. May 22 and 29.	
June 17	Saratoga Springs, N. Y.	May 22

BUILDINGS

May 31	Clymer, Pa.	May 22
May 31	Atlantic City, N. J.	May 22
June 1	Canton, Mo.	May 8
June 1	Milwaukee, Wis.	May 29
June 2	Mt. Pleasant, N. Y.	May 22
	Adv. May 22 and 29.	
June 2	Quebec, Que.	May 29
June 2	Columbus, O.	May 8
June 2	Grove City, Pa.	May 15
June 2	Columbus, O.	May 22
June 2	Kansas City, Kan.	May 22
June 3	Koch, Mo.	May 8
June 3	Caruthersville, Mo.	May 22
June 3	Atlantic City, N. J.	May 29
June 4	Mansfield, O.	May 29
June 4	Flint, Mich.	May 29
June 4	Gloversville, N. Y.	May 29
June 5	Upper Darby, Pa.	May 15
June 5	Galveston, Tex.	May 15
June 5	Mansfield, O.	May 22
June 5	Pine Bluff, Ark.	May 22
June 5	Denver, Col.	May 22
June 6	North Little Rock, Ark.	May 29
June 7	Kirksville, Mo.	May 29
June 9	Irvington, N. J.	May 22
June 9	Elizabeth, N. J.	May 29
	Adv. May 29.	
June 9	Long Beach, Calif.	May 29
June 10	New York, N. Y.	May 15
June 10	New York, N. Y.	May 22
June 10	Burlington, Wis.	May 22
June 12	Woodbury, N. J.	May 29
June 14	Brooklyn, N. Y.	May 22
June 15	Dallas, Tex.	May 29
June 16	Greigsville, N. Y.	May 22
	Adv. May 15 to 29.	
June 16	Burlington, Wis.	May 29
June 18	Asbury Park, N. J.	May 22
June 24	New York, N. Y.	May 29
June 27	Lubbock, Tex.	May 29
July 1	Dallas, Tex.	May 22

FEDERAL GOVERNMENT WORK

May 28	Roads—Colorado	May 29
June 2	Cottages—Cincinnati, O.	May 15
June 2	Steel Barge—Chicago, Ill.	May 22
June 4	Hospital Buildings — San Diego, Calif.	May 8
June 5	Derrick Boat—Chicago, Ill.	May 22
June 10	Dredging, etc.—Jacksonville, Fla.	May 22
June 10	Hospital Ward—Ft. Sill, Okla.	May 29
	Adv. May 29.	
June 11	Post Office—Saranac Lake, N. Y.	May 8
June 11	Generating Plants—Pittsburgh, Pa.	May 15
	Adv. May 15 to 29.	
June 12	Tower—Philadelphia, Pa.	May 22
June 12	Post Office—Dubois, Pa.	May 22
	Adv. May 22 and 29.	
June 13	Post Office—Greensburg, Pa.	May 29
June 14	Operating Machinery—Florence, Ala.	May 15
	Adv. May 15 to 29.	
June 14	Florence, Ala.	May 29
June 16	Breakwater—Dunkirk Harbor, N. Y.	May 22
	Adv. May 22 and 29.	
June 17	Laundry—Tupper Lake, N. Y.	May 29
June 17	Post Office—Salesbury, Md.	May 22
June 18	Screens, etc.—Florence, Ala.	May 29
	Adv. May 29.	
June 18	Post Office — Salisbury, Md.	May 22
	Adv. May 22 and 29.	
June 18	Dump Scows—Pittsburgh, Pa.	May 22
	Adv. May 22 and 29.	
June 19	Post Office—Bluffton, Ind.	May 29
	Adv. May 29.	
June 24	Hospital—Rutland, Mass.	May 29
	Adv. May 29.	
June 24	Mess Hall, etc.—Gulfport, Miss.	May 29
	Adv. May 29.	
June 24	Buildings, etc.—Federal Park, Md.	May 29
	Adv. May 29.	
June 25	Bridges—Wilmington, Del.	May 1
June 26	Dredging—Baltimore, Md.	May 29
	Adv. May 29.	
Aug. 5	Bridge—Florence, Ala.	May 15
	Adv. May 15 to 29.	

UNCLASSIFIED

June 2	Grandstand—West Allis, Wis.	May 22
June 2	Steel—New York, N. Y.	May 22
June 6	Subway—Cincinnati, O.	May 29
June 6	Sea Wall, etc.—Tampa, Fla.	May 1

MATERIAL AND EQUIPMENT

May 29	Street Sweepers—Cleveland, O.	May 29
June 2	Castings—New York, N. Y.	May 29
June 3	Trucks — Minneapolis, Minn.	May 29
June 3	Underground Cable—New Haven, Conn.	May 29
June 3	Paving Materials—St. Paul, Minn.	May 29
June 4	Asphalt Road Oil—Brooklyn, N. Y.	May 29
June 5	Slurry Tanks—San Antonio, Tex.	May 29
June 5	Asphaltic Concrete — New York	May 29
Aug. 29	Dredger—Brisbane, Queensland, Australia	Apr. 10

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Brighton (Boston P. O.)—Dept. Pub. Wks., City Hall, Boston, plans laying and relaying water pipes in Cleveland Circle, Commonwealth Ave., Southerland and Colonial Rds. To exceed $15,000. J. A. Rourke, Boston, comr.

Mass., Roxbury (Boston, P. O.)—See "Sewers."

N. Y., Ballston Spa—Bd. Trustees opens bids about June 15, 6 mi. pipe line, reservoir and dam in Cook Brook. $320,000. Engineer, c/o State Water Control Comn., Albany.

S. C., Goldville—See "Industrial Works."

Fla., Melbourne—Election June 9, $75,000 bonds, waterworks plant and distributing system.

Ky., Newport—Plans new steam driven pump, not less than 6 m.g. capacity. $135,000. H. K. Flutmus, Court House, engr.

Ky., Paintsville—Plans filtration plant with high and low service pumping stations, reservoir, etc. $70,000. D. E. Davis and J. N. Chester, Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.

Ind., Anderson—Making plans approximately 14,000 ft. 6 in. c.i. main from 8th and Main Sts. north to river, thence 1¼ mi. along Indiana Ave., east ¼ mi. and south to river, furnishing fire protection for new addition. $80,000. M. H. Douney, city engr.

Minn., Robbinsdale — Making plans waterworks system, artesian wells and several miles of mains. $80,000. J. W. Shaffer & Co., 916 New York Life Bldg., Minneapolis, engrs.

N. D., Carrington—Voted $15,000 bonds constructing new unit at city well; new well to be drilled and pump outfit complete except engine to be installed. C. C. Carnahan, city aud. Engineer not announced.

Mo., Harrisonville — Election June 3, $100,000 bonds waterworks and distribution system.

Tex., Beaumont — Magnolia Petroleum Co., Magnolia Bldg., Dallas, making plans fifteen 25 x 40 ft. pump houses, concrete and steel, for pipe line, also pumping machinery for same. $150,000. Private plans. See item under "Unclassified."

Ark., Blytheville—Consumers Water Co. having preliminary plans prepared extending water distribution system. $15,000 to $20,000. Private plans.

Okla., Avant—Plans new wells, pumps, 4,500 ft. 6 and 8 in. c.i. pipe. $30,000. Holway Engr. Co., Wright Bldg., Tulsa, engrs.

Okla., Heavener—Voted $45,000 bonds dam, pipe line, pumping station, ponds, valves and drainage system. J. M. Page, City Hall, Oklahoma City, engr. Noted Feb. 7.

Ont., Chippawa—Making plans filtration plant. $30,000. A. W. Connor, 1005 Royal Bank Bldg., Toronto, engrs. Prices wanted on all materials.

WATER MAIN—CLEVELAND, OHIO

Following are lowest three bids opened by Dept. Pub. Utilities, Div. of Water, May 7, for furnishing and laying Ingersoll Rd. Main, Baldwin-Fairmount Project, Contr. No. 33-A, (A) Winterbottom-Connelly Co., 2644 Southington Rd., Shaker Heights Village; (B) David Lowensohn, 6795 Wakefield Ave., (awarded contract for lock bar steel pipe); (C) Great Lakes Constr. Co., 2000 Keith Bldg. The unit bids were as follows:

	A	B	C
13,500 cu.yd. excavation	$4.00	$3.75	$4.50
9,400 cu.yd. backfill	1.00	1.15	1.30
20 M. ft. B.M. lumber and wooden sheeting, left in place	30.00	50.00	45.00
995 ton furnishing and laying cast iron, straight, bell and spigot pipe	75.00	78.00	85.00
12 ton furnishing and laying cast iron, bell and spigot, standard fittings, complete	200.00	220.00	275.00
30 ton furnishing and laying cast iron, bell and spigot, special fittings, complete	210.00	220.00	300.00
10 ton furnishing and laying cast iron, flanged fittings, complete	250.00	300.00	315.00
1,875 lin.ft. furnishing and laying 48-in. lock bar or similar steel pipe line, ½ in. thick	....	27.00	28.00
3,525 lin.ft. furnishing and laying 48-in. lock bar or similar steel pipe line, $\frac{7}{16}$ in thick	....	26.00	26.50
1,875 lin.ft. furnishing and laying 48-in. hammer welded or similar steel pipe line, ½-in. thick, (alternate)	21.75	....	....
3,525 lin.ft. furnishing and laying 48-in. hammer welded or similar steel pipe line, $\frac{7}{16}$ in. thick (alternate)	19.60	....	....
1,875 lin.ft. furnishing and laying 50-in. riveted or similar steel pipe line, ½-in. thick (alternate)	23.75	27.00	27.70
3,525 lin.ft. furnishing and laying 50-in. riveted or similar steel pipe line, $\frac{7}{16}$ in. thick (alternate)	22.25	26.00	26.20
Setting one 48-in. check valves, furnished by the City	200.00	400.00	150.00
Setting seven 36-in. gate valves (bell and flanged), furnished by the City	200.00	150.00	60.00
Setting one 30-in. gate valves (flanged), furnished by the City	200.00	125.00	50.00
Setting five 20-in. gate valves (bell and flanged), furnished by the City	150.00	100.00	35.00
Setting two 16-in. gate valves, furnished by the City	100.00	75.00	25.00
Setting one 12-in. gate valves, furnished by the City	50.00	50.00	15.00
Setting one 8-in. gate valve, furnished by the City	40.00	25.00	10.00
Setting one 6-in. gate valves, furnished by the City	30.00	25.00	10.00
Setting three 6-in. automatic air valves, furnished by the City	80.00	25.00	25.00
90 cu.yd. brick masonry	30.00	35.00	40.00
215 cu.yd. concrete masonry	30.00	35.00	30.00
6,500 lb. steel reinforcement and miscellaneous wrought iron and cast iron	.10	.15	.15
100 lin.ft. furnishing and laying 15-in. D.S. vitrified pipe drains	3.00	3.00	2.00
200 lin.ft. furnishing and laying 12-in. vitrified pipe drains	2.50	2.75	1.50
100 lin.ft. furnishing and laying 10-in. vitrified pipe drains	2.50	2.50	1.50
200 lin.ft. furnishing and laying 8-in. vitrified pipe drains	2.00	1.75	1.00
500 lin.ft. furnishing and laying 6-in. vitrified pipe drains	1.50	1.50	.75
300 lin.ft. furnishing and laying 4-in. vitrified pipe drains	1.00	1.25	.50
2,000 sq.ft. furnishing and laying stone flagging	.30	.33	.33
6,000 sq.ft. furnishing and laying concrete sidewalks	.30	.33	.30
6 sets furnishing and setting 2-in. brass drains; and setting 2-in. valves and valve boxes, furnished by the City	50.00	50.00	25.00
150 lin.ft. furnishing and laying 2-in. galvanized iron pipe	2.00	1.60	1.25
15 tons furnishing and delivering surplus cast iron pipe and fittings	50.00	50.00	50.00
Extended totals using lock bar	....	$315,115	$336,710
Extended totals using hammer welded	$278,856	....	....
Extended totals using riveted Steel	291,948	315,115	335,090
Reduction in price for substitution of steel pipe $\frac{7}{16}$ in. thick, for the cast iron pipe	....	21,000	23,000
Extended totals using lock bar throughout	....	*294,115	313,710
Extended totals using riveted steel throughout	....	294,115	312,090

* Awarded contract.

Waterworks (Continued)

BIDS DESIRED

N. Y., New York—June 6, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in White Plains Rd., Morris Lane, Barrett, Bolton, Purdy and East 172nd Sts., Gildersleeve, Husson, Ludlow, Olmstead, Pugsley, Waterbury, Bryant, Fowler, Gleason, Leland, Noble, Wallace, Balcom, Brinsmade, Buttrick, Calhoun, Emerson, Graff, Harding, Hosmer, Huntington, Lawton, McDowell, Miles, Quincy and Robinson Aves., Bronx Boro.

N. J., Pennington — June 2, by Boro Council, 1,510 ft. 6- to 8-in. c.i. mains, hydrants, etc. $20,000. H. L. Laning, 103 South Main St., engr.

N. C., Durham—June 26, by Mayor and Council, dam and impounding reservoir, on Flat River, etc. W. M. Piatt, Durham, engr.; adv. E. N.-R. May 29.

N. C., Weldon — June 3, by W. W. Wiggins, mayor and Bd. Comrs., brick and concrete pumping station, filter house and filter tubs, concrete coagulating basin, concrete reservoir, filter plant equipment, steel wash water tank and tower, brick and concrete auxiliary station and motor driven centrifugal pumps and accessories. G. W. White & Co., Durham, engrs.

La., Coushatta — June 11, by E. T. Archer & Co., 1010 Merchant Bldg., Shreveport, waterworks, sewers and gravel paving.

La., Glenmora—June 17, by J. C. Calhoun, mayor, and Bd. Aldermen, waterworks system. H. A. Mentz, Magnolia, Miss., consult. engr.

Tenn., Lewisburg — June 19, by City Comrs., City Hall, addition to water system. P. H. Norcross, 1404 Candler Bldg., Atlanta, Ga., consult. engr.; adv. E. N.-R. May 22.

O., Garfield Heights (Bedford P. O.)—June 6, by village, mains in various streets. $50,000. R. F. Munz, Town Hall, engr.

Mich., Jackson—July 2, by City Clerk, rein.-con., brick and steel high service pumping station. J. E. Whittaker, city mgr.; adv. E. N.-R. May 29.

Wis., Athens — June 12, by A. A. Kreutzer, village clk., laying 16,970 ft. 6 and 8 in. water mains, 40,000 or 50,000 gal. tank, 90 or 100 ft. tower, pumping station, well house, two 300 g.p.m. centrifugal pumps with motor and engines, one 300 g.p.m. deep well centrifugal vertical shaft pump, 16,020 ft. 6- to 12-in. vitr. sewers, sewage disposal tank, etc. W. G. Kirchoffer, 22 North Carroll St., Madison, engr. Noted Sept. 13.

Wis., Kimberly—June 4, by H. W. Langenberg, village clk., 20,732 ft. 6- to 12-in. c.i. pipe, drilling 600 ft. well, 100,000 gal. rein.-con. reservoir and brick pump house, 100,000 gal. steel tank on 110 ft. steel tower, etc. $100,000. E. A. McMahon, City Hall, Menasha, engr. Noted May 15.

Calif., Hawthorne — June 9, by S. V. Fraser, city clk., 1,350 ft. 12 in., 2,800 ft. 10 in., 4,700 ft. 8 in., 10,500 ft. 6 in., 22,000 ft. 4 in. c.i. pipe, 20,000 lb. 6 in., and 10,000 lb. 4 in. c.i. fittings; two 12 in., two 10 in., eighteen 6 in., thirty 4 in. and six 2 in. gate valves; 3,000 ft. 2 in., 2,000 ft. 1 in. and 7,000 ¾ in. standard screw pipe, etc. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, engrs.

BIDS RECEIVED

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., furnishing two 72 x 72 in., and two 72 x 135 in. sluice gates, from Michigan Valve & Fdry. Co., 3631 Parkinson Ave., Detroit, Mich., $9,920. Noted May 8.

N. J., Avon-By-Sea—Boro Council, May 13, drilling wells, from Sickle Water Production Co., Aurora, Ill., $48 per gal. of 600 gal. Noted May 8.

Pa., Phila.—Bureau Water, Dept. Pub. Wks., City Hall, waterworks improvements, Contr. 668, from Central Fdry. Co., 41 East 42nd St., New York City, $99,560; Contr. 669, from J. J. McHugh, 1617 Race St., $105,665; Contr. 680, from Service Supply Corp., 20th aand Venango Sts., $9,210. Noted May 1.

O., Bexley (Columbus P. O.) — S. W. Roderick, village clk., May 12, from H. E. Miller Contg. Co., 938 South High St., mains as follows: 2,460 ft. 4- to 8-in. mains in Broad St., $6,899, 822 ft. 6 and 8 in. mains in Powell Ave., $2,451, 780 ft. 6 and 8 in. mains in Fair Ave., $2,101, 298 ft. 6 and 8 in. mains in Main St., $869, 1,730 ft. 6 and 8 in. mains in Remington Rd., $3,708, 4,110 ft. 6 and 8 in. mains in Stanwood Rd., $6,521, 3,330 ft. 6 and 8 in. mains in Hartley Rd., $7,124. Noted May 1.

O., Cleveland — Dept. Pub. Utilities, Ridge Rd. main, Sect. 2, from J. Kalill & Jackson Co., 621 Bangor Bldg., $39,222. Noted May 8.

Wis., Milwaukee—Dept. Pub. Wks., 14,143 ft. 6-16 in. c.i. main in various streets, from Wenzel & Henoch, 498 27th St., $20,800.

Wash., Bellingham—City Comrs., high line water main from Lake Whatcom to city, 2,000 ft. 42 in., 500 ft. 36 in. and 500 ft. 30 in. c.i. pipe, from Pacific Lock Koint Pipe Co., Bellingham, $33,250. Engrs. est. $45,000.

CONTRACTS AWARDED

R. I., Providence — Purification works and portions of Scituate Aqueduct, Contr. 30, to Winston Co., 240 Fair St., Kingston, N. Y., $1,799,210, engrs. est. $2,000,000. Other bidders as follows: Wilson & English Constr. Co., 50 Church St., New York, N. Y., $2,118,450, Whiting-Turner Constr. Co., 404 Stewart Bldg., Baltimore, Md., $2,147,440, Simpson Bros. Corp., 77 Summer St., Boston, Mass., $2,153,425 Phillipsburg Constr. Co. 15 North Bway., Yonkers, N. Y. $2,176,800.

N. Y., Whitehall—Bd. Village Trustees, furnishing c.i. pipe, Div. A, hauling and laying pipe, building small concrete dam, earth dam, dike and distributing reservoir, Div. B, to J. J. Fitzpatrick & Sons, Plattsburg, $97,000. Noted Apr. 24.

N. J., Maple Shade — Furnishing 770 tons 4, 6 and 8 in. c.i. pipe to R. D. Wood, 400 Chestnut St., Phila., Pa., laying pipe to W. G. Fitz Co., West Orange, $32,000. Noted Apr. 17.

Md., St. Michaels—Comrs., 100 m.g. tank and demolition of existing tank, to Chicago Bridge & Iron Wks., 30 Church St., New York City, $7,100 and $600 respectively. Noted Apr. 24.

O., Cincinnati — Director Pub. Serv., reservoir Eastern Hills, 3,050 lin.ft. 8- to 30-in. iron pipe 13,000 sq.yd. gunite, 500 sq.yd. cement walks, 18,000 cu.yd. rein.-con., 70,000 cu.yd. earth excav., etc., to M. Penker & Sons, 123 Valencia St., $579,462. Engrs. est. $720,000. Noted May 8.

O., Garfield Heights (Cleveland, P. O.)—Mains in various streets, to D. Rossi-Marceletti Co., 13701 Benwood Ave., Cleveland, $60,000. Noted Apr. 24.

Wis., Tomah—For 460 ft. well and pumping equipment, to G. Nelson, Hayfield, Minn.; 80,000 gal. water tank on 100 ft. steel tower, to Pittsburg-Des Moines Steel Co., 38 South Dearborn St., Chicago, Ill. Engrs. est. $15,000. Noted Feb. 14.

Minn., Marietta — Waterworks system, pumping equipment, one 30,000 gal. tank on 100 ft. tower, 700 lin.ft. 2 in., 4,300 ft. 4 in. and 1,200 ft. 6 in. c.i. pipe, 3,300 lb. special castings, pump house, etc., to Bruce-Bickelhaupt Co., Yankton, S. D.; drilling 10 in. well 500 to 300 ft. deep, to L. Maitland, Marietta. Noted Nov. 1.

Minn., Minneapolis—F. S. Gram, city purch. agt., two 7 ton gas locomotives for Water Dept., to W. H. Ziegler Co., 525 South 5th St., $2,790, each. Noted May 22.

Minn., West Concord—Extending mains, etc., 12,204 lin.ft. c.i. pipe hydrants, valves, etc., to W. C. Fraser & Son, Minnesota Transfer State Bank Bldg., St. Paul, $20,480. Noted Apr. 24.

Kan., Coffeyville—City, 2,000 kw. steam turbo generator and 1 surface condenser, to Westinghouse Electric Co., Orear-Leslie Bldg., Kansas City, Mo., $48,477. Noted Apr. 1.

Neb., Pender—For 5,450 lin.ft. 4 and 6 in. pipe, 50,000 gallon reservoir, 2 motor driven centrifugal pumps, etc., to C. Robeck Co., 1537 Park Ave., $14,821. Noted Mar. 27.

Mo., St. Louis—Waterworks intake and concrete engine pits, incl. 64,000 cu.yd. excav., 2,150 tons steel sheet piling, 24,370 cu.yd. rein.-con., 24 sluice gates, etc., to Frazier-Davis Constr. Co., 1170 Arcade Bldg., $1,068,228. Engrs. est. $1,125,000. Noted May 22.

Tex., Ranger—Concrete filtration plant, to Bordeau Bros., Ranger, $30,000.

Ore., Eugene—City, 420,000 gal. earth bank cement lined reservoir, Fairmount Heights, to G. Pyle, Eugene, $17,375. Engrs. est. $25,000.

Wash., Seattle—Bd. Pub. Wks., mains in North 42nd St., et al., LID 3189, to F. N. Badolato, Box 561, $64,920. Engrs. est. $64,196. Noted May 15.

Sewers

PROPOSED WORK

Mass., Quincy—Plans election to vote on $40,000 bonds sewers extensions in various streets. P. F. O'Brien, city engr.

Mass., Roxbury (Boston, P. O.)—Pub. Wks. Dept., City Hall, Boston, plans sewers and watermains in Harrishof St., here. J. A. Rourke, Boston, comr.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., rejected bids May 5, sewers in Sandol St. Will readvertise. Noted May 15.

Va., Richmond—City Council approved $100,000 bond issue for sewers at Hammond Pl., near here.

S. C., Goldville—See "Industrial Works."

Fla., Melbourne—Election June 9, $30,000 bonds, sewerage disposal system.

O., North Canton—Stark Co. (Canton) plans sanitary sewerage system between here and Canton. $200,000. Engineer not selected.

Mich., Detroit — Making plans 789 ft. 12- to 15-in. crock in Lateral 4062, 996 ft. 15- to 24-in. crock in Lateral 4126, 470 ft. 12- to 25-in. crock in Lateral 4127, 6,377 ft. 12- to 24-in. crock in Lateral 4128, 477 ft 12- to 15-in. crock in Lateral 4135, 352 ft. 12 in. crock in Lateral 4138, 1,816 ft. 10 in. crock in Lateral 4139, 1,165 ft. 12- to 15-in. crock in Lateral 4141, 625 ft. 12- to 15-in. crock in Lateral 4112, 1,148 ft. 12- to 18-in. crock, and 3- to 4-ft. cylinder in Lateral 4079. G. Jerome, city engr.

Mich., Royal Oak (branch of Detroit)—Making plans lateral sewers, No. 30, 1,789 ft., No. 31, 6,331 ft., 8 in. vitr. crock, etc. $25,000. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Ill., Lake Zurich—Soon takes bids disposal plant with either sand or stone filters, $20,000, also 1,500 ft. sewer extensions. J. Anderson Co., Inc., Lake Forest, engrs. Noted Feb. 28.

Minn., Robbinsdale — Making plans sewerage system. $100,000. J. W. Shaffer & Co., 916 New York Life Bldg., Minneapolis, engr.

Tex., Dallas—A. G. McAdams, Magnolia Bldg., had plans prepared 2 mi. 12 and 15 in. sanitary sewer in Cedar Crest and Trinity Heights. $28,000. Koch & Fowler, Central Bank Bldg., engrs.

Tex., Merkel—Voted $55,000 bonds, complete sewerage system. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs. Noted May 1.

Wash., Centralia—Making plans extending sewerage system, business section. $100,000. N. W. Avery, city engr. Noted May 1.

Ont., St. Thomas—Making plans disposal plant. $80,000. W. C. Miller, city engr.

Ont., Windsor—Having plans prepared and takes bids in June trunk sewers. $175,000. E. Brian, city engr. Prices wanted on all materials.

BIDS DESIRED

Mass., Framingham—See "Streets and Roads."

N. Y., Brooklyn—June 4, by E. Riegelman, boro pres., Boro Hall, repairing relief sewers in Colonial Rd., Mansfield Pl., 65th, 32nd and 68th Sts., 9th, 7th, 12th and Greene Aves.

N. J., Manasquan — June 3, by L. C. Riddle, mayor and Council, extending sewers in various streets. A. B. Appleget, boro clk.; adv. E. N.-R. May 29.

N. C., Sanford—June 5, by W. H. Fitts, mayor and Bd. Aldermen, 21 x 41 x 33 ft., rein.-con. Imhoff tank, rein.-con. dosing tank, 33 ft. diameter, sand filters and sludge bed aggregating one acre. G. C. White & Co., Durham, engrs.

La., Coushatta—See "Waterworks."

Miss., Iverness—June 12, by W. M. Cole, and Bd. Aldermen, sewerage system. H. A. Mentz, consult. engr.

O., Cleveland Heights (Warrensville, P. O.)—June 2, storm and sanitary sewer in Kirkwood Rd. To exceed $25,000. F. A. Pease Engr. Co., Marshall Bldg., Cleveland, engrs.

O., Columbus—June 3, by W. H. Duffy, dir. Pub. Serv., combined sewer in alley north 17th Ave., 3,581 ft. 6- to 24-in. pipe, etc., $10,818; sanitary sewer in Iswald Rd., 1,900 ft. 6- and 8-in. pipe, etc., $4,206.

O., Garfield Heights (Bedford P. O.)—June 6, by village, sewers in various streets. R. F. Munz, Town Hall, engr.

Mich., Royal Oak — June 10, by City Clerk, sewage pumping station and disposal works, 2 m.g. capacity. Hoad, Decker, Shoecraft & Drury, Ann Arbor, consult. engrs.; adv. E. N.-R. May 29.

Wis., Athens—See "Waterworks."

BIDS RECEIVED

N. J., Orange—G. C. Bergen, purch. agt. Essex Co., Court House, Newark, 5,710 ft. 12- to 24-in. rein.-con. storm sewers in Scotland St., from Luce & Tozzi, 321 Central Ave., $25,448. Noted May 15.

Mich., Detroit—Dept. Pub. Wks., 765 ft. 5 ft. 3 in. cylinder Joann Ave. Arm of Joann Ave. Extension Sewer, from Anderson & Campbell, Detroit, $19,801; 2,757 ft. 5 and 6 ft. cylinder Harper Ave. Arm of Ashland Ave. Sewer, from W. Blanck Co., 40 Seven Mile Rd., $53,916.

Wash., Seattle—Bd. Pub. Wks., sewers (a) clay (b) concrete, in Oregon St. et al., from H. Pederson, Alaska Bldg., 8220 ft. 8 in. (a) $2.25 (b) $2.25, 5,231 ft. 10 in. (a) $2.40 (b) $2.40, 2,672 ft. 12 in. (a) $2.65 (b) $2.65, 4,357 ft. 15 in. (a) $3.75 (b) $3.75, 1,200 ft. 18 in. (a) $3.60 (b) $3.60, 1,230 ft. 24 in. (a) $5.10 (b) $5, 2,340 ft. 30 in. (a) $7.25, (b) $7.10, 1,220 ft. 36 in. brick $17.95, 1,055 ft. 34 in. rein.-con. $19.90, 2,090 ft. 48 in. rein.-con. $22.25, 2,770 ft. 72 in. rein.-con. $28.80, 7 flush tanks at $200 each, total $362,552 for clay and $362,078 for concrete.

CONTRACTS AWARDED

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Kennedy & Smith Inc., 93 Amity St., Flushing, sewer in 7th Ave., $2,163; to J. Gallo, 203 Division St., Brooklyn, sewer in Clermont Ave., $7,830; to J. F. Clancy, 460 Lookwood St., Astoria, sewer in Justice St. $5,251, Lake St. $1,756, 91st Ave. $1,193. Noted May 15.

N. J., Oaklyn—Laying 2½ mi. 8, 10 and 12 in. terra cotta sanitary sewers, to Penna. Eng. & Constr. Co., Real Estate Trust Bldg., Phila., $42,000. Noted May 22.

Ga., Bainbridge—Constructing 4 mi. 3- to 12-in., and 2 mi. 15- to 36-in. sewers, to Dysard Constr. Co., Austell Bldg., Atlanta, $61,170. Noted Apr. 24.

O., Cleveland—For 980 ft. 5 ft. concrete sewer in Ridge Rd., to Joseph, Kalill & Jackson, Bangor Bldg., $29,351; 1,045 ft. 12- to 24-in. vitr. tile sewer in East Blvd., to C. Jackson, 1318 East 84th St., $13,607; 1,450 ft. 12- to 24-in. vitr. tile sewer in East 143rd St., to Kassouff & Co., 3182 West 25th St., $12,169; sewers in Highland Rd. and Thrush Ave., to G. F. Randall, Lorain, $13,716 and $4,667 respectively; in Abell Ave., 2 sections, to Hanna & Michael, 2457 East 55th St., $14,946; in Kazimer Ave. to W. McDowell & Son, 10309 Miles Ave., $14,546; in Rosewood Ave., to S. N. Khury, 3511 Walton Ave., $4,668. Noted May 22.

Mich., Royal Oak—R. B. Fleming, city clk., 6,034 ft. sanitary sewer in Lateral 24, to Hammen & Co., 4612 Woodward Ave., Detroit, $30,992; 5,189 ft. in Lateral 28, to Liberty Constr. Co., 1026 Dime Savings Bank Bldg., $31,917; 5,920 ft. in Lateral 29, to J. DePonio, Royal Oak, $13,000. Noted Apr. 24.

Neb., Omaha—City Council to Omaha Sewer Constr. Co., 301 Karbach Block, sewers in Dist. 863, 1,500 lin.ft. 8 in., 2,500 lin.ft. 12 in., 1,630 lin.ft. 15 in., 440 ft. 18 in., 440 ft. 24 in., 360 lin.ft. 27 in. vitr. clay pipe, 1,090 ft. 3- to 4-ft. 6 in. rein.-con. pipe, etc., $21,932, Dist. 850, 1,295 lin.ft. 8 and 12 in. pipe $1,849, Dist. 848, 660 lin.ft. 12 in. vitr. clay pipe $1,055; to A. Dobson Co., 809 1st Natl. Bank Bldg., Lincoln, Dist. 843, 4,430 lin.ft. 8- to 24-in. vitr. clay pipe, 550 lin.ft. 30 and 36 in. rein.-con. pipe, $10,972, Dist. 856, 2,370 lin.ft. 8 in., 1,000 lin.ft. 10 in., 2,740 lin.ft. 12 in., etc., vitr. clay pipe, 995 lin. ft. 54 and 60 in. rein.-con. pipe, $23,321; to J. P. Connelly, World Herald Bldg., Dist. 855, 1,250 lin.ft. 8 in., 4,040 lin.ft. 12 in., 540 lin.ft. 15 in., 390 lin.ft. 18 in., 350 lin.ft. 21 in., 1,240 lin.ft. 24 in., 630 lin.ft. 27 in., vitr. clay pipe, 375 lin.ft. 36 and 42 in. 2-ring brick sewer, $20,662; to J. Jensen, Omaha, Dist. 849, 1,458 lin.ft. 8- to 18-in. vitr. clay pipe, $2,537; to G. Carlson, Omaha, Dist. 846, 945 lin.ft. 8- to 15-in. vitr. clay pipe, $1,433, Dist. 859, 615 lin.ft. 15 in. vitr. clay pipe, $1,278, Dist. 858, 525 lin.ft. 8 and 15 in. vitr. clay pipe, $890; to J. S. Harrington, 3705 North 18th St., Dist. 852, 1,240 lin.ft. 8- to 15-in. vitr. clay pipe, $1,910, Dist. 847, 475 lin.ft. 12 in. vitr. clay pipe, $604, Dist. 862, 1,560 lin.ft. 12 and 15 in. vitr. clay pipe, $2,294, Dist. 861, 780 lin. ft. 8 and 18 in. vitr. clay pipe, $1,273, Dist. 860, 1,135 lin.ft. 8 and 12 in. vitr. clay pipe, $1,521, Dist. 851, 942 lin.ft. 8 and 12 in. vitr. clay pipe, $1,243. Noted Apr. 24.

Neb., Omaha—Vitr. clay sewers in Dist. No. 854, to Jones Eng. & Constr. Co., 315 Courtney Bldg., $341,632. Noted Apr. 17.

Mo., Milan — Improving Sanitary Sewer Dist. 2, incl. 3⅞ mi. 6, 8 and 10 in. vitr. clay sewer, 1,000 ft. 4 in. c.i. pipe for ejector station and disposal plant, etc., greater part of trenching 4-6 ft. deep, to Gjellefold-Chapman Constr. Co., Forest City, Ia.

Ark., Little Rock — See "Streets and Roads."

Tex., Marshall—Will lay 5 mi. 6, 8 and 10 in. sewers, by day labor. $25,000. M. Ramsay, city engr. Noted May 15.

Tex., Waco—For 4,500 ft. 6 and 8 in. sewer pipe, to Texarkana Pipe Wks., Texarkana, $6,000. Noted Jan. 10.

Wash., Hoquiam — Sewers in East Hoquiam Dist., to Holmlund & Forsberg, Hoquiam, $36,517 for concrete. Noted May 1.

Ont., Fort Erie—For 6 mi. sewers in various streets, to F. F. Fry Co., 43 Scott St., Toronto, $126,000.

Waste Disposal

BIDS DESIRED

Pa., Sewickley—June 9, at office J. C. Hiteshew, boro mgr., garbage incinerator; adv. E. N.-R. May 29.

CONTRACTS AWARDED

N. Y., Rockaway Beach (Ind. Sta. Far Rockaway)—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., Long Island City, constructing and completing building and runway furnaces, appurtenances and chimney of Rockaway Beach Destructor, here, to Hudson City Eng. & Constr. Co., 25 Hunterspoint Ave., Long Island City, $298,000. Noted May 8.

Ill., Joliet—Garbage incinerator, 35 tons daily capacity, to Joseph Goder Chicago Incinerating Co., 320 East North Water St., Chicago, $42,500.

Bridges

PROPOSED WORK

Illinois—Dept. Pub. Wks. and Buildings. Div. Highways, Springfield, rejected bids 2 concrete girders on State Route 23, Sect. 4B, LaSalle Co. Noted Feb. 21.

Missouri — State Hy. Dept., Jefferson City, plans 80 ft. steel truss and five 30 ft. rein.-con. deck girder spans, etc., over Castile Creek, Clinton Co.; 60 ft. steel truss and five 20 ft. rein.-con. slab spans, etc., over Third Fork Platte River De Kalb Co.; 90 ft. steel truss and six 20 ft. rein.-con. slab spans, etc., over Ramsey Creek Diversion Channel, Scott Co.; two 10 ft. rein.-con. slab spans, etc., over stream, St. Clair Co.; 80 ft. steel truss span, etc., over Cooper Creek, Henry Co.; 70 ft. steel truss and seven 20 ft. rein.-con. slab spans, etc., over Cain Creek, Butler Co.; two 12 ft. rein.-con. slab spans, etc., over stream, also 100 ft. steel truss and two 35 ft. rein.-con. deck girder spans, etc., over Joachim Creek, Jefferson Co.; three 40 ft. rein.-con. deck girder spans over Pin Oak Branch and 30 ft. rein.-con. deck girder span, etc., over Wiggins Creek, Gasconade Co.; two 20 ft. rein.-con. slab spans, etc., over Wet Fork Creek and two 20 ft. rein.-con. slab spans over Wolf Creek, Wayne Co.; four 16 ft. rein.-con. slab spans, etc., over Dry Creek, St. Francis Co.; 40 ft. rein.-con. deck girder span, etc., over Honey Creek, and 40 ft. rein.-con. deck girder span, etc., over Little Honey Creek, Springfield Co.; twenty-two 25 ft. I-beam spans, etc., over overflow of Grand River and Shoal Creek, Livingston Co. B. H. Piepmeier, state highway engr.

Missouri — State Hy. Dept., Jefferson City, rejected bids Apr. 22, three 20 ft. rein.-con. slab spans, etc., over Long Branch, five 20 ft. rein.-con. slab spans, etc., over overflow Lamine River, both Cooper Co.; 80 ft. steel truss span, etc., over Niangua Creek, and 25 ft. rein.-con. deck girder span, etc., over North View Branch, both Webster Co. Noted May 8 and 15.

Calif., Sacramento—Sacramento Co. rejected bids, bridge over Paintersville Slough. Noted May 22.

Ont., Georgetown—Esquesing Twp. plans bridge, here. $50,000. R. Smith, Oakville. engr.

BIDS DESIRED

S. C., Saluda—See "Streets and Roads."

Florida—June 10, by State Rd. Dept., Tallahassee, 705 ft. and 60 ft. timber bridges, Project 534, Rd. 24, Brevard Co.; 405 ft., 45 ft. and 30 ft. timber bridges. Project 601, Rd. 4, St. Johns Co. J. L. Cresap, state highway engr.

Ind., Muncie—June 3, by Comrs. Delaware Co., 6 concrete and steel bridges. $74,000.

Bridges (Continued)

Ill., Perryville—June 9, at Court House, Rockford, Mulford Bridge in Cherry Valley Twp., 1¾ mi. from here, seven 65 ft. spans, 18 ft. roadway, 204,500 lb. reinforcing, 1,780 lb. structural steel, etc. $53,640. A. R. Carter, Rockford, co. supt. highways. G. F. Burch, Div. Highways, Springfield, bridge engr.

Oklahoma—See "Streets and Roads."

Mont., Glendive—June 10, by State Highway Comn., Helena, six 216 ft. steel spans on 6 concrete piers and one abutment pier, concrete with concrete deck, 20 ft. roadway, etc., over Yellowstone River, Federal Aid Project 213, Dawson Co., here. $275,000. Noted Apr. 24, under "Montana."

BIDS RECEIVED

Maine—State Hy. Comn., Augusta, Emerson Bridge, one 60 ft. concrete clear span, over Missalonsku stream, in Waterville, from Greene & Wilson, Waterville, $24,515; Thomas Pond Bridge, one 15 ft. 3 in. concrete slab and concrete abutment over outlet of Thomas Pond in, Casco and Raymond, also one 14 ft. concrete span bridge over Jordan River, in Raymond, from E. A. Dekin, Howland, $1,965 and $11,109 respectively. Noted May 15.

Kentucky—State Hy. Dept., Frankfort, repairing bridges, from Henley Constr. Co., Lewisville, Ind., 150 ft. bridge over Cumberland River, Bell Co., 97,800 lb. structural steel, 30,000 ft. creosoted timber, 580 sq.yd. creosoted wood blocks, 4,080 lb. reinforcing, $13,283, 540 ft. Brooklyn Bridge over Kentucky River, Jassamine Co., 48,900 lb. structural steel, 67,500 ft. creosoted timber, $12,923, bridge over Rolling Fork River near New Haven, Larue Co., 62,500 lb. structural steel, 17,600 ft. creosoted timber, $6,609.

Minn., St. Paul—Ramsey Co., May 19, 892 ft., temporary bridge over Mississippi River at Jackson St., 24 ft. roadway, one 6 ft. sidewalk, all timber except one 92 ft. through plate girder lift span, from W. M. Murphy & Son, 342 Endicott Bldg., $59,254. Noted May 8.

Tex., Corpus Christi—City and Nueces Co. Navigation Dist. 1, combination railroad and highway bridge incl. single leaf bascule and concrete approach spans, etc., across Bay, from Wisconsin Bridge & Iron Co., North Milwaukee St., Milwaukee, $400,000. Noted Apr. 10.

Colorado—State Hy. Dept., Denver, 2,155 ft. bridge over Arkansas River about 6 mi. north Salida, Federal Aid Project 248-A, Chaffee Co., from H. S. Croker, Tramway Bldg., Denver, $27,900. Noted May 8.

Calif., Pasadena — Rein.-con. bridge, Arroyo Seco, Linda Vista Ave., from P. H. Ehlers, 1959 North Raymond Ave., $57,700. Noted May 15.

Calif., Santa Barbara — Supervs. Santa Barbara Co. taking bids and open same about June 3, 5 rein.-con. spans to bridge over Sisquoc River. $30,000. O. H. O'Neill, co. surv.

CONTRACTS AWARDED

Vermont—State Hy. Dept., Montpelier, one 160 ft. steel span bridge over Hoosic River, Federal Aid Project 53, in Pownal, to Jordan, Spooner Corp., 443-445 Bway., Albany, N. Y., $25,352; one 80 ft. steel span bridge, Federal Aid Project 62A, in Middlebury, to Byron, Forman & Riggs, Troy, N. Y., $18,370. Noted May 1.

N. Y. Buffalo—Substructure for Stevenson St. bridge to J. Johnson Constr. Co., 765 Abbott Rd., $37,200, superstructure, to Peckham Constr. Co., Crosby Bldg., $20,900.

Pa., Martinsburg — See "Streets and Roads."

Fla., Inverness — See "Streets and Roads."

Alabama—State Hy. Comn., Montgomery, various concrete I beam bridges, along "Gainesville Detour" road from Eutau to Gainsville, Greene Co., to Lamb & McLemore, La Fayette, $66,060. Engrs. est. $67,000.

Illinois—See "Streets and Roads."

Ia., Creston—Bd. Supervs. Union Co., bridges on Projects 42 and 265, one 90 ft. pony truss, to Lundgren-Reis Co., 65 College St., Des Moines, $16,448; two span, 70 ft. pony truss, to Wicks Eng. & Constr. Co., 418 Polk Blvd., Des Moines, $21,194; 7 box culverts, to J. W. Rusk, Afton, $3,500.

Kan., Oskaloosa—Jefferson Co. 220 ft. steel truss span bridge ½ mi. from Perry, Federal Aid Project 175-A, to Midland Bridge Co., 401 Railway Exchange Bldg., Kansas City, Mo., $48,163. Engrs. est. $53,620. Noted Feb. 28.

South Dakota—State Hy. Dept., Pierre, **(F. A. P. means Federal Aid Project)**, to Federal Bridge Co., 1002 B. T. Bldg., Des Moines, Ia., Bridge on F. A. P. 162 A, Haakon Co., 72,651 lb. reinforcing and 167,766 lb. structural steel, $30,362, bridge on F. A. P. 160, Brookings and Moody Counties, 33,841 lb. reinforcing and 125,967 lb. structural steel, $19,219, bridge on F. A. P. 158 A, Clay Co., 25,916 lb. reinforcing and 111,020 lb. structural steel, $15,001, bridge on F. A. P. 177 A, Pennington Co., 103,064 lb. reinforcing and 78,515 lb. structural steel, $36,971; to H. Pickus Co., 309 Mass Bldg., Sioux City, Ia., bridge on F. A. P. 170 D, Minnehaha Co., 4,407 lb. reinforcing and 21,063 lb. structural steel, $2,716, culverts on F. A. P. 173 B, Faulk Co., 39,381 lb. reinforcing, $15,076; Schreiber Eng. Co., Watertown, bridge on F. A. P. 179 Deuel Co., 8,768 lb. reinforcing and 39,523 lb. structural steel, $5,286, bridge on F. A. P. 95 B, Faulk Co., 4,000 lb. reinforcing, and 14,745 lb. structural steel, $2,323, bridge on F. A. P. 183 A, Beadle Co., 61,652 lb. reinforcing and 142,150 lb. structural steel, $27,000; to Pioneer Bridge Co., Mitchell, bridge on F. A. P. 164, Brooklings-Moody Counties, 82,915 lb. reinforcing and 189,513 lb. structural steel, $36,445; to Kinnally & Menge, Huron, culverts on F. A. P. 172 C, Walworth Co., 25,053 lb. reinforcing, $11,267. Noted May 8.

Idaho and Nevada—See "Railways."

FILTRATION PLANT—SPRINGFIELD, MASS

Following are lowest three bids opened by Bd. of Water Comrs., May 5, for addition to filtration plant at Little River Water Supply: (A) P. T. Cox Constr. Co., Inc., 154 Nassau St., New York (awarded contract); (B) Simpson Bros. Corp., 11 Summer St., Boston; (C) E. P. Lupfer Corp., 594 Ellicott Sq., Buffalo. The unit bids were as follows:

	A	B	C
43,000 cu.yd. earth excavation	$1.00	$0.94	$1.40
3,000 cu.yd. trench excavation	2.00	1.88	3.00
2,000 cu.yd. rock excavation	4.50	5.00	5.00
3,000 cu.yd. borrowed excavation	.80	3.76	1.25
27,000 cu.yd. rolled embankment	.45	2.00	.30
25,000 cu.yd. general fill	.20	.75	.90
6 acres seeding	450.00	250.00	150.00
600 cu.yd. reinforced-concrete in reservoir	45.00	30.90	30.00
2,100 cu.yd. reinforced-concrete in sand bins and other structures	29.80	23.50	30.00
4,450 cu.yd. concrete in piers and vaulting	27.00	28.40	30.00
6800 cu. yd. concrete in floors, walls and other structures	18.00	15.10	16.75
200,000 lb. steel reinforcing	.06	.06¼	.06
4,000 cu.yd. filter gravel	3.60	2.82	2.00
16,000 cu.yd. filter sand	3.75	2.81	3.50
Vitrified pipe drains (lump sum)	4,200.00	5,630.00	6,000.00
Split tile drains (lump sum)	5,500.00	5,640.00	4,400.00
Furnishing, laying and connecting steel pipes (lump sum)	26,500.00	16,830.00	30,000.00
260 tons placing c.i. pipe, iron pipe, gates, etc	50.00	26.00	50.00
Sand washers and piping (lump sum)	18,000.00	15,490.00	15,000.00
Building complete (lump sum)	14,000.00	20,030.00	10,000.00
Wiring filters (lump sum)	1,300.00	2,280.00	850.00
15,000 lb. copper flexible joints	.25	.45	.40
Appurtenances (lump sum)	6,500.00	6,770.00	4,200.00
Extended totals	$591,530	$593,460	$608,300

SEWERS AND SEWAGE DISPOSAL PLANT—STROUD, OKLA.

Following are lowest three bids opened by city, Jan. 14, for installing main sanitary sewers and sewage disposal plant, (A) H. L. Cannady Co., Tulsa, (awarded contract); (B) Municipal Excavator Co., 200 East Main St., Oklahoma City; (C) Sherman Machine & Iron Wks., 18-32 East Main St., Oklahoma City. The unit bids were as follows:

	A	*B*	*C*
Sewage disposal plant (lump sum)	$14,000.00	$18,500.00	$14,500.00
899 cu.yd. earth excavation (disposal plant)	.70	.50	.75
234 cu.yd. loose rock excavation (disposal plant)	1.00	1.50	1.25
156 cu.yd. solid rock excavation (disposal plant)	5.00	3.00	2.50
1,430 ft. 8 in. vitrified sewer pipe	.45	.48	.60
3,820 ft. 10 in. vitrified sewer pipe	.60	.64	.78
5,140 ft. 12 in. vitrified sewer pipe	.77	.82	.97
550 ft. 15 in. vitrified sewer pipe	1.00	1.14	1.35
80 ft. 10 in. ci. pipe	2.50	2.50	3.60
1,170 ft. excavation, 0-4 ft. cut	.28	.18	.25
3,835 ft. excavation, 4-6 ft. cut	.33	.21	.35
1,990 ft. excavation, 6-8 ft. cut	.42	.31	.45
925 ft. excavation, 8-10 ft. cut	.55	.48	.55
1,355 ft. excavation, 10-12 ft. cut	.90	.78	.65
55 ft. excavation, 12-14 ft. cut	1.20	.86	.91
225 ft. excavation, 14-16 ft. cut	1.40	1.17	1.35
335 ft. excavation, 16-18 ft. cut	1.70	1.40	1.60
615 ft. excavation, 18-20 ft. cut	2.00	1.72	2.35
215 ft. excavation, 20-22 ft. cut	2.25	2.20	2.85
32—6 ft. manholes	60.00	60.00	50.00
69 ft. extra depth manholes	3.50	7.00	6.25
2 combined manholes and flushtanks	150.00	110.00	100.00
2,000 cu.yd. earth fill	.25	.40	.38
2,594 cu.yd. loose rock excavation in trench	1.00	1.40	1.90
1,340 cu.yd. solid rock excavation in trench	5.00	2.50	4.00
10 cu.yd. plain concrete	25.00	20.00	18.00
833.3 lb. reinforcing steel	.06	.06	.07
400 ft. ¾ in. galvanized iron pipe	.35	.40	.35
Extended totals	$42,804	$44,189	$46,236
Engineering, etc., 5%	2,140	2,209	2,312
Extended grand totals	44,944	46,398	48,548

Following are lowest three bids opened by city, Jan. 14, for installing sanitary sewers in Dist. No. 1, (A) H. L. Cannady Co., Tulsa (awarded contract); (B) Gibson & Mitchell, Pauls Valley; (C) Municial Excavator Co., 200 East Main St., Oklahoma City. The unit bids were as follows:

	A	*B*	*C*
2,210 ft. 6 in. vitrified pipe	$0.30	$0.31	$0.68
16,500 ft. 8 in. vitrified pipe	.50	.51	.78
3,940 ft. 10 in. vitrified pipe	.65	.70	.90
48 ft. 8 in. cast iron pipe	2.25	2.33	2.50
70–6x6 wyes	1.00	1.00	1.10
380—6x8 wyes	1.15	1.10	1.70
120—6x10 wyes	1.30	1.20	2.50
400 ft. excavation 0-4 ft. cut	.35	.32	.40
5,140 ft. excavation 4-6 ft. cut	.37	.44	.44
9,420 ft. excavation 6-8 ft. cut	.45	.55	.52
7,225 ft. excavation 8-10 ft. cut	.62	.75	.65
415 ft. excavation 10-12 ft. cut	1.00	1.18	.80
53—6 ft. manholes	60.00	65.00	65.00
69 ft. extra depth manholes	5.00	6.00	8.00
3 flushtanks	130.00	130.00	110.00
600 ft. ¾ in. galvanized iron pipe	.40	.32	.50
1,675 cu.yd. loose rock excavation in trench	1.20	2.50	1.40
2,640 cu.yd. solid rock excavation in trench	6.00	4.00	2.75
135 cu.yd. earth fill	.60	.50	.50
3 cu.yd. plain concrete	28.00	20.00	25.00
300 lb. reinforcing steel	.07	.05	.07
Extended totals	$47,313	$47,114	$47,507
Engineering, etc., 5%	2,366	2,356	2,375
Extended grand totals	49,679	49,469	49,883

Dams

PROPOSED WORK

N. Y., Ballston Spa—See "Waterworks."

N. C., Durham—See "Waterworks."

CONTRACTS AWARDED

Tex., Denison—Repairing Waterloo Dam, 225,000 cu.yd. earth excav., 12,000 ft. sheet piling, to Brooks Constr. Co., Andrews Bldg., Dallas, $30,000.

Railways

PROPOSED WORK

Texas—Texas Electric Ry. Co., Interurban Bldg., Dallas, plans extending East Waco St. car lines to Bellmeade Shops of Missouri, Kansas & Texas R.R. $50,000. P. R. Brown, Interurban Bldg., ch. engr.

Quebec—Montreal Tramways Co., Craig St. W., Montreal, plans to lay 1.497 mi. 115 lb. rails in Shakespeare Rd. from Cote de Neiges. $42,000. P. A. N. Seurot, ch. engr.

CONTRACTS AWARDED

Missouri—Bd. Pub. Serv., 208 City Hall, St. Louis, standard gauge railroad, etc., at Howards Bend, St. Louis Co., to Industrial Track Constr. Co., Granite Bldg., St. Louis, $26,562. Noted May 22.

Idaho and Nevada—Northern Pacific Ry., Railway Bldg., St. Paul, Minn., and Oregon Short Line R.R., Deseret News Bldg., Salt Lake City, Utah, 100 mi. cutoff from Rogerson, Idaho, to Wells, Nev., incl. sidings, roadbed, heavy grading, and 2 or 3 large bridges, to Utah Constr. Co., Phelan Bldg., San Francisco, Calif., $3,500,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Melbourne—See "Unclassified under Park, etc."

Neb., Omaha—Park Dept. received no bids May 13, excavating at Levi Carter Park. Will re-advertise. Noted May 8.

Ind., Peru — Peru Flood Control Dist. having preliminary plans prepared earthwork on levee, concrete walls, drainage ditches, etc. $350,000. T. N. Jacob, Railway Exch. Bldg., St. Louis, Mo., engr.

Ind., Princeton—Patoka-Wabash Levee Dist., Peru, having preliminary plans prepared, 7,000,000 cu.yd. levee and ditch work for drag line, 2 pumping stations with three 36 in. centrifugal pumps and oil engines. $1,250,000. T. N. Jacob, Railway Exch. Bldg., St. Louis, Mo., engr.

Tex., Sierra Blanca—Hudspeth Co. Conservation and Reclamation Dist. 1, voted $700,000 bonds new construction. S. R. Mitchell, Sierra Blanca, engr.

BIDS DESIRED

New York—June 11, by Salt Water Bays Comn., at office State Engineer, Telephone Bldg.. Albany, excavating channel in Shinnecock-Peconic Canal and Peconic Bay, Suffolk Co. D. B. LaDu, chn. adv. E. N.-R. May 29.

Miss., Corinth—June 9, by E. B. Mitchell, clk. Alcorn Co., constructing 2.17 mi. Parmitchie D. D. 2, 8 ft. bottom width, 1 to ½ ft. slope, 7.5 ft. depth, 30,000 cu. yd. excav., 6 acres clearing; 6 mi. Hatchie D. D. 2, 10 ft. bottom width, 1 to ½ ft. slope, 9 ft. depth, 150,000 cu.yd. excav., 50 acres clearing, 7 mi. haul.

Tenn., Newbern—June 14, by Bd. Dirs. Cypress Creek D. D., Dyer Co., 1 main canal and 1 lateral totaling 4 mi., 6 mi. southeast of here. L. O. Brayton, Dyersburg, engr.

Wash., Vancouver — June 7, by Bd. Comrs. Clarke Co., dikes, dams, ditch excav., clearing, pumping plant machinery, etc., in Diking Impvt. Dist. 3. $520,000. W. G. Brown, Yeon Bldg., Portland, Ore., engr. Noted May 1.

BIDS RECEIVED

N. Y., Cohoes—R. K. Fuller, comr. Canals & Waterway, 55 Lancaster St., Albany, excavating tail race, etc., for Crescent power house, on Mohawk River, near here, from Dunbar & Sullivan Dredging Co., Albany, $27,244. Engrs. est. $27,600. Noted Apr. 24, under "New York."

Tex., Corpus Christi—City and Nueces Co. Navigation Dist. 1, dredging for deep water channel, 3,100,000 yd. earth excav., from Reynolds Dredging Co., New Orleans, La., $516,400. Noted Apr. 10.

CONTRACTS AWARDED

Mass., Boston—Dept. of Pub. Wks., Div. Waterways and Public Lands, State House, dredging about 28,500 cu.yd. material from areas north of steamboat wharf in Nantucket Harbor, to H. F. Gerrish, 101 Tremont Bldg., Boston, at $0.67 yd. soft deposit, and $35 yd. boulders. Engr. est. $26,000.

N. J., Camden—Dredging in front of Municipal Pier at Spruce St. to depth of 25 ft., 25,000 to 30,000 cu.yd. excav., to Amer. Dredging Co., Mariner & Merchants Bldg., Phila., $0.30 per cu.yd.

Fla., West Palm Beach—Pahokee D. D., H. Vivian, secy., Pahokee, canals to drain 20,000 acres, here, to N. A. Campbell, West Palm Beach, $100,000.

La., Lake Charles — Police Jury Calcasieu Parish, Court House, constructing Calcasieu Parish Navigation Channel, 4.83 mi. Sect. 4, from Sta. 322 to 577, 4,400,000 cu.yd. excav., and 2.26 mi. Sect. 6 from Sta. 58 to 118, 2,100,000 cu.yd. excav., to United Dredging Co., 233 Bway., New York City, $399,600 and $208,740 respectively.

Streets and Roads

PROPOSED WORK

Mass., Boston—Park Dept., plans improving Franklin Park and constructing driveway from Forest Hills St. to Columbia Rd. $53,000.

N. Y., Cortland—Bd. Pub. Wks. plans paving Bway., $9,625, South Church St., $21,450, and Evergreen St. $13,920.

N. Y., St. Johnsville—Village Bd. had plans prepared rein.-con. paving Averill, Washington, Union, Monroe and East Liberty Sts. $52,000. O. Williams, village pres.

N. Y., Watertown — Common Council having plans prepared concrete paving East Main St. To exceed $25,000. P. B. Sutton, city engr.

Fla., Moore Haven—Glades Co. voted $252,000 bonds constructing highway from Hendry Co. line through Clewiston to Highlands Co. line, Lake Okechobee to Kissimmee River; $25,000 bonds roads in Tasmania Rd. and Bridge Dist.

Ala., Birmingham — Plans paving with sheet asphalt of 1-in. binder course and ½-in. wearing surface on 5-in. concrete 7 blocks 2nd Ave. South and 16th St. South, 50 ft. $56,700.

Miss., Waynesboro—Making plans grading and gravel surfacing about 9 mi. Boyce-Howannee Rd. R. R. Prescott and R. C. Atkinson, road comrs.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, having surveys made grading and surfacing 12 mi. Kingston-Knox Co. line Rd., 18 ft., J. G. Creveling, highway comr.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, soon takes bids surfacing with bituminous macadam 3.5 mi. Fayettsville-Alabama State line Rd., 16 ft., Lincoln Co.; with bituminous macadam on crushed stone 1.5 mi. near Hartsville, 14 ft., Trousdale Co. J. G. Creveling, highway comr.

Tennessee—State Dept. Hys. & Pub. Wks., Nashville, soon takes bids gravel surfacing 9.8 mi. Newport-North Carolina State line Rd., 18 ft., Federal Aid Project 23, Cocke Co.; grading and surfacing 10 mi. Rogersville-Pressmans Home Rd. 16 ft., Hawkins Co. J. G. Creveling, highway engr. Noted May 22.

Tenn., Erwin—Unicoi Co. Court plans constructing Irwin-North Carolina State line Rd. up Spivy Creek. $30,000.

Tenn., Greeneville—Greene Co. election June 14, $200,000 bonds improving and resurfacing roads.

Tenn., Memphis—City plans widening, grading and paving Jackson Ave., 14,000 cu.yd. excav., 140 lin.ft., No. 2 and 7,100 lin.ft., No. 3, concrete curb and gutter, 19,850 sq.yd. gravel. $60,141. C. C. Pashby, city clk.

Ky., Inez — Martin Co. plans election $150,000 bonds for roads.

O., Youngstown — Soon takes bids improving north half of Woodbine St., brick. $26,000. G. Turner, city engr.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, rejected bids paving 5.28 mi. State Route 23, Sect. 4, LaSalle Co. Noted Feb. 21.

Ill., Galesburg—Bd. Local Impvts. soon takes bids grading, paving, curbing, etc., 16 bocks South Pearl, East 3rd, North Prairie and Seldon Sts. $88,778. A. L. Richey, City Hall, engr.

Ill., Highwood—Soon takes bids grading, concrete surfacing and integral curb on various streets, $91,997. In addition plans sewer, water and sidewalk improvement. $7,310. J. Anderson Co., Inc., Lake Forest, engrs.

Ia., Atlantic—Making plans paving about 10 blocks 9th St. $35,000. T. E. Nichols, city clk.

Ia., Des Moines—Polk Co. election June 2, $1,500,000 bonds improving roads. F. O. Laing, co. engr.

Ia., Muscatine—Muscatine Co. election June 2, $1,350,000 bonds improving roads. F. P. G. Halbfass, co. engr.

Ia., Tipton—Cedar Co. election in November $2,000,000 bonds hardsurfacing 76 mi. roads. H. L. Phelps, co. engr.

Ia., Vinton—Plans paving, etc., 11 blocks, 8th Ave. and 5th St. W. Winslow, Belle Plaine, engr. $40,000.

Minn., Detroit—Having plans prepared paving, etc., about 10 blocks, Frazee St. and Washington Ave. $35,000. Druar & Milinowski, 500 Globe Bldg., St. Paul, engrs.

Kan., Kansas City—Wyandotte Co. soon takes bids concrete surfacing 2.524 mi. road. O. K. Williams, co. engr.

Kan., Marion—Marion Co. plans grading 8.766 mi. Federal Aid Project 218-A, 28 ft. E. C. L. Wagner, 608 Kemper Bldg., Kansas City, Mo., engr.

Kan., Marion — Marion Co. takes new bids within 30 days, constructing 4.269 mi. New Santa Fe Trail, Sect. A, Project 216, 28 ft. Former bids rejected. R. K. Walters, Marion, engr. Noted Apr. 1.

Kan., Mound City—Linn Co. plans grading 7.25 mi. Federal Aid Project 215-A, 28 ft. C. E. Kenney, co. engr.

Neb., Omaha—Plans paving Dists. No. 2564-65-66-67-68-69-71-74-82-85-86-89-91. To exceed $100,000. H. Beal, city engr.

South Dakota — State Highway Dept., Pierre, rejected bids grading Federal Aid Project 130B, Custer Co. Noted May 8.

S. D., Huron—Plans paving 8 blocks, East 3rd St. $30,000. T. K. White, city engr. Noted Jan. 10.

S. D., Watertown—Plans paving 20,000 to 25,000 sq.yd. various streets. $75,000. W. F. Cochrane, city engr.

Missouri — State Hy. Dept., Jefferson City, rejected bids grading 4.944 mi. Marshfield West Rd., 4.793 mi. Marshfield North and West Rds., 3.892 mi. Marshfield North Rd., 3.811 mi. Marshfield North Rd., all Webster Co., 3.12 mi. St. Louis-Festus Rd., St. Louis Co.; gravel surfacing 4.553 mi. Jefferson City-Kansas City Rd., Morgan Co., 1.822 mi. Risco East Rd., New Madrid Co., 2.835 mi. Rolla South Rd., Phelps Co., 5 mi. Stockton-Fairplay Rd., Cedar Co.; concrete surfacing 3.12 mi. St. Louis-Festus Rd., St. Louis Co. Noted May 8 and 15.

Missouri—State Hy. Dept., Jefferson City, plans grading 17.152 mi. Kansas City-St. Louis Rd., 34 ft., Warren Co., 2.889 mi. Taskee Rd., 26 ft., Wayne Co., 1.15 mi. Chillicothe Rd., 30 ft., Livingston Co., 3.349 mi. Noel South Rd., 26 ft., McDonald Co., 4.214 mi. Ozark East Rd., 26 ft., Christian Co.; gravel surfacing 6.984 mi. Caruth-Hornersville Rd., and 3.51 mi. Arbyrd South Rd., both 12 ft., Dunklin Co., 3.289 mi. Zebra East and West Rd., 12 ft., Camden Co., 4.838 Eldon East Rd., 12 ft., Miller Co.; concrete paving 1.301 mi. Kansas City-Porkville Rd., 18 ft., Clay Co., 4.834 mi. Kansas City-St. Louis Rd., 18 ft., St. Louis Co. B. H. Piepmeier, state highway engr.

Missouri—State Hy. Dept., Jefferson City, plans grading 1.138 mi. High Hill-East Rd., Montgomery Co.; 1.301 mi. Kansas City-Parkville Rd., Clay Co.; 1.63 mi. Bismark-Flat River Rd., St. Francois Co. B. H. Piepmeier, ch. engr.

Mo., Carthage—Soon takes bids 16,000 yd. 7 in. concrete paving, 44 ft. E. S. Glenn, city engr.

Ark., Van Buren — Making preliminary plans grading and surfacing with concrete, asphalt, or asphaltic concrete, 40 blocks Dist. 5. W. L. Winters, 311 Merchants Natl. Bank Bldg., Fort Smith, engr.

Tex., Batesville—Zavalla Co. voted $125,000 bonds hard surfacing Precinct 1. N. P. Hunt, co. judge. Noted May 1.

Tex., Dallas—Had plans widening and paving Harwood St. between Main and Bryan St., new width Main to Pacific Sts., 63 ft., Live Oak to Bryant Sts., 60 ft. E. A. Kingsley, city engr. $474,375. E. A. Kingsley, city engr.

Tex., Floresville—Wilson Co. plans 1 in. bituminous topping on gravel 34 mi. San Antonio-Quero Rd. State Highway 16, Rd. Dist. 1, $624,750. F. E. Hess, co. engr.

Tex., Ft. Worth—City Comn. making plans opens bids about July 31st, paving 4½ mi. Camp Bowie Blvd. from Van Zandt to Mineral Wells Pike, 50-60 ft., alternates on standard paving. $450,000. D. L. Lewis, city engr. Noted Apr. 24.

Streets and Roads (Continued)

Tex., Houston—Election June 10, $500,000 bonds permanent paving and $200,000 gravel paving various streets. J. C. McVea, city engr.

Tex., Raymondville—Willacy Co. voted $295,000 bonds permanent paving highways. W. A. McCharen, co. judge. Noted Apr. 24.

Tex., Rock Springs—Edwards Co. making plans gravel surfacing 48 mi. State Highway 41. $404,260. W. E. Simpson Co., Natl. Bank Commerce Bldg., San Antonio, engrs.

Tex., Sabinal—Making plans permanent paving 10 blocks Center St. $40,000. R. P. Rainey, mayor. Noted Apr. 3.

Tex., San Diego—Duval Co. voted $400,000 bonds, permanent paving highways. G. A. Pharr, co. judge.

Tex., Wichita Falls—Wichita Co. voted $500,000 bonds paving Dist. 1, 3 roads radiating from Electra. J. M. Isbelle, co. engr. Noted Mar. 20.

Okla., Muskogee—Withdrew bids which were to be opened May 13, concrete paving 10 blocks Denver Ave. Will readvertise. J. R. Marsh, City Hall, engr. Noted May 8.

Okla., Oklahoma City — Plans grading and paving 4 blocks Park Pl., and McKinley St., 5,600 sq.yd. asphalt, 2,400 lin.ft. curbing, etc. $28,000. B. M. Hart, city engr.

Okla., Sand Springs — Plans improving 13 blocks, 13,000 sq.yd. concrete, 7,900 lin.ft. curbing, 4,600 cu.yd. excav. $65,000. Holway Eng. Co., Wright Bldg., Tulsa, engrs.

Wash, Chehalis — City Council takes bids about June 10, concrete paving and cement sidewalks on Main, 3rd, Chehalis, Market Sts., et al. $100,000. E. G. Sturdevant, Chehalis, engr.

Ont., Essex—Plans concrete pavements. $30,000. J. S. Laird, Essex, engr.

Ont., Hamilton—Suburban Area Comn. having plans prepared improving 1½ mi. King and Concession Sts., tar and asphalt penetration. $110,000. H. Lumsden, c/o Comn., City Hall, engr.

Ont., Sandwich—Plans concrete paving Mill, Perry and Felix Sts. $35,000. Prices wanted on materials.

BIDS DESIRED

N. Y., Brooklyn—June 4, by E. Riegelmann boro pres. Boro Hall, grading, curbing and flagging East 13th, East 16th, East 28th, 49th, 67th and 85th Sts., paving East 16th, East 28th, 49th, 67th, 76th and 87th Sts., Foster and 12th Aves., Grace Court; curbing, flagging and paving East 18th St., recurbing 82nd St.

N. Y., Long Island City—June 3, by M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., grading and sidewalks space on Court St., Arcadia, Gosman and Hunt Aves., grading, curbing, etc., Maurice and Richard Aves., Opdyke, Siboutsen, 1st, 85th, 86th, 97th 103rd and 123rd Sts.; paving Maurice Ave., Opdyke, 85th, Siboutsen and 86th Sts.; curbing, etc., Hunt Ave.

N. Y., New York—June 3, by H. Bruckner, pres. Bronx Boro., 3rd and Tremont Aves., constructing Transverse road carrying the center driveway of Grand Blvd. and Concourse under East Fordham Rd.

N. Y., New York—June 5, by Park Comn., Municipal Bldg., repaving walks in Melrose Park, Bronx Boro. Former bids rejected. Noted May 8.

N. Y., St. George—June 4, by J. A. Lynch, pres. Richmond Boro., Boro. Hall, repaving with bituminous concrete roadway St. Marks, Pl., Richmond and North Burgher Aves.

New Jersey—June 2, by Clementon Twp. Council, White Horse Hotel, Kirkwood, grading and filling 10,552 cu.yd. Linden Ave. in Lindenwold, and 1,120 cu.yd. grading and 13,480 sq.yd. concrete sidewalks. W. P. Houwen, Laurel Springs, engr.

N. J., Atlantic City—June 12, by Bd. Comrs., City Hall, improving portions of Parkside and other avenues. J. W. Hackney, city engr.; adv. E. N.-R. May 29.

N. J., North Caldwell—June 3, by Purch. Agent Essex Co. (Newark), grading and paving with 8 in. rein.con. 6,300 ft. Grandview Ave., here. $78,000. W. A. Stickel, Court House, Newark, engr.

Pa., Shenandoah—June 17, by T. R. Edwards, chn. Street Com., 111 North Jardin St., repairing sheet asphalt streets; adv. E. N.-R. May 29.

Pa., Upper Darby — June 3, by S. F. Rudolph, secy. Upper Darby Twp., 81,000 sq.yd. one course rein.-con. paving Marshall, Garrett and Burmont Rds., also Landsdowne Ave. $250,000. F. A. Damon, Jr., Municipal Bldg., engr.

ROAD WORK—NEW HAMPSHIRE

Following are lowest three bids opened by State Highway Dept., Concord, Feb. 15, for highway in Derby Township, Rockingham Co., (A) O. Morino, Swampscott, Mass.; (B) Winslow & Cummings, Nashua; (C) Frissell Eng. Co., Gardner, Mass. The unit bids were as follows:

	A	B	C
7,532 cu.yd. excavation	$1.25	$1.50	$1.45
3,449 cu.yd. borrow	1.50	1.50	1.50
655 cu.yd. ledge excavation	4.05	5.00	4.50
1,169 cu.yd. gravel	2.00	2.25	2.90
25,480 sq.yd. one-course reinforced-concrete pavement	2.75	3.00	3.10
24 lin.ft. 12 in. culvert metal pipe	1.00	1.00	1.25
26 lin.ft. 16 in. culvert metal pipe	1.50	1.25	1.25
74 lin.ft. 12 in. reinforced-concrete pipe	1.50	1.50	1.25
30 lin.ft. 18 in. reinforced-concrete pipe	2.00	1.75	1.50
146 lin.ft. 24 in. reinforced-concrete pipe	3.25	2.50	1.75
34 lin.ft. 36 in. reinforced-concrete pipe	5.00	3.00	2.00
2,850 lin.ft. wooden railing	.90	.70	.75
3 cu.yd. plain rubble paving for stream beds	15.00	10.00	15.00
4 cu.yd. first-class concrete	20.00	30.00	35.00
34 cu.yd. second-class concrete	17.00	25.00	28.00
40 cu.yd. cement rubble masonry	20.00	9.00	10.00
554 lb. reinforcing steel bars	.07	.10	.09
3 catch basins	110.00	75.00	100.00
Extended totals	$94,965	$103,139	$105,96

Maryland—June 10, by State Rds. Comn., Baltimore, concrete paving roads in Cecil, Kent, Queen Annes and Caroline Counties, Contrs. Ce-46, K-25, Q-28 and Co-35 respectively; macadam resurfacing in Harford Co., Contr. H-40; penetration macadam surfacing and concrete shoulders in Baltimore Co., Contr. B-63; gravel surfacing in Anne Arundel Co., Contr. AA-41. J. N. Mackall, chn.; adv. E. N.-R. May 29.

Md., Hancock—June 2, by J. T. Mason, burgess and Comrs. of Hancock, 7,000 sq. yd. concrete or oil bound macadam road, 1,500 cu.yd. grading, 5,400 lin.ft. concrete curb, etc. P. Bowles, engr.

N. C., Morehead City—June 17, by L. Hamilton, mayor and Bd. Comrs., 75,000 sq.yd. paving, etc. R. D. Gladding, Wilson, engr.; adv. E. N.-R. May 29.

S. C., Saluda—June 4, at office Saluda Co. Hy. Comn. improving 9 mi. State Route 24, Federal Aid Project 52-B, 57,600 cu. yd. common and 336 cu.yd. rock excav., 25,896 cu.yd. topsoiling, 2 rein.-con. bridges one three 22 ft. span and other one 43 ft. and five 22 ft. spans. State Highway Engineer, Main St., Columbia.

Louisiana—June 12, by State Hy. Dept. Reymond Bldg., Baton Rouge, grading, etc., 4.23 mi. State Project 406, Amite-Franklinton Highway, Tangipahoa Parish. J. M. Fourmy, ch. engr.

La., Coushatta—See "Waterworks."

Kentucky—June 10, by State Hy. Dept., Frankfort, improving roads, **(F. A. P. means Federal Aid Project, S. P. means State Project)**, constructing and surfacing with waterbound macadam or bank gravel 19.22 mi. Henderson-Madisonville Rd., 18 ft., F. A. P. 34-F, Webster Co., 10 mi. Madisonville-Hopkinsville Rd., 14 ft., S. P. 2-F, Christian Co.; with waterbound macadam 6.1 mi. Elizabethtown-Lietchfield Rd., 12 ft., S. P. 12-G-1, Hardin Co., 4.8 mi. Versailles-Lawrenceburg Rd., 14 ft., S. P. 20-D, Woodford Co., 3.5 mi. Danville-Stanford Rd., 16 ft., S. P. 22-F, Lincoln Co.; reconstructing and surfacing with waterbound macadam 6.5 mi. Emminence-Shelbyville Rd., 14 ft., S. P. 46-D, Henry and Shelby Counties; surfacing 4.67 mi. Richmond-Winchester Rd., 14 ft., S. P. 50-A, Madison Co., 6.1 mi. Lancaster-Richmond Rd., 14 ft., S. P. 25-F-1, Garrard Co., 6 mi. Stanford-Somerset Rd., 14 ft., S. P. 22-G, Lincoln Co., 2.55 mi. Middlesboro-Cumberland Gaps Rd., 14 ft., S. P. 38-A, Bell Co., 4 mi. Danville-Lebanon Rd., 14 ft., S. P. 25-C-1, Boyle Co., 5.4 mi. Nicholasville-Lexington Rd., 14 ft., S. P. 32-B, Jassamine Co., 7.5 mi. Stanford-Somerset Rd., 14 ft., S. P. 22-H, Pulaski Co., 3.2 mi. Sharpsburg-Owingsville Rd., 14 ft., Bath Co. J. S. Boggs, highway engr.

O., Akron—June 16, by W. F. Peters, dir. Pub. Serv., widening and repaving West Market St. from Merriman Rd. to Portage Path. $100,000 or more.

O., Cincinnati—June 6, by Comrs. Hamilton Co., rebuilding 14,690 ft. Eight Mile Rd., 25,000 cu.yd. grading, 70,000 gal. Grade 1 tar, etc., $68,640. E. A. Gast, Court House, engr. Noted May 1.

O., Cleveland Heights (Warrensville, P. O.)—June 2, grading, paving, curbing, etc., Washington Blvd., Mayfield and Oakridge Rds., brick, bituminous macadam, asphaltic concrete or sheet asphalt. To exceed $50,000. F. A. Pease Eng. Co., Marshall Bldg., Cleveland, engrs.

O., Columbus—June 3, by W. H. Duffy, dir. Pub. Serv., grading and paving, laying necessary water services and sewer connections, 1,636 ft. alleys west Michigan Ave., west of Harrison Ave. and north of Reinhard Ave., 20 ft., brick $15,527, concrete $12,168, asphalt $6,547; 771 ft. alleys west 4th St. and Hamlet St., 16 ft., brick $4,907, concrete $4,339; 501 ft. alleys north 9th and Reinhard Aves., 15 ft., brick $3,163, concrete $2,796.

Ind., Ft. Wayne—June 10, by Comrs. Allen Co., grading and graveling 17,210 ft. Cassel Rd., 30 ft. wide. $28,861. O. M. Darling, Ft. Wayne, engr. Noted May 22.

Ind., Goshen—June 6, by Comrs. Elkhart Co., concrete paving 5,185 ft. and grading and gravel surfacing 5,261 ft. Twp. RD. C-1, 16 ft. $35,150. C. L. Kinney, Goshen, engr. Noted May 22.

Ind., South Bend—June 9, by Comrs. St. Joseph Co., grading and graveling 3.9 mi. Godshall Rd., 18 ft. $43,401. P. R. Gflin, South Bend, engr. Noted May 29.

Ind., Vincennes — June 6, by Comrs. Knox Co., paving 12,320 sq.yd. C. L. V. Tucker Rd., concrete on concrete. $26,500. W. D. Hanlon, Vincennes, engr. Noted May 22.

Michigan—June 9, by State Hy. Dept. at office Comrs. Gogebic Co., Bessemer, grading and surfacing State Trunk Line Rd. 12-16, 4,270 cu.yd. excav., 10,331 sq.yd. concrete. G. C. Dillman, Lansing ch. engr.

Michigan—June 9, by State Hy. Dept. at office Comrs. Shiawassee Co., Corunna, grading and surfacing 1.524 mi. State Trunk Line Rd. 21-23, 7,231 cu.yd. excav., 17,910 sq.yd. asphalt, concrete or bituminous concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 9, by State Hy. Dept. at office Comrs. Roscommon Co., Roscommon, grading and surfacing State Trunk Line Rd. 14-35, 9,265 cu.yd. excav., 18,946 sq. yd. gravel. G. C. Dillman, Lansing, ch. engr.

Michigan—June 10, by State Hy. Dept. at office Comrs. Washtenaw Co., Ann Arbor, grading and surfacing 1.453 mi. Federal Aid Project 67, A3, 3,908 cu.yd. excav., 8,370 sq.yd. concrete, and 3,000 lin.ft. storm sewer, grading 5.031 mi. Federal Aid Project 67, A1, 2 and 3, 98,493 cu.yd. excav., 16,807 sq.yd. concrete, 12,683 lb. steel, shaping and surfacing 5.13 mi. Federal Aid Project 78 E1, 54,176 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Illinois — June 3, at office of Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, concrete paving 1.05 mi. State Route 2, Sect. 37X, 18 ft., Ogle Co. F. T. Sheets, ch. highway engr. Bids will be received on same date by City of Oregon, at Oregon, street paving which will widen Sect. 37X. T. W. Clayton, Dixon, city engr. for Oregon. Jobs will not be let separately.

Minn., St. Paul—June 9, by G. J. Ries, aud. Ramsey Co., paving etc. Project 24-52, Dellwood Connection, Lake Ave.-White Bear Rd., 4,506 lin.ft. concrete gutter and 3,832 lin.ft. combined curb and gutter, alternate bids on 20,870 sq.yd. one course concrete, or 18,585 sq.yd. asphaltic concrete wearing surface, 2 in. thick on plain concrete base, etc. $70,000. P. N. Coates, Guardian Life Bldg., engr. Noted Mar. 6.

Kan., Howard—June 24, by clerk Elk Co., grading 3.219 mi. Federal Aid Project 237-A, 2,430 cu.yd. borrow, 136 sq.yd. concrete, 9,338 lb. reinforcing, 652 lin.ft. 24- to 36-in. c.i. pipe, 20,140 cu.yd. earth and 1,234 cu.yd. rock excav., etc. F. L. Appleby, co. engr.

Kan., Independence—June 18, by clerk Montgomery Co., improving 2.81 mi. Federal Aid Project 199-B, 4,444 cu.yd. bor-

Streets and Roads (Continued)

row, 6,000 cu.yd. channel change, 74,177 gal. applied bituminous, 21,858 lb. reinforcing, 218 ft., 15- to 24-in. corrugated metal pipe, etc. H. K. Hilbard, co. engr. Noted Mar. 31.

Kan., Wichita—June 20 (extended date), by clk. Sedgwick Co., grading and paving 1.261 mi. Federal Aid Project 130-C. M. Roseberry, co. engr. Noted May 8.

Montana—June 10, by State Highway Comn., Helena, grading, etc., 15.79 mi. Federal Aid Project 189 A and B, on Nashua-Fraser Sect. of Roosevelt Hy., Valley Co., 132,287 cu.yd. common, 797 cu.yd. intermediate and 797 cu.yd. rock excav., 13,310 sta.yd. overhaul, 25,581 cu.yd. crushed gravel surfacing, 13,872 lb. reinforcing; alternates, 2,247 lin.ft. 15- to 36-in. corrugated metal culverts, etc., or 2,217 lin.ft. of 15- to 30-in. rein.-con. pipe culverts. $150,000.

Ark., Hot Springs—June 10, by C. Smith, city engr. improving Cedar St., Dist. 72, 1,356 cu.yd. excav., 576 lin.ft. arch concrete, 400 ft. 12- to 24-in. tiling, 1,589 lin.ft. concrete gutter and reset curb, 2,466 lin.ft. curb and gutter, 8,140 sq.yd. concrete paving, etc. Noted May 8.

Tex., Baird—June 20, by V. B. Gilbert, judge Callahan Co., grading and bituminous macadam surfacing 8.84 mi. State Highway 1, Sect. B, Federal Aid Project 52, 18 ft. $157,300. T. H. Webb, co. engr. Noted May 22.

Tex., Pecos—June 18, by J. F. Ross, judge Reeves Co., grading and gravel surfacing 13.25 mi. State Highway 1, Federal Aid Project 390, 18 ft. $121,400. S. S. Posey, co. engr.

Tex., Waxahachie—June 6, by C. T. Spalding, aud. Ellis Co. Rd. Dist. 1, 30 mi. grading, 180,000 cu.yd. excav., etc. $30,000. T. A. Spalding, co. engr.

Colo., Denver—June 3, by Dept. Impvts. and Parks, asphalt paving 12 blocks each, Capitol Hill Paving Dists. No. 3, $37,425, No. 6, $42,951, No. 12, $41,757, No. 13, $56,476, No. 14, $44,075, 12 blocks each South Capitol Hill Paving Dist. No. 3, $43,223, No. 1, $79,652, No. 4, $42,741 and 12 blocks North Paving Dist. No. 6, $49,555. A. K. Vickery, city engr.

California—June 9, by State Highway Comn., Sacramento, grading and protecting with sea wall 1.2 mi. highway between Sea Cliff and Rancho El Rincon, Ventura Co.; widening, etc., 4 mi. road near Rockville, Solano Co., concrete and crushed gravel or broken stone shoulders. R. M. Morton, state highway engr. Noted May 8.

California—June 16, by State Highway Comn., Sacramento, grading 5.3 mi. road between Boca and Floriston, Nevada Co. R. M. Morton, state highway engr.

Calif., Inglewood—City Trustees taking bids improving portion Nectarine St., 75,376 sq.ft. grading, 46,126 sq.ft. 5 in. asphaltic concrete, 2,474 lin.ft. concrete curb, walks, etc.; portion Olive St., 191,397 sq.ft. grading, 117,426 sq.ft. 5 in. warrenite bitulithic, 6,460 lin.ft. concrete curb, 9,543 sq.ft. concrete gutter, 30,022 sq.ft. cement walks. A. Cory, city engr. Noted May 15.

Calif., Hawthorne—June 9, by S. V. Fraser, city clk., improving Bway., 2,218 lin.ft. grading, 4,240 lin.ft. curb, 18,520 sq. ft. walks, 8,479 sq.ft. 5 in. concrete gutter, 81,305 sq.ft. 1½ in. Willite on 3 in. asphaltic concrete, 26 lighting standards.

Calif., Los Angeles—June 9, by Supervs. Los Angeles Co., improving 9,900 lin.ft. Painter Ave., 10,311 cu.yd. earth excav., removing 3,542 cu.yd. old macadam and disintegrated granite, shaping 26,588 sq. yd. roadbed, 25,003 sq.yd. 4 in. sub-base, shaping 19,800 lin.ft. shoulders, 26,588 sq. yd. concrete, 14,225 lin.ft. curtain walls, rein.-con. culvert and headwalls (county to furnish 6,286 bbl. cement and freight on 9,283 tons sand and gravel).

Calif., Suisun City—Town Trustees, taking bids improving various streets, 150,000 sq.ft. 3 in. asphaltic concrete on existing base. E. N. Eager, c/o Courthouse, Fairfield, engr.

BIDS RECEIVED

Maine—State Hy. Comn., Augusta, bituminous macadam surfacing 1.77 mi. section of state highway B, in Bridgeton, from Arborio Road Constr. Co., 408 Main St., Hartford, Conn., $40,883; 5.24 mi. section of state highway F, in Turner, from I. J. Murphy, Somerville, Mass., $125,015; 2.03 mi. section of state highway K-Spur, in Houlton, from Boone & Brewer, Presque Isle, $67,270; 4.296 mi. section of state highway S, in Gray, and 3.498 mi. section state highway S, in New Gloucester, from A. D. Bridges Sons, Inc., Hazardville, Conn., $71,917 and $65,479 respectively; 4.05 mi. section of state highway J-K, in Ormeville and La Grange, from Wyman & Simpson, Waterville, $63,988. Noted May 8.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, from Cleveland Trinidad Paving Co., Flushing, repaving with asphalt roadway of East 14th St., $6,817, Kingston Ave. $10,360; from Borough Asphalt Co., 1301 Metropolitan Ave., Lafayette Ave. $48,767; from M. J. O'Hara, 1228 Park Ave., New York, 41st St. $10,192; from H. Johnson, Astoria Ave. and East 46th St., Elmhurst, constructing timber jetty pile, foot of West 10th St., $4,456. Noted May 15.

N. Y., Buffalo—Dept. Pub. Wks., Municipal Bldg., May 19, from Rock Asphalt & Constr. Co., Morgan Bldg., asphalt paving Bills Pl., $10,646, Houston St. $14,227, repaving Lewis St. $16,822, Eagle St. $7,510, Forest Ave. $8,258, South Division St. $7,862, North Division St. $17,455, East Ferry St. $39,635, Jones St. $27,675, also widening East Ferry St. 1 ft., $4,427; from H. P. Burgard Co., 1968 Fillmore Ave., paving Poultney St. $15,714, repaving Walden Ave. $130,889; from Erie Contg. Co., Morgan Bldg., paving with brick Bills Pl. $11,900, Poultney St. $18,316; from B. J. Spire, 24 Colonial Circle, paving with brick Houston St. $15,200. Noted May 22.

New Jersey—State Hy. Dept., Trenton, paving and one small span bridge on Route 7, Sect. 2, Golf Course to Andersons Corner, Monmouth Co., 18,886 cu.yd. excav., 32,184 sq.yd. concrete, 18,121 sq.yd. gravel shoulders, etc., from J. N. Rueter, 221 Catherine St., Elizabeth, $168,954. Noted May 8.

N. J., Audubon—Boro Comrs., concrete paving from Union Paving Co., 30th and Lancaster Sts., Phila., Pa., alleys north of Merchant St., Princeton and Cornell Rds., Pine Oak and Chestnut Sts., Edgewood, Audubon, 4th, Hampshire and West Atlantic Aves., $168,223; East Atlantic Ave., Yale and Lafayette Rds., $21,591. Noted May 15.

N. J., Camden—Regrading and resurfacing 40,000 sq.yd. Line, 4th, Point, Elm, South 6th, Welsh and Liberty Sts., Princeton, Clare, Cedar and Auburn Aves., from Union Paving Co., 30th and Lancaster Sts., Phila., Pa., $123,957; patching and surfacing North 4th, Chestnut, Royden and Cherry Sts., from B. Foster Co., 20th and Venango Sts., Phila., Pa., $26,510.

N. J., Haddenfield—Paving 198,000 sq. yd. all streets in boro. bituminous surface and sheet asphalt, from Union Paving Co., 30th and Lancaster Sts., Phila., Pa., $342,025.

N. J., Orange—G. C. Bergen, purch. agt. Essex Co., Court House, Newark, paving 20,000 sq.yd. 3 in. sheet asphalt on 2 in. concrete, in Scotland St., from Standard Bitulithic Co., 50 Church St., New York City, $72,244. Noted May 15.

N. J., Pitman—Laying 66,400 ft. concrete sidewalks, 20,600 lin.ft. curb and 780 sq. yd. concrete gutter in various streets, from G. Kindle, Pitman, $44,770.

Pennsylvania—State Hy. Dept., Harrisburg, **(R. means Route and A. Application)** R. 258, A. 2908 and 2909, Erie Co., from J. C. Devine Co., Alliance, O., $167,045; R. 212, Bradford Co., from Meredith McVaugh & Webb, 1409 West 10th St., Erie, $257,907; R. 333, York Co., from P. R. Hostetter, Inc., 31 West Phila. St., York, $172,776; R. 258, A. 2883 and 2908, Erie Co., from E. M. Love & Son, Corry, $205,727; R. 189 and 338, Jefferson Co., from M. Bennett & Sons, Indiana, $550,254; R. 335, A. 2631, 2632, 2633 and 2634, Lackawanna Co., from H. B. Sproul Constr. Co., Inc., 218 Adams Ave., Scranton, $271,774; R. 140, Schuylkill Co., from Warren Bros. Co., 9 Cambridge St., Boston, Mass., $146,060; R. 231, A. 2708, Adams Co., from Union Constr. Co., 349 Woolworth Bldg., Lancaster, $229,600; R. 59, Jefferson Co., from W. C. Quick & Co., Brookville, $120,790. Noted May 1.

Maryland—State Rds. Comn., Baltimore, May 20, concrete paving 1 mi. highway in Garrett Co., Contr. G-28, from Kitzmiller Constr. Co., Kitzmiller, $44,544, 1 mi. in Frederick Co., Contr. F-76, from L. R. Warsche, Thurmont, $53,120, 4.43 mi. in Anne Arundel Co., Contr. AA-39, from D. Marine, 2 East Lexington St., Baltimore, $127,201, 2 mi. in Worcester, Contr. WO-32, from Smith & Renshaw, Snow Hill, $60,696; gravel surfacing 3 mi. in St. Marys Co., Contr. SM-27, from St. Marys Constr. Co., Mechanicsville, $21,546; penetration macadam paving 4.6 mi. in Baltimore Co., Contr. B-63, from Development & Constr. Co., Amer. Bldg., Baltimore, $81,119. Noted May 8.

Kentucky—State Hy. Dept., Frankfort, **(S. P. means State Project)**, bituminous surfacing 4.07 mi. Lawrenceburg-Chaplin Rd., S. P. 44-A, 14 ft., Anderson Co., 4.15 mi. Pineville-Magnet Rd., 14 ft., S. P. 5-S, Bell Co., 5.12 mi. Grayson-Ashland Rd., 14 ft., S. P. 47-1, Boyd Co., 7.7 mi. Winchester-Richmond Rd, 14 ft., S. P. 50-B, Clark Co., 6.12 mi. Greenup-Ashland Rd., 14 ft., S. P. 20-B Greenup Co. and 3.85 mi. Paducah-Mayfield Rd., 14 ft., S. P. 9-A, McCracken Co., from Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, $2,842, $3,958, $4,824, $5,277, $4,406 and $6,433 respectively; 3.9 mi. Lawrenceburg-Kentucky River Rd. 14 ft., S. P. 20-C, Anderson Co., and 16.14 mi. Danville-Stanford Rd., 14 ft., S. P. 22-E, Boyle Co., from R. B. Tyler & Co., 114 South 4th St., Louisville, $2,982 and $7,890 respectively, 16.6 mi. Lenoxburg-Germantown Rd., 14 ft., S. P. 57-E and F, Bracken Co., and 16.5 mi. Newport-Falmouth Rd., 14 ft., S. P. 21-A and B, Campbell Co., from Eaton Oil Works, Sterrett St., Cincinnati, O., $13,907 and $11,611 respectively, 10 mi. Hopkinsville-Pembroke Rd. 14 ft., S. P. 2-G, Christian Co. 9.6 mi. Lancaster-Kentucky River Rd., 14 ft., S. P. 25-E-1, Garrard Co., and 17.4 mi. Louisville-Taylorsville Rd., 14 ft., S. P. 18-A, Jefferson Co., from F. G. Breslin, 32nd and Market Sts., Louisville, $8,326, $12,251 and $12,952 respectively; shaping and waterbound macadam surfacing 7.05 mi. Mt. Vernon-Roundstone Rd., 12 ft., S. P. 5-L, Rockcastle Co., from J. B. Betts, Nicholasville, $64,625, 13.2 mi. London-Corbin Rd. 12 ft. S. P. 5 Laurel Co. 15,000 cu.yd. earth and 3,000 cu.yd. rock excav., from E. A. Chilton, London, $143,036. J. S. Boggs, highway engr. Noted May 8.

O., Cleveland—Improving (1) East 100th St. (2) Iroquois Ave. (3) Castalia Ave. (4) Pratt Ave. (5) Hope Court (6) Train Ave. (7) East 123rd St. (8) East 97th St., (1 to 8 inclusive) involves 19,130 sq.yd. vitr. brick, ashalt or concrete, 16,285 lin. ft. stone curbing, 17,952 lin.ft. 4 in. drain tile gutter, 8,725 cu.yd. earth excav., 19,130 sq.yd. concrete base, (9) East 118th St. (10) St. Catherine Ave. (11) East 110th St. (12) East 112th St. (13) East 84th St., (9 to 13 inclusive) involves 14,240 sq.yd. vitr. brick, asphalt or concrete, 6,820 lin. ft. stone curbing, 7,100 lin.ft. 4 in. drain tile gutter, 4,950 cu.yd. earth excav., 9,980 sq.yd. concrete base, (14) Durkee Ave. (15) Lasy Ave. (16) East 139th St., (14 to 16 inclusive) involves 15,200 sq.yd. vitr. brick, asphalt or concrete, 10,500 lin.ft. stone curbing, 11,200 lin.ft. 4 in. drain tile gutter, 7,450 cu.yd. earth excav., 15,200 sq.yd. concrete base, from Enterprise Paving & Constr. Co., 8444 Bway., (1) $4,998 (4) $4,998 (11) $4,998 (12) $7,738; from Gould & Maybach, 16113 Saranec Rd. (2) $9,765 (3) $4,175 (8) $14,912; from Roehl Bros. Paving & Constr. Co., 7006 East Denison Ave., (5) $8,443 (6) $7,380; from Baldwin Bros., 4500 Euclid Ave., (7) $36,888 (16) $34,266; from Freshwater Constr. Co. Natl. Bldg., (9) $21,739; from Garland Bros., Pavers Exch., (10) $14,484 (15) $22,236; from Cleveland Trinidad Paving Co., The Arcade, (13) $17,144; from A. M. Pejsa Paving Co., 3161 Derbyshire Rd., Cleveland Heights, (14) $30,563. Noted May 8.

O., Cleveland—Cuyahoga Co., paving Lorain Rd. 2, 24,100 sq.yd. (a) Medina or (b) granite block, 21,600 sq.yd. concrete base, 12,550 ft. 4 in. sewer pipe, etc., from Roehl Bros., 7002 Denison Ave., (a) $206,775 (b) $214,005. Noted May 8.

Michigan—State Highway Dept., at office Bd. Gogebic Co. Rd. Comrs., Bessemer, grading, gravel surfacing, etc., 7.463 mi. State Trunk Line Rd. 12-41, 2 course gravel, 359 cu.yd. concrete, 71,311 sq.yd. gravel, 32,727 cu.yd. earth excav., from J. E. McNicholas, Marenisco, $80,529. Noted Apr. 17.

Michigan—State Highway Dept. at office Bd. Houghton Co. Comrs., Hancock, from Fitzpatrick Bros. & La Mont, Ironwood, improving 6.767 mi. State Trunk Line Rd. 28-8, Sect. C, 14,280 lb. reinforcing, 18,484 sq.yd. stamp sand or 63,516 sq.yd. gravel, 52,079 cu.yd. earth excav., $78,014; 3.63 mi. State Trunk Line Rd. 28-8, Sect. B, 5,220 lb. reinforcing, 9,919 tons stamp sand or 34,083 sq.yd. gravel, 46,542 cu.yd. earth excav., $57,055. Noted May 1.

Michigan—State Highway Dept. at office Bd. Missaukee Co. Rd. Comrs., Lake City, grading and surfacing 3.32 mi. State Trunk Line Rd. 66-16, 16 ft., 31,810 sq. yd. gravel, 21,905 cu.yd. excav., from C. G. Honeywell, Elmira, $25,133. Noted Apr. 24.

Michigan—State Highway Dept. at office Bd. Ontonagon Co. Rd. Comrs., Ontonagon, grading and surfacing 2.057 mi. State Trunk Line Rd. 28-11, 16 ft., 20,456 lb. reinforcing, 250 cu.yd. concrete, 19,307 sq. yd. gravel, 11,514 cu.yd. excav., from W. T. Campbell, Trout Creek, $23,936. Noted Apr. 24.

Streets and Roads (Continued)

Michigan—State Highway Dept. at office Bd. Van Buren Co. Rd. Comrs., Paw Paw, grading and surfacing 3.295 mi. State Trunk Line Rd. 40-1, Sect. A, Van Buren Co., 34,800 sq.yd. concrete, 21,027 cu.yd. earth excav., from Kalamazoo Paving Co., Kalamazoo, $68,071. Noted May 1.

Michigan—State Highway Dept. at office Comrs. Oakland Co., Pontiac, grading and surfacing 2.25 mi. State Trunk Line Rd. 10-39, Sect. D, 40 ft., 23,690 lin.ft. center contraction joint, 53,397 sq.yd. concrete, 22,762 lin.ft. gutter, 44,217 cu.yd. earth excav., etc., from R. D. Baker Co., 1454 Penobscot St., Detroit, $186,956. Noted May 8.

Mich., Springwells — B. P. Esper, city clk., improving Schaefer Rd. south of Michigan Central Ry. from M. R. Hanna Co., 1636 Dime Bank Bldg., Detroit, 42,105 sq.yd. paving $2.50 per sq.yd., 18,045 lin. ft. curb $1, 9,023 ft. grading $0.90, etc., total $227,030. Noted May 8.

Wis., North Milwaukee—W. E. Chase, city clk., May 20, improving 6 streets, from Milwaukee Genl. Constr. Co., 427 Mitchell St., Milwaukee, 15,102 cu.yd. grading at $0.88 per cu.yd., 22,661 sq.yd. pavement concrete $2.92, vibrolithic concrete $2.85. Noted May 15.

Minn., St. Paul — See "Material and Equipment under Reinforcing, Paving Materials, etc."

Neb., Lincoln—City (**P. D. means Paving Dist.**), from Abel Constr. Co., 318 Terminal Bldg., P. D. 567 $4,458, P. D. 583 $13,564, P. D. 585 $2,520, P. D. 581 $6,216, P. D. 402 $19,098; from Cochrane Constr. Co., 822 1st Natl. Bank Bldg., P. D. 195 $41,515.

Tex., Houston — Rock asphalt paving McKinney Ave. from Chenevert St. to Houston Belt & Terminal R.R. tracks, from Uvalde Rock Asphalt Co., West Bldg., $76,153; Clay Ave. from Louisiana to Austin Sts., from Scott Schambaugh, Lavendon Bldg., $50,572.

Okla., Bartlesville — Improving Kaw, Comanche, Chickasaw and Cherokee Aves., 7th and 13th Sts. and alleys in blocks 6, 29 and 40, from Hamilton Constr. Co., Bartlesville, 5 x 8.5 in. concrete paving at $3.00 per sq.yd., 6 in. concrete paving at $2.70 per sq.yd., curbing at $0.80 per lin.ft., earth excav. at $0.85 per cu.yd. and rock excav. at $1.75 per cu.yd.

Wash., Tacoma — Comrs. Pierce Co., May 9, paving Veterans Dr., from Albertson, Cornell Bros. & Walsh, 1113½ A St., $40,626. Engrs. est. $37,599. Noted May 1.

Calif., Fresno—Improving portion Fresno St., 237,405 sq.ft. grading, 221,142 sq.ft. asphalt, 4,258 ft. concrete, etc., from Federal Paving Co., Standard Oil Bldg., San Francisco, $64,166.

Calif., Fresno — Fresno Co., improving Rd. Dist. 8, 118,400 sq.ft. concrete walks, 25,500 ft. concrete curb, etc., from Thompson Bros., G and Divisadero Sts., $29,302.

Calif., Glendale — Improving Camulos Ave., etc., from C. L. Hill, 320 West Vine St., 155,550 sq.ft. grading $0.08 per sq.ft., 109,020 sq.ft. 3 in. oil macadam, $0.105, 17,090 sq.ft. cement walks $0.165, 4,631 lin. ft. curbs $0.50, **total** $40,750.

Calif., San Diego—Improving Cleveland Ave. and Vermont St. (1) 116,330 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete (2) 198,441 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous, from G. R. Daley, 4430 Boundary St. (1) $0.219 (2) $0.169; from California Constr. Co., Union Bldg., (1) $0.224 (2) $0.168. Noted Mar. 6.

CONTRACTS AWARDED

Vt., Barre—State Hy. Dept., Montpelier, concrete paving 2.12 mi. Montpelier and Barre Sts. 16 ft., to J. E. Flood Constr. Co., Hudson Falls, N. Y. $80,120. Engrs. est. $85,000.

N. Y., Albany—Bd. Contract & Supply, asphalt paving and curbing, etc. Grand St. from Beaver to Morton Sts., to H. Dumary, 119 State St., $86,514. Engrs. est. $90,000.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Welsh Bros. Contg. Co., 32 Queens St., Astoria, regrading and laying sidewalks in Himrod St., $2,325, laying sidewalks in Hinman St., $3,970, grading, curbing and laying sidewalks in 2nd Ave., $12,749; to H. J. Mullin Contg. Co., Jamaica Ave. and 144th St., curbing and laying sidewalks in 159th St., $4,864, grading and curbing 159th St., $4,260; to Sicilian Asphalt Paving Co., 41 Park Row, New York City, repairing sheet asphalt pavement in 1st and 2nd Wards, $6,733. Noted Apr. 24.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., to Peace Bros. Inc., 57 North Laurence St., Flushing, grading, curbing and laying sidewalks, etc., on Lewis Ave. $8,940, 55th Ave. $5,770, grading sidewalk space, setting curb, etc., on 58th St. $1,577; to Kennedy & Smith, 93 Amity St., Flushing, grading, curbing and laying sidewalks, etc., on Merritt St. $11,914, 89th Ave. $11,916; to J. J. O'Brien, Jr., William St., Jamaica, grading sidewalk space in 101st St. $1,488; to Highway Impvt. & Repair Co., 501 Bloomfield Ave., Montclair, N. J., grading, laying sidewalks and asphalt paving Edgemere Ave. $70,475, Hancock St. $6,875; to J. Condon, 341 Cornelia St., Brooklyn, grading, etc., 4th Ave. from Astoria to Vandeventer Aves. $2,812, grading and curbing 4th Ave. from Vandeventer to Grand Aves. $7,810. Noted May 15.

N. Y., Rome—Bd. Estimate & Contract, Warrenite pavements on McAvoy Ave., Doxtater, North, Louisa and Jasper Sts., to Warren Bros., Parkman Bldg., Boston, Mass., $30,000.

N. Y., St. George—Repaving Richmond Terrace, etc., granite blocks, to J. Johnson Sons, 445 Bway., West New Brighton, S. I., $21,277; Bay St., to Vanderbilt Constr. Co., 24 Elizabeth St., West New Brighton, S. I., $132,978. Noted May 22.

N. Y., Watertown—Concrete curb and gutters in various streets, to P. C. Rock, Antwerp, Grand Ave. $2,648, Hancock St. $3,748; to G. H. Allard, Watertown, Salina St. $3,282, Bway. Ave. W., $1,676; to W. C. Jones, Watertown, Haley St. $3,619, Ward St. $3,669, Myrtle Ave. $1,991, Halcomb St. $3,086, Bishop St. $3,619, and North Orchard Sts., $3,724. Noted Apr. 17.

N. J., Freehold—Monmouth Co., reconstructing 2.153 mi. Sect. 2 Freehold-Smithburg Rd., to Gallena-Poole Co., 146 East Front St., Trenton, $96,860. Noted May 1.

N. J., Magnolia—Camden Co. (Camden), paving ¾ mi. Warwick Rd. Centre Twp., here, to Union Paving Co., 30th and Locust Sts., Phila. $67,131.

N. J., New Brunswick — City Comn., sheet asphalt paving and curbing 7 streets, to T. H. Riddle, 102 Church St., $3.05 per sq.yd., and 3 streets to Utility Constr. Co., 5 Spring St., $3.02 per sq.yd.

N. J., Trenton—City Comn., City Hall, to Union Paving Co., 30th and Locust Sts., Phila., asphalt paving and repaving Edgemere Ave., $21,907, Hillcrest Ave., $34,809, Ingham Ave. $35,981, Kelsey Ave., $11,313, Stuyvesant Ave. $43,876, Stockton St. $6,045, Liberty St. $32,903; to Ross & Whalen, 471 Southard St., Bridge St. $15,852, Calhoun St. $10,933, Chestnut St. $28,628, Cooper St., $12,686, Emory St. $46,297, Lamberton St. $16,130, Lee St. $8,757, Union St. $8,887; to A. DeLucia, 52 Bayard St., part of Bridge St. $17,073, part of Calhoun St. $7,162, Snyder St. $475, Mulberry St. $8,812, Rose St. $14,208; to R. S. Barrett, 139 Hoffman Ave., Wilson St. $7,203. Noted May 8.

Pennsylvania—State Dept. Hys. Harrisburg, (**R. means Route and A. Application**), rein.-con. paving A. 1430, Chester Co., to Sutton Constr. Co., 1015 Chestnut St., Phila., $107,885; R. 325, Sect. 2, Greene Co., to Froemming Bros., 1326 Humboldt Ave., Milwaukee, Wis., $357,970; R. 98, Forest Co., to Penn Erie Constr. Co., Erie, $227,142; R. 183, Columbia Co., to J. Christiano, Shamokin, $129,996; R. 203, A. 2016, Armstrong Co., to Greunke Bros., New Castle, $214,745; R. 234, A. 2042, Clearfield Co., to Avery & Bailey, Phillipsburg, $111,612; A. 523, York Co., to Comerford Constr. Co. 125 South 5th St., Phila., $108,331; A. 585, Franklin Co., to Bester Long Co., Hagerstown, Md., $118,596. Noted May 15 and 22.

Pa., Martinsburg — Blair Co. rein.-con. paving and curbing 3.219.8 lin.ft. Market and Allegheny Sts., 26 and 36 ft., to David & Young, Hollidaysburg, $34,773; 210 ft. rein.-con. bridge, four 46 ft. spans at 30 degree skew (no approaches included) to A. Fogel, Hollidaysburg, $22,442. Noted May 1.

W. Va., Logan—Logan Co. improving 22 mi. Man-Campus Rd., to F. H. Herring Constr. Co., Greenwood, Va., $29,500; 3.6 mi. Stollings-Ethel Rd., to Coda-Nash Co., Logan, $34,269.

W. Va., Wheeling—Paving Wood St. and side street, to Seabright Co., 70 43rd St., $32,530; building retaining wall on McColloch St., to Kaltenbach Bros., Bd. of Trade Bldg., $28,608.

Fla., Dade City—Pasco Co., to Mickler & McLeod, Dade City, paving with rock and clay and asphalt surfacing, Rd. 8, Hudson to Hernando Co. line, $25,000; Rd. 7, Odessa to Denham, $46,000; Rds. 3, 4, 5 and 6, $26,000; Rd. 2, $40,000; Rd. 1, $99,740. Noted Sept. 13.

Fla., Inverness—Citrus Co. 17.47 mi. State Rd. 5, Projects 625 and 626, paving, clearing, grubbing, bridges, etc., to Barber Foster & Co., Jacksonville, $200,000, county portion, and $800,000 state portion.

Alabama—State Hy. Comn., Montgomery, graveling 5 mi. road between Alexander City and Jacksons Gap, Tallapoosa Co., 10 ft., to Stanley & Singer Constr. Co., La Fayette, $118,604, engrs. est. $120,000; grading 19.8 mi. Eutaw-Livingston Highway, Greene Co., 60 ft., to Thompson & Co., Fayette, $142,011, surfacing same, to Morgan Hill Paving Co., Birmingham, $201,520. Noted May 15.

Ala., Florence—Paving with rock asphalt 70 blocks various streets 20- to 30-ft., to Uvalde Paving Co., Insurance Bldg., Dallas, Tex., $200,000.

Ala., Opp — Asphalt paving 10 blocks streets 20 ft., to Couch Constr. Co., Opp, $80,000.

Ala., Tuscumbia—Paving with asphalt 36 blocks and laying 2 mi. cement sidewalks on Inter-Southern Highway, to Southern Roads Co., Amer. Trust Bldg., Birmingham, $151,000.

Miss., Greenwood—La Flore Co. grading and gravel surfacing 14.5 mi. Greenwood-Money-Tallahatchie Rd., 18 ft., to S. M. Boyd, Columbus. Noted May 1.

Louisiana — State Hy. Dept. Reymond Bldg., Baton Rouge, 9.4 mi. State Project 346 C, New Orleans-Fort Jackson Highway, Plaquemine Parish, to Highway Constr. Co., c/o State Hy. Dept., $63,475. Noted May 1.

La., Baton Rouge—Comn Council, surfacing streets, 78,166 sq.yd. Warrenite bitulithic on concrete, to Southern Roads Co., Weiss Bldg., New Orleans, $275,000, 12,008 sq.yd. 3 in. brick on 5 in. concrete, to Valient & Toomey, 8th St., Ft. Worth, Tex., $54,128; 9,146 sq.yd. 4 in. brick on 6 in concrete, to Merrill Eng. Co., Vicksburg, Miss., $17,465.

La., Baton Rouge — Paving various streets, 79,000 sq.yd. 2 in. warrenite on 5 in. base, to Southern Roads Co., Baton Rouge, $276,505; 12,000 sq.yd. 3 in. brick on 5 in. concrete base, to Valieant & Toomey, Farmers & Merchants Natl. Bank Bldg., Fort Worth, Tex., $54,128. Noted Apr. 10.

Tenn., Gallatin—Paving with rock asphalt 50,000 sq.yd. various streets, to V. E. Shevenell Constr. Co., Memphis, approximately $50,000. Noted Apr. 10.

Tenn., Ridgley—Paving with 6-in. concrete 13,000 sq.yd. various streets, to W. R. Aldrich Constr. Co., Dyersburg, $30,000. Noted Apr. 1.

O., Akron—Paving 5th Ave., to V. Olson, Akron, $29,401, engrs. est. $30,000; paving West Delton St., grading, paving and installing walks on North Adams St., to Hollinger & Davidson, Akron, $26,158 and $66,148 respectively, engrs. est. $27,500 and $70,000 respectively.

O., Carrolltown—Asphalt paving 4,491 sq.yd. 5th St. N. W. and 4th St. N. E., also 4,000 sq.yd. 3rd St. S. E. and 2nd St. N. W., to General Asphalt Paving Co., 1268 Dueber Ave. S. W., Canton, $25,485 and $26,239 respectively, engrs. est. $25,750 and $26,500 respectively.

O., Cleveland—Cuyahoga Co. improving Minor Rd. 2, 13,480 lin.ft. 4 in. sewer pipe gutter, 36,000 cu.yd. earth excav., 13,480 sq.yd. 8 in. concrete, to C. A. White, Willoughby, $52,753. Engrs. est. $61,992. Noted May 22.

O., Columbus—H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections, and asphalt paving 1,735 ft. Manhattan Ave., 26 ft., to Burns Paving Co., 316 South High St., $27,865; 1,275 ft. Hanford St. 26 ft., to Franklin Asphalt Paving Co., 209 South High St., $17,483; 326 ft. Pomola Ave. 24 ft., to Trinidad Asphalt Paving Co., Grand Theatre Bldg., $4,106. Noted May 15.

O., Garfield Heights (Cleveland P. O.)—For 175,000 lin.ft. concrete sidewalk, on various streets, to F. Stollfus, 4912 Baker Ave., Cleveland, $0.21 per ft. Noted Apr. 24.

O., Wooster—To Genl. Asphalt Co., 1268 Dueber Ave., Canton (**e. e. means engrs. est.**), grading and sheet asphalt paving, 5,875 sq.yd. Spink St. $24,452, e. e. $27,872; 2,838 sq.yd. Spring St. $11,824, e. e. $13,502, 1,704 sq.yd. University St., $7,701, e. e. $7,997, all foregoing 26 ft.; 4,200 ft. Liberty St., resurfacing old brick on stone base, 40 and 52 ft. wide, 25,666 sq.yd. sheet asphalt, $44,035, e. e. $51,538. Noted May 8.

O., Youngstown—Mahoning Co., improving Lowellville-Hubbard Rd., Route 219, and Taft Rd. 250, waterbound macadam, to Sebring Constr. Co., Sebring, $31,486 and $26,751 respectively, engrs. est. $31,000 and $28,000 respectively; Fairview

Streets and Roads (Continued)

Ave. Rd., to Welk & McCleery, Youngstown, $26,041, engrs. est $27,000.

Indiana—State Hy. Comn., Indianapolis, **(e.e. means engrs. est.)**, surface treatment State Aid Rds. 12 and 32, to R. H. King, Danville, $30,237, e.e. $31,936; Federal Rd. 79, to Ellis & Scamahorn, Rockport, $36,818, e.e. $34,000; State Aid Rds. 13, 21 and 23, to Burk Constr. Co., Newcastle, $30,412, e.e. $29,000; State Aid Rd. 10, Sect. K, to Bowyer Co., Newcastle, $42,758, e.e. $48,230; State Aid Rd. 10, Sects. Q. and R., to C. R. Winks, Williamsport, $29,927, e.e. $36,142. Noted May 22.

Ind., Anderson—Madison Co., concrete paving 29th St., to Daniels & Lyst, Farmers Trust Bldg., $23,478; 14th and Fairview Sts., to J. T. Burke, Anderson, $21,744 and $13,510 respectively.

Ind., Ft. Wayne—Allen Co., bituminous macadam paving 3.99 mi. Marion Twp. Rd. 2, 18 ft., to C. W. Ehline, Monroeville, $28,868. Engrs. est. $35,326. Noted May 22.

Ind., New Albany—Bd. Pub. Wks., surfacing Jay and East 9th Sts. from Spring to Elm Sts., to W. S. Condra, New Albany, engrs. est. $4,770 and $4,522 respectively; Market St. from Vincennes to East Sts. and East to Thomas Sts., to D. C. Collins, New Albany, engrs. est. $18,535. Noted Apr 10.

Ind., Rockville—Parke Co., hard surfacing Florida Twp. Rd., to Norman & DeVoto, Clinton, $39,550. Noted May 29.

Ind., Rushville—Rush Co., concrete paving 8,676 ft. James Shannahan Rd., 18 ft., to Winslow & Hooten, Greenfield, $25,500. Engrs. est. $27,761. Noted May 22.

Ind., Terre Haute—Vigo Co. **(e. e. means engrs. est.)**, 1 mi. J. E. Bickel Rd., 18 ft., to Pigg & Snyder Constr. Co., Terre Haute, $25,463, e. e. $27,219; 12,320 ft. John White Rd., and 11,220 ft. Fromme Rd., 18 ft., to J. F. Kelley Co., Terre Haute, $53,998 and $51,886 respectively, e. e. $67,364 and $60,483 respectively. Noted May 29.

Michigan — State Hy. Dept. at office Comrs. Cass Co., Cassapolis, grading and surfacing 2.763 mi. State Trunk Line Rd. 40-5, A and B, 9,355 cu.yd. excav., 29,325 sq.yd. asphalt, concrete or bituminous concrete to J. Kauffman, Dowagiac, $53,327. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Iron Co., Crystal Falls, grading and surfacing 1.932 mi. State Trunk Line Rd. 12-41, Iron Co., 32,727 cu.yd. excav., 71,311 sq.yd. gravel, to J. E. McNicholas, Marenisco, $80,529. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Genesee Co., Flint, grading and surfacing 5.97 mi. Federal Aid Project 115, B, 28,896 cu.yd. excav., 66,355 sq.yd. 7 in. concrete pavement, also 6.357 mi. Federal Aid Project 115 A, 53,342 cu.yd. excav., 75,182 sq.yd. 7 in. concrete pavement, to Palma Constr. Co., Detroit, $158,905 and $172,229 respectively.

Michigan—State Hy. Dept. at office Bd. Kent Co. Rd. Comn., Grand Rapids, grading and surfacing 5.71 mi. State Trunk Line Rd. 13-50, A, Kent Co., 39,321 cu.yd. excav., 70,258 sq.yd. concrete, to Vanderveen Constr. Co., Grand Rapids, $131,799. Noted Apr. 24.

Michigan — State Hy. Dept. at office Comrs. Muskegon Co., Muskegon, grading and surfacing 2.35 mi. State Trunk Line Rd. 24-26, 7,980 cu.yd. excav., 24,811 sq. yd. concrete, to Charlevoix Abstract & Eng. Co., Charlevoix, $50,303. Noted May 22.

Michigan — State Hy. Dept., Lansing, grading and gravel surfacing 3.02 mi. Federal Aid Project 109, 18,176 cu.yd. excav., 47,177 sq.yd. one course gravel, to M. J. Bacco, Iron Mountain, $60,508.

Michigan — State Hy. Dept. at office Comrs. Oakland Co., Pontiac, grading and surfacing 4.75 mi. Federal Aid Project 97 A, Oakland Co., 55,567 sq.yd. concrete, 28,559 cu.yd. excav., and 3.25 mi. State Trunk Line Rd. 10-41, 38,134 sq.yd. concrete, 23,400 cu.yd. excav., to Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, $79,461 and $75,056 respectively. Noted May 8.

Michigan—State Highway Dept., at office Bd. Presque Isle Co. Rd. Comrs., Rogers, grading and surfacing 1.296 mi. State Trunk Line Rd. 10-37 A, 20 ft., 5,359 cu. yd. excav., 19,400 yd. sta. overhaul, 15,354 sq.yd. 7 in. concrete, to L. W. Edison, Onaway, $29,252. Noted Apr. 24.

Michigan — State Hy. Dept. at office Comrs. Roscommon Co., Roscommon, grading and surfacing 6.474 mi. State Trunk Line Rd. 76-4 C, 23,154 cu.yd. excav., 60,719 sq.yd. gravel, etc., to H. M. Belknap, Tawas City, $50,584. Noted May 22.

Mich., Ann Arbor—Paving South Main St., sheet asphalt, to Ann Arbor Constr. Co., Ann Arbor, $77,958, laying curbs and gutters in Dists. 62 to 70 inclusive, to P. Ryan, Jr., Bay City, $30,114. Noted May 1.

Mich., Detroit—Paving with 3½ in. sheet asphalt on 8 in. concrete, to Detroit Asphalt Paving Co., 909 Free Press Bldg., St. Jean Ave., $13,099, Loyo Ave. $76,560, South St. $13,209, Winfield Ave. $33,263, Drexel Ave. $31,331, Longfellow Ave. $15,243; from Cleveland Trinidad Paving Co., 402 Hammond Bldg., Wilson Ave. $17,762, Kendall Ave. $13,409, Idaho Ave. $13,189; from Cooke Asphalt Paving Co., 1260 Penobscot Bldg., Charest Ave. $37,699, Colton Ave. $23,528, State Fair Ave. $40,455.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, **(3-59 Jersey Madison means State Route 3, Sect. 59, Jersey and Madison Counties)** paving 3-59 Jersey-Madison, to Nelson Bros., Jerseyville, $146,302; 3-60 Madison, to Edwardsville Constr. Co., Edwardsville, $97,970; 1-7 Edwards to H. A. Carpenter, Terre Haute, Ind., $90,348; 12-24 Clinton, to O. Allenthorp & Co., Casey, $67,939; 36-1 Hancock-Adams, to E. J. Eiff Co., Quincy, $139,699; 9-34 McDonough, to J Kesl & Son, Edwardsville, $42,409; grading 26-8A Lee, to J. B. Drew, Tampico, $17,572; bridges on 2-54 DeWitt, to Acme Engineers, Decatur, $11,698. Noted Feb. 21 and Mar. 27.

Ill., Galesburg—Bd. Local Impvts., grading and paving East 3rd St., 1,500 sq.yd. vitr. brick, 1,160 lin.ft. combined concrete curb and gutter, to H. H. Gunther, 859 East Losey St., $6,204, engrs. est. $6,811; West North St., 6,440 sq.yd. vitr. brick, 220 lin.ft. marginal curb, 4,460 lin.ft. concrete curb and gutter, etc., to Graham-King Constr. Co., 550 South Cedar St., $25,989, engrs. est. $28,053. Noted Apr. 17.

Ill., Galesburg — Grading and paving West North St., 5,034 sq.yd. vitr. brick on concrete, 2,400 cu.yd. earth excav., 3,540 ft. combined curb and gutter, to Graham-King Constr. Co., 550 South Cedar St., $18,599. Engrs. est. $19,985. Noted May 15.

Ill., Highwood—Grading, concrete paving, integral curbing, to J. Cape Sons & Co., 468 Water St., Racine, Wis., $59,000.

Ia., Davenport—Paving various streets, to Central Eng. Co., 809 Putnam Bldg., 9,390 sq.yd. concrete at $2.55 per sq.yd., and 25,926 sq.yd. sheet asphalt at $2.58, total $90,834; to McCarthy Impvt. Co., 802 Kahl Bldg., 21,977 sq.yd. bitulithic concrete at $2.69, total $59,118; to W. D. Phelan, Davenport, 51,132 sq.yd. 6 in. concrete at $1.68 and $1.73, total $87,000; to Iowa Eng. Co., Davenport, 6,178 sq.yd. 6 in. concrete at $1.70 and $1.72, total $10,560. Eng. est. $250,000.

Ia., Iowa City—For 18,500 sq.yd. paving, 13,000 lin.ft. concrete curbing, etc., on various streets, to W. Horrabin Constr. Co., Iowa City, $3.29 per sq.yd. brick, $2.35 for rein.-con.

Kan., Emporia—Grading and surfacing with brick on concrete 10 blocks various streets, to C. J. McCoy Constr. Co., Emporia. Engrs. est. $104,569. Noted Apr. 3.

Kan., Leavenworth — Leavenworth Co. grading and vitr. brick surfacing 3.201 mi. Federal Aid Project 234-A, 24 and 27 ft., to Geiger & Rutherford Constr. Co., Leavenworth, $199,699. Engrs. est. $211,834. Noted Apr. 10.

Kan., Salina—Grading and paving 5.25 mi. Federal Aid Project 44, Sects. A and B, 18 ft., Salina Co., to San Ore Constr. Co., Salina, $43,748. Federal Aid Project 45, Sects. C and D will be readvertised. Noted Mar. 27.

Kan., Ft. Scott—Bourbon Co. grading and vitr. brick surfacing 3.897 mi. Federal Aid Project 208-A, 18 ft., to F. L. Thogmartin & Sons, Ft. Scott, $149,632. Engrs. est. $161,958. Noted Apr. 19.

Kan., Sedan—Chautauqua Co. grading and concrete surfacing 2.495 mi. Federal Aid Project 201, Sect. A, 18 ft., to M. R. Amerman, 248 North Market St., Wichita, $85,358. Noted Mar. 20.

South Dakota — State Highway Dept., Pierre, **(F. A. P. means Federal Aid Project)**, to Dowd Bros. & Schreiber, Watertown, grading 15.6 mi. F. A. P. 95B, $41,257, 152 mi. F. A. P. 173A, $4,951, 8.3 mi. F. A. P. 95C, $18,534, all Faulke Co., to Enke Constr. Co., Lake Benton, Minn., 13.49 mi. F. A. P. 160, $45,192, 19.66 mi. F. A. P. 164, $63,454, both Brookings-Moody Co., to I. C. Cox, 800 North Duluth Ave., Sioux Falls, 11.52 mi. F. A. P. 179, Deuel Co., $44,309, to B. O'Rourke, Aberdeen, 15.05 mi. F. A. P. 172A, Edmunds Co., $46,537, to W. R. Larson, 519 Secy. Natl. Bank Bldg., Sioux Falls, 11.21 mi. F. A. P. 162A, Haakon Co., $42,877, 1.38 mi. F. A. P. 135B, Minnehaha Co., $29,811, 18.56 mi. F. A. P. 183A, Beadle Co., $61,001, to Tobin & Moloney, Madison, 14.03 mi. F. A. P. 170D, Minnehaha Co., $44,733, 9.98 mi. F. A. P. 158A, Clay Co., $27,404, to N. J. Olson, Wall, 4.58 mi. F. A. P. 138B, Law-Meade Co., $34,892, to R. P. England, Murdo, 22.44 mi. F. A. P. 177A, Pennington Co., $104,092, to Pioneer Bridge Co., Mitchell, 12.09 mi. F. A. P. 176, Kingsbury Co., $39,896, to Tobin & Maloney, Madison, graveling 7,503 yd. F. A. P. 49BC Lyman-Brule Co. $7,295, 8,981 yd. F. A. P. 50C, Sanborn Co. $7,261, 20,019 yd. F. A. P. 61B Aurora and Brule Counties, $21,493, 9,878 yd. F. A. P. 86, Sanborn Co. $12,117, 13,086 yd. F. A. P. 88B, Meade Co., $15,253, 20,115 yd. F. A. P. 90, Hutchinson Co. $20,426, 20,788 yd. F. A. P. 98, Lincoln Co. $23,064, 17,948 yd. F. A. P. 105B, Brown Co. $24,869, 22,736 yd. F. A. P. 116, Hutchinson Co. $14,441, 14,946 yd. F. A. P. 122, Deuel Co. $11,582, 14,645 yd. F. A. P. 129, Turner Co. $13,366, 8,185 yd. F. A. P. 137, Lake Co. $6,313, 14,076 yd. F. A. P. 144, Union Co. $8,065, 3,611 yd. F. A. P. 153, Union Co. $9,291; to H. Pickus, 309 Mass Bldg., Sioux City, Ia., 11,099 yd. F. A. P. 20B, Walworth Co. $11,560, to R. R. Wiley, Summit, 11,207 yd. F. A. P. 140, Law-Meade Co. $11,867. Noted Apr. 17 and May 8.

N. D., Devils Lake — Grading 12 mi. Federal Aid Project 225, to W. Collins, Lacota, $31,529 with metal culverts, $33,637 with concrete culverts; rein.-con. work J. J. Rue & Sons, Bismarck, $6,693; improving 13 mi. Federal Aid Project 153, 18,806 cu.yd. graveling load and unload and spread, 55,728 cu.yd. mile haul, to be done by day labor. Noted May 8.

N. D., Fargo—Cass Co., improving 13,042 mi. Project 213, 78,995 cu.yd. earth and 1,490 cu.yd. rock excav. 4,046 lin.ft. 12- to 30-in. portable culverts, 21,625 cu.yd. load, unload and spread, 110,957 cu.yd. gravel haul, etc., to W. H. Noel, Jamestown, $59,591. Noted May 1.

N. D., Mandan—Morton Co. curbing and paving, etc., 7,260 sq.yd. Project 1000, to Woodrich Constr. Co. 1141 Metropolitan Life Bldg., Minneapolis, Minn. $24,359. Noted May 1.

N. D., Napoleon—Logan Co. improving 21.595 mi. Federal Aid Project 123, 182,709 cu.yd. rock excav., 11,428 cu.yd. overhaul, portable culverts; 54,662 lbs. metal reinforcement; 819 cu.yd. dry and 110 cu. yd. wet structure excav., grading, to North Dakota Constr. Co., Linton, $68,485; concrete work. E. A. Moline, Bottineau, $18,109.

Mo., Richmond—Rein.-con. paving 16,000 sq.yd. various streets, etc., to Cooke-O'Brien Constr. Co., 305 Railway Exch. Bldg., Kansas City, $2.65 per cu.yd., etc., total $50,379.

Ark., Little Rock—Improving streets in Impvt. Dist. 357, 15,087 lin.ft. 24- to 36-in. curb and gutter, 2,700 cu.yd. excav., 4,121 ft. 12- to 18-in. storm sewer and 25 manholes, also rebuilding 1,500 ft. sewers and 7 man holes, to G. Garms, Southern Trust Bldg., $33,294.

Ark., Pine Bluff—Paving about 20 blocks Dist. 77, 5,319 cu.yd. excav., 23,100 cu.yd. rein.-con., 14,000 lin.ft curb and gutter, etc., to H. E. Monk, Pine Bluff, $62,082. Noted Apr. 24.

Tex., Dallas — Will repair 40 mi. 15 bituminous streets, by day labor. $100,000. E. A. Kingsley, city engr.

Oklahoma—State Hy. Dept., Oklahoma City, grading and paving 7.55 mi. Federal Aid Project 119, Pittsburg Co., 79,618 sq.yd. concrete, 28,119 cu.yd. earth and 655 cu.yd. rock excav., and 4.56 mi. Hartshorne Rd., Project 120-A, Pittsburg Co., 50.133 sq.yd. concrete, 23,733 cu.yd. earth and 13,221 cu.yd. rock excav., to Smith Bros., Amer. Exch. Bank Bldg., Dallas, Tex., $211,093 and $140,842 respectively, engrs. est. $225,000 and $150,000 respectively; grading and graveling 10.25 mi. Federal Aid Project 117, Muskogee Co., 21,567 cu.yd. gravel, 35,156 cu.yd. earth and 11,466 cu.yd. rock excav., to Maney Bros., Empire Bldg., Oklahoma City, $110,561, engrs. est. $120,000. Noted Feb. 14.

Wash., Centralia—City Council, paving L. I. D. Nos. 64, 65 and 66, 14,650 sq.yd. 6 in. concrete, 10,000 lin.ft. concrete curbing, 1,600 sq.yd. sidewalk, to Albers Constr. Co., Centralia, $16,188, $19,912 and $20,886 respectively. Engrs. total est. $75,000. Noted May 8.

Wash., Longview—Paving, laying walks, curbs, etc., on Main St., etc., incl. 37,500 sq.yd. 5 in. concrete, to Olympic Constr. Co., 1326 Northlake Ave., Seattle, $100,000.

Wash., Port Angeles—Clallam Co., constructing 4.5 mi. Ozette Highway, to N. Nelson, Clallam Bay, $39,900. Engrs. est. $40,000.

Wash., Seattle—Concrete paving Lurdock and Woodworth Sts., to C. L. Laplant, Sedro Woolley, $25,656.

Wash., Seattle—Bd. Pub. Wks., paving East 40th St. et al., to J. B. Covello, 1510 16th St. S., 3,020 sq.yd. 7 in. concrete, $1.85 per sq.yd., 19,860 sq.yd. 6 in. concrete, $1.65, 760 lin.ft. 5 in. asphaltic concrete $0.65, 2,117 ft. concrete curb $0.40, and 7,400 ft. concrete curb $0.35, etc., total

Streets and Roads (Continued)

$44,758. Engrs. est. $48,830. Noted May 15.

Wash., Tacoma — Pierce Co., concrete paving 1.46 mi. Sumner-Buckley Highway, also Midland Highway, to Albertson, Cornell Bros. & Walsh, 1113½ A St., $35,960 and $25,850 respectively, engrs. ests. $35,961 and $27,342 respectively. Noted May 1.

Wash., Walla Walla—Walla Walla Co., grading and gravel surfacing 8 mi. Highway 29, to Columbia Constr. Co., Walla Walla, $76,156.

Calif., Los Angeles—Improving Dunleer Ave., to Hall-Johnson Co., Box 51, Lynwood, grading $85,000, 170,079 sq.ft. concrete, $0.26 863,230 sq.ft. oil and roll $0.08, 245,325 sq.ft. walks $0.22, 54,248 ft. curb $0.65, 99,397 sq.ft. gutter $0.28, total approximately $316,950.

Calif., Orange—Improving various streets, 640,000 ft. 6 in. and 41,010 ft. 5 in. concrete paving, curbs, walks, etc., to G. A. Simpson, San Fernando Bldg., Los Angeles, approximately $138,600. Noted May 22.

Calif., San Francisco—Improving Palou Ave. between Phelps and Rankin Sts., 5,300 cu.yd. cut, 1,350 cu.yd. fill, 2,700 lin.ft. concrete curb, 2,375 sq.ft. artificial stone walks 72,900 sq.ft. concrete, to Raisch Impvt. Co., 46 Kearny St., $30,972. Noted May 15.

Ont., Ottawa — Ottawa Suburban Rd. Comn., 279 Carling Ave., 3 mi. Richmond Rd., bituminous macadam, to McDonnell & Dibblee, 16 St. James St., Montreal, $48,000. Noted Apr. 10.

Ont., Stratford—Asphalt pavements, to Godson Contg. Co., Manning Chambers, Toronto, $82,000.

Industrial Works

PROPOSED WORK

Me., Rockland—Plants—New England Portland Cement & Lime Co., 31 Milk St., Boston, Mass., plans lime plant, annual capacity 500,000 bbls., and cement plant daily capacity 2,000 bbls., here. $400,000.

Me., South Berwick — Power Plant — Newickawnick Co. plans power plant. C. T. Main, 200 Devonshire St., Boston, Mass., engr.

Vt., Bennington—Plant—Vermont Kaolin Co., Inc., having plans prepared classifying, settling and drying plants. $85,000. F. Lafayette, mgr. Private plans.

Mass., Boston—Machine Shop—Union Realty Co., c/o H. F. Livermore, 100 Cummington St., had plans prepared 2 story and basement, 75 x 240 ft., rein.-con. and brick, Linden St., Ward 25, Allston Dist. $110,000. Private plans.

Mass., Everett — Plant — New England Fuel & Transportation Co., 111 Devonshire St., Boston, having plans prepared, iron work plant in connection with present coal handling plant, here. $5,000,000. Private plans.

Mass., Tewksbury — Factory — Wamesit Chemical Co., plans rebuilding brick and timber factory. $100,000. S. Stevens, pres. Private plans.

Conn., Hartford—Shop—Colling Tool & Machine Co., Asylum St., having plans prepared by Greenwood & Noerr, 847 Main St., 1 story, 50 x 100 ft., brick.

N. Y., Watervliet—Factory—Foreman & Clark Mfg. Co., 2409 2nd Ave., plans 6 story, 95 x 210 ft., rein.-con., brick and steel, plain foundation, 24th St. $200,000. Engineer and architect not selected.

S. C., Goldville—Mill, etc.—Joanna Cotton Mills having plans prepared by Lockwood, Greene & Co., engrs., Healy Bldg., Atlanta, Ga., weave building, new picker room addition, moving present office building and warehouse addition, constructing cottages, community house, incl. sewerage water, lights, etc.

Wis., Milwaukee—Warehouse and Cold Storage—Fleischmann Co., 701 Washington St., New York City, N. Y., having plans prepared by L. I. Tieman, archt. and engr., 693 Washington St., New York City, N. Y., 1 story, 50 x 150 ft., brick and timber, plain foundation, 12th St., here. $40,000.

Wis., West Allis—Storage—Allis-Chalmers Mfg. Co. having plans prepared by Klug & Smith, 69 Wisconsin St., Milwaukee, 7 story, concrete and brick, plain foundation. $150,000.

Tex., El Paso—Cotton Compress—Newburger Cotton Co. plans 2 story cotton compress, 75,000 bale capacity. $250,000. Engineer and architect not selected.

Tex., El Paso — Mill — A. Y. Smith, Pearce, Ariz., making plans beet sugar mill, brick and concrete, here. $200,000. Private plans.

Tex., Houston — Mill — Houston Cotton Mills Co., 6th and Rutland Sts., soon lets contract 1 story, 139 x 388 ft., concrete, brick and steel mill, 1 story, 100 x 125 ft. corrugated iron warehouse, and 1 story, 38 x 42 ft. brick boiler room, East Montgomery Rd. $500,000. J. E. Sirrine & Co., South Main St., Greenville, S. C., archts. R. J. Cummins, 727 Bankers Mortgage Bldg., engrs.

Okla., Tulsa — Plant — Slater Bros., 60 North Gilette St. plans plant for manufacturing derricks, rigs and oil well supplies. $125,000.

Calif., Oakland — Substations — Pacific Gas & Electric Co., 445 Sutter St., San Francisco, had plans prepared, 2 story, rein.-con., 51st St. and Shattuck Ave., $85,000, also 2 story, rein.-con. and steel, Grove St. and Telegraph Ave., here. $60,000. Private plans. Steel for both substations, to Moore Drydock Co., foot Adeline St. Other contracts to be awarded later.

Que., Hull—Power Plant—Hull Electric Co., 117 Main St., having plans prepared by W. J. Francis & Co., 260 St. James St., Montreal, 100,000 hp. power development plant, Parryau Falls.

Ont., Brantford—Plant—Brantford Cordage Co., plans addition. $250,000. A. Messecar, mgr.

Ont., Lynedoch — Plant — Jeffrey Milling Co. plans plant.

BIDS DESIRED

Mass., Woburn—Repair Shop—C. De Rosa, Salem St., taking bids 2 story, 40 x 100 ft., rein.-con. and steel, show rooms and machine repair shop, Salem St. About $40,000. E. R. B. and A. C. Chapman, 101 Tremont St., Boston, archts. and engrs.

Pa., Bloomsburg—Mill—June 3, by Ritter & Shay, archts., North Amer. Bldg., Phila., 1 story, brick and stone addition, plain foundation, for Bloomsburg Silk Mill. $125,000.

Pa., Phila.—Factory—June 2, by C. E. Wunder, archt., 1520 Locust St., 1 story, 70 x 200 ft., brick, plain foundation, Westmoreland St., East of 25th St., for Roseman Bros., Inc., 904 Walnut St. $40,000.

Ill., Kewanee—Light Plant, etc.—June 2, by R. R. Haley, city clk., electric light and distribution system. $107,000. Burns & McDonnell, Interstate Bldg., Kansas City, Mo., engrs.

Wis. Neillsville—Machine Shop—June 3, by O. J. Weyhmiller, comr. Clark Co., 1 story, 50 x 150 ft., hollow tile and concrete, plain foundation. $40,000. Private plans.

CONTRACTS AWARDED

Mass., Cambridge—Factory—Irving & Casson, 573 Boylston St., Boston, 1 and 2 story, 65 x 100 ft., with 20 x 50 ft. wing, brick and timber addition, to S. C. Sperry, 299 Main St., Cambridge. Archts. est. $100,000.

N. Y., Buffalo—Factory—H. Wile & Co., 39 Carroll St., rein.-con. factory, Oak St., to J. W. Cowper Co., Fidelity Bldg., to exceed $100,000.

N. Y., New York—Housing Station—Dept. Plant & Structures, Municipal Bldg., rein.-con., brick nad steel, plain foundation, 139th St. and Harlem River, to W. W. Constr. Co., Inc., 15 East 40th St., $648,800. Noted May 22.

N. Y., Watertown — Factory — Shaughnessy Knit Co., 208 East Milton St., 2 story and basement, 40 x 100 ft., concrete, brick and steel, to Charlebois Contg. Co., 841 Mill St., $45,000.

N. J., Ridgefield—Mill—Lowe Paper Co., River St., 1 story, 40 x 250 ft., rein.-con., brick and steel, plain foundation, to H. Wales Lines Co., 134 State St., Meriden, Conn. Noted May 1.

Pa., Phila.—Plant—Hulton Dyeing Co. Inc., 3819 Frankfort Ave., 1 story, 112 x 301 ft., brick and stone, plain foundation, East of Coral St., to F. Crompton & Bros., 4614 Oakland St. $45,000.

Pa., Phila.—District Station—Supplee-Wills-Jones Co., 1523 North 26th St., 1 story, 145 x 160 ft., brick and stone, plain foundation, to G. Kessler Constr. Co., 1733 Marvine St.

Tenn., Milan—Factory—Milan Development Co., 2 story, cigar factory, brick, to Z. O. Long, Trenton, plumbing and heating, to H. E. Jenkins Co., Milan, wiring and electric fixtures, to Carter Electric Co., Martin. Total $40,000. Amer. Cigar Co., lessee.

Ky., Louisville — Warehouse — Reynolds Tobacco Co., Swan and Kentucky Sts., 3 story, East Kentucky St., to Natl. Concrete Constr. Co., Bd. Trade Bldg., $88,000. Noted May 1.

O., Cleveland — Boiler House — Richman Bros., 1600 East 55th St., 1 story, 43 x 44 ft., brick and steel, to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $40,000.

O., Cleveland — Factory — White Sewing Machine Co., 7821 St. Clair Ave., 4 story and basement, 100 x 100 ft., brick and steel, Winslow St., to Reaugh Constr. Co., 2835 East 51st St. Archts. est. $200,000.

O., Columbus—Power House—Columbus Railway, Light & Power Co., 104 North Ohio St., 1 and 2 story, 52 x 125 ft., rein.-con. addition, 112 East Gay St., to E. Spencer, 910 Huntington Bank Bldg., $125,000.

Ill., Galesburg — Car Plant — Chicago, Burlington & Quincy R.R., 547 West Jackson Blvd., Chicago, 80 x 216 ft., steel, plain foundation, here, to Kenwood Bridge Co., 1416 1st Natl. Bank Bldg., Chicago. Engrs. est. $200,000. Noted Feb. 28.

Wis., Madison—Laundry—Bd. Health, 2 story and basement, 36 x 70 ft., rein.-con., brick and steel laundry and boiler-house, plain foundation, for isolation hospital, to J. H. Findorff, 601 West Wilson St. Archts. est. $40,000. Noted May 1.

Wis., Oostburg—Factory—Oostburg Canning Co., 2 story, 40 x 44 ft., rein.-con., brick and steel, plain foundation, to F. Radloff Co., Plymouth. Noted Mar. 20.

Kan., Salina—Plant—Standard Oil Co., 1 story and basement, 40 x 170 ft., concrete, brick and steel, to Eberhardt Constr. Co., Salina. Archts. est. $40,000.

Mo., St. Louis — Factory — Vivinano Grocer Co., 916 North 7th St., general contract 2 story and basement, 43 x 109 ft., Washington and 9th Sts., to T. H. Ratz, 917A Pine St. Archts. est. $45,000.

Okla., Oklahoma City — Factory — Ford Motor Co., Highland Park, Detroit, Mich., 3 story and basement, 125 x 140 ft., rein.-con. and brick addition, plain foundation, 900 West Main St., here, to C. M. Dunning, 420 Hudson St., Oklahoma City, $150,000. Noted Apr. 17.

Okla., Stroud—Plant—Roxanna Petroleum Co., 927 Mayo Bldg., Tulsa, will construct new casinghead natural gas plant with 3 compressors and storage tanks, by company forces by day labor. $70,000.

Okla., Tulsa—Laundry—T. Miller Laundry Co. will build 1 story, 100 x 140 ft., brick, marble and stone, by day labor. $40,000. C. McDonald, 540 Robinson Bldg., archt.

Calif., Oakland — Power Plant — Great Western Power Co., 530 Bush St., San Francisco, will build 2 story, 66 x 135 ft., rein.-con., sub station and steam heat plant, 20th St. near Telegraph Ave., here, by day labor. $435,000.

Calif., Oakland—Substations—See "Proposed Work."

Calif., San Francisco—Machine Shop—Amer. Can Co., 120 Bway., New York City, 3 story, rein.-con. and brick, 17th and Florida Sts., to Lindgren-Swinerton, Inc., Standard Oil Bldg., $[illegible]00,000.

Buildings

PROPOSED WORK

Mass., Arlington (branch of Boston)—Fire Station—Town having preliminary plans prepared by McNaughton & Robinson, 46 Cornhill St., Boston, 2 story and tower, brick, Massachusetts Ave. and Bway. $150,000. Noted May 22.

Mass., Boston — Apartment — Goggin & Ripley Inc., 350 Madison Ave., New York City, is interested in syndicate which plans 8 story, brick and limestone, Commonwealth Ave. and Clarendon St., here. $1,000,000. Parker, Thomas & Rice, 110 State St., Boston, archts.

Mass., Boston — Hospital — Beth Israel Hospital, Townsend St., Roxbury, having preliminary plans and sketches made by Densmore, Le Clair & Robbins, Park Sq. Bldg., group brick and stone buildings, Brookline near Longwood Ave. $1,000,000.

Mass., Boston — Schools — School Bd. plans alterations, repairs, etc., in several school buildings this summer. $647,592.

Mass., Bridgewater—Prison—Commonwealth of Massachusetts, Boston, plans state prison on land adjoining state farm, here.

Mass., Concord — Chapel — Middlesex School, plans brick and marble, memorial chapel on grounds opposite Eliot Hall. $150,000. W. C. Appleton, archt., 53 State St., Boston.

Mass., Fall River—Church, etc.—Union Methodist Episcopal Church, R. A. Colpitts, pastor, Prospect St., having preliminary plans prepared by Woodbury & Stewart, 581 Boylston St., Boston, church and parish house, brick and stone, Howland Ave. and Pearce St. $350,000.

Mass., Hyde Park (Ind. Sta. Boston)—High School—School House Dept. City Hall, Boston, having plans prepared by Newhall & Blevins, 9 Park St., Boston, 2 story and basement, 40 x 162 ft., brick and stone addition, Everett and Harvard Aves. $240,000.

Mass., Jamaica Plain (Branch of Boston)—School—City School House Dept., 103 City Hall Annex, Boston, plans 2 story, 80 x 110 ft., and 3 story and basement, 40 x 168 ft, addition, here. $400,000.

Mass., Lexington—High School—W. Rolland, chn. School Comn., having plans prepared by Ritchie, Parsons & Taylor, 15 Ashburton Pl., Boston, constructing Senior

Buildings (Continued)

high school brick and stone, combined with and alterations to present Junior high school. To exceed $150,000.

Mass., Newtonville—High School—Comn. Pub. Buildings, City Hall, Newton, having preliminary plans prepared by Haven & Hoyt, 220 Devonshire St., Boston, brick and stone addition, Walnut St. To exceed $150,000.

Mass., Plymouth—Hall and Auditorium—H. Walton, chn. Town Comn., having preliminary plans prepared by J. D. Leland & Co., 41 Mt. Vernon St., Boston, brick and stone. $300,000.

Mass., Somerville—School, etc.—Church of St. Catherine of Genoa, plans school and convent, Summer and Belmont Sts., Spring Hill Dist. $150,000. C. E. Mongan, chn.

Mass., Wakefield — Apartment — Crystal Apartments, c/o Hutchins & French, archts., 11 Beacon St., Boston, had plans prepared, 6 story, 80 x 120 ft., rein.-con., brick and stone, here. About $150,000.

Mass., West Roxbury (Boston, P. O.)—School—School House Dept., Boston, plans 3 story and basement, 40 x 168 ft., and 2 story, 80 x 110 ft. additions to Jamaica Plain School, here. $400,000.

R. I., Providence—Dormitory—Brown University, having sketches made for dormitory, college grounds. $250,000. C. R. Adams, 150 Congress St., Boston, member com. Architect's name withheld.

Conn., Norwich — Schools — School Bd. plans 2 schools. $300,000. J. C. McPherson, chn. Engineer and architect not selected.

Conn., West Haven (New Haven, P. O.) —Town, E. G. Grimes, chn. school comn., 185 Church St., New Haven, having plans prepared by R. W. Foote, 185 Church St., New Haven, 2 story, 70 x 150 ft., with 54 x 68 ft. wing, rein.-con. and brick, Richard St. $160,000.

Md., Baltimore — Theatre — N. J. Myerberg, 210 North Calvert St., and E. Hanzsche, having plans prepared by L. R. White, Jr., 300 Hearst Tower Bldg., 3 story, 97 x 185 ft., stone front, 2418 St. Paul St. $350,000.

N. Y., Binghamton — School — Common Council having plans prepared by Tiffany & Kaley, Bighamton, new 7th Ward school. To exceed $250,000. E. F. Prentice, city engr. Noted Apr. 24.

N. Y., New York—Academy—Academy of Medicine, c/o York & Sawyer, archts., 50 East 41st St., having plans prepared, 14 story, brick and stone, plain foundation, 5th Ave. and 103d St. $750,000.

N. Y., New York—Hospital—Natl. Hospital Assn., c/o G. and E. Blum, archts. and engrs., 505 5th Ave., having plans prepared 4 story, 50 x 100 ft., brick, steel and stone, plain foundation, Bronx Blvd. and East 236th St. $1,000,000.

N. Y., New York—Hotel—J. Alexrod & Son, 234 West 74th St., having sketches made by G. F. Pelham, 200 West 72nd St., 15 story, 41 x 100 ft., 26-28 West 69th St. $800,000.

N. Y., New York—Office—Co-operative Building Loan Assn., c/o Ludlow & Peabody, archts. and engrs., 101 Park Ave., soon takes bids 16 story, 75 x 80 ft., brick, steel and stone, plain foundation, 437 Lexington Ave. $700,000.

N. Y., New York—Offices—Nola Realty Corp., c/o G. and E. Blum, archts. and engrs., 505 5th Ave., having plans prepared 14 story, 100 x 163 ft., brick, steel and stone, plain foundation, 42 West 48th St. $1,000,000.

N. Y., New York — Y. W. C. A., 610 Lexington Ave., plans 80 x 92 ft. brick, steel and stone, plain foundation, 335-341 East 17th St. $500,000. Architect and engineer not selected.

N. Y., Woodhaven—School—Bd. Educ., 500 Park Ave., New York, had plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, 5 story, brick, steel and stone addition to P. S. 113, plain foundation, 88-89th Aves., here. $600,000.

N. J., Camden—Lodge—Camden Lodge Elks 293, Bway. and Federal Sts., having plans prepared by J. C. Jefferies, 312 Market St., 4 story and basement, 70 x 150 ft., brick and steel, plain foundation, 7th and Cooper Sts. $400,000

Pa., Phila.—Administration—Bd. Educ. had preliminary sketches made, 5 story and basement, 22nd and Parkway Sts. $2,500,000. Private plans.

Pa., York—Hotel—York Chamber Commerce, c/o C. R. Rice, York, having preliminary plans prepared by W. L. Stoddart, 50 East 41st St., New York City, hotel.

D. C., Wash.—Church—Church of Jesus Christ of Latter Day Saints, 16th St. and Columbia Rd., plans church here. Private plans. $400,000.

Va., Richmond—Hotel—Schmidt & Wilson, Inc., and Thomas Realty Co., having preliminary plans prepared by W. L. Stoddart, 40 East 41st St., New York City, 12 story, Broad and 9th Sts. $1,000,000.

S. C., Goldville—Office, etc.—See "Industrial Works."

Fla., Tampa — Hotel — Wynn-Claughton Realty Sales Corp., E. M. Claughton, secy., Atlanta, Ga., having plans prepared by G. L. Preacher Co., Healey Bldg., Atlanta, Ga., 10 story, Howard Ave. and Bay Shore Blvd., here. $700,000.

Ala., Auburn — Engineering — S. Dowell, pres. Auburn College, takes bids about July 1, 3 story, 75 x 150 ft., brick, college site. $250,000. Warren, Knight & Davis, Empire Bldg., Birmingham, archts.

Ala., Birmingham—Office—Lincoln Reserve Life Insurance Co., having plans prepared by Miller & Martin, Title Bldg., and takes bids about July 15, 4 story addition, 1st Ave. and 19th St. $200,000.

La., New Orleans—Hotel—Guarantee Development Co., Roosevelt Hotel, rejected bids May 15, 18 story addition. $2,000,000. Favrot & Livaudais, Hibernia Bank Bldg., archts.

O., Cleveland—Apartment—Ideal Impvt. Co., c/o S. Spira, 2207 Ontario St., had plans prepared by S. H. White, 1032 Schofield Bldg., 3 story and basement, 80 x 110 ft., brick and timber, 13206 Superior Ave. $200,000.

O., Cleveland — Apartment — M. Teplitz, vice pres., Co-Operative Furniture Co., 4901 Woodland Ave., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 52 x 168 ft., brick and timber, 1886 East 82nd St. $175,000.

O., Cleveland — Convent and Chapel — Sisters of St. Joseph, c/o Sister Klatilda, 6700 Lansing Ave., having plans prepared by F. C. Warner, Hippodrome Annex Bldg., 3 story and basement, 80 x 300 ft., concrete, brick and steel, Granger Rd. and Andover Boulevard. $350,000.

Mich., East Lansing—Laboratories, etc.—Michigan Agricultural College, c/o V. R. Gardner, prof., plans 3 story, 124 x 128 ft., laboratories, class rooms, cold storage, etc., rein.-con., brick and steel, plain foundation. $360,000. Archts. name withheld.

Ill., Galesburg—Library—Knox College plans 2 and 3 story and basement, 50 x 140 ft., rein.-con. and stone, plain foundation, on Campus. $200,000. Engineer and architect not selected.

Ill., Cairo—High Schools—Voted $300,000 bonds 2 high schools.

Wis., Lake Beulah—Novitiate—Fathers of Devine Word, Techny, Ill., had plans prepared by E. Brielmaier & Sons, 432 Bway., Milwaukee, and soon takes bids 3 story, 52 x 120 ft., concrete and brick, plain foundation, here. $150,000.

Wis., Madison—Laboratory—Natl. Institute of Colloid Chemistry, c/o J. H. Mathews, Chemistry Bldg., having sketches made by A. Peabody, State Capitol, 4 story, 100 x 125 ft., rein.-con., brick and steel, plain foundation. $750,000. Noted May 1.

Wis., Milwaukee — Apartment — Deuster, Schwartz & Keuper, 530 Grand Ave., plans 3 story and basement, brick and tile, plain foundation, Prospect Ave. $150,000. Engineer and architect not selected.

Wis., Milwaukee—Store—I. H. Benesch Co., 513 Van Buren St., plans 4 story and basement, 100 x 100 ft., brick and concrete, plain foundation, Teutonia Ave. $150,000. Engineer and architect not selected.

Ia., Mount Ayr—Court House—Ringgold Co. election June 2, $150,000 bonds new court house. Keffer & Jones, 202 Masonic Temple, Des Moines, archts.

Neb., Lincoln—Depot—Chicago, Burlington & Quincy R.R., 547 West Jackson Boulevard, Chicago, Ill., plans depot, 7th and P Sts., here. To exceed $150,000. A. W. Newton, ch. engr.

Neb., Omaha — Hospital — Swedish Emanuel Deaconess Hospital, having preliminary plans prepared by H. C. Peterson, 406 Finance Bldg., rein.-con., brick and stone, 34th St. $150,000 or more.

Neb., Omaha—Office—World Herald, c/o H. Doorly, World Herald Bldg., takes bids about June 2, 4 or 8 story and basement, 60 x 150 ft., brick and steel addition, 15 and Farnam Sts. $250,000. T. R. Kimball, 836 World Herald Bldg., archt. Noted May 22.

Mo., Kansas City—Store—Western Electric Co., 608 Wyandotte St., having plans prepared by Shepard and Wiser, Reliance Bldg., 3 story, 111 x 132 ft., rein.-con., and brick. $150,000.

Mo., Webster Groves—High School—Bd. Educ. voted $150,000 bonds, 2 story and basement, also $10,000 bonds repairs and improvements to Douglas Grade School.

Tex., Breckenridge—Courthouse, etc.—Stephens Co., election June 14, $400,000 bonds, courthouse and jail building. E. F. Ritchey, co. judge. Noted May 1.

Tex., Houston—Schools—Election June 10, $3,000,000 bonds school buildings. Address O. F. Holcombe, mayor.

Tex., Houston—Warehouses—J. A. Baker and associates, Chamber of Commerce, having plans prepared by J. E. Sirrine & Co., South Main St., Greenville, S. C., 3 concrete and steel warehouses, East Montgomery Rd. $150,000 each.

Tex., Marfa — High School — Bd. Educ. plans brick and concrete high school. $150,000. Engineer and architect not announced.

Tex., San Antonio—Hospital—Crippled Childrens Assn., c/o Santa Rosa Hospital, plans to raise $150,000 for 4 story and basement, rein.-con., brick and stone, plain foundation, Houston and Santa Rosa Sts. $50,000 already subscribed. Engineer and architect to be selected soon.

Wash., Burlington—School—School Bd. takes bids about June 12, 2 story, 108 x 200 ft., brick, incl. gymnasium and auditorium. $150,000. Morrison & Stimson, Lumber Exch. Bldg., Seattle, Archts.

Wash., Everett—High School—Morrison & Stimson, archts., Lumber Exch. Bldg., Seattle, takes bids about June 12, fireproof, incl. auditorium and gymnasium, for School Bd., here. $300,000. Noted Apr. 17.

Calif., San Francisco—Schools—City and San Francisco Co. plans election to vote on from $15,000,000 to $20,000,000 bonds for schools.

BIDS DESIRED

N. Y., Gloversville—Hospital—June 4, by Crow, Lewis & Wick, archts. and engrs., 200 5th Ave., New York City, brick, steel and stone, plain foundation, here, for Nathan Littauer Hospital.

N. Y., New York—Training School—June 24, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, New York Training School for Teachers, West 135th St., here, for Bd. Educ., 500 Park Ave.

N. J., Atlantic City—Bank—June 3, by Simons, Brittain & English, Inc., archts., 929 Chestnut St., Phila., Pa., 3 story and basement, 90 x 694 ft., brick and steel, for Union Natl. Bank, Kentucky and Atlantic Aves., here.

N. J., Elizabeth—Administration—June 9, by Union Co. Park Comn., 286 North Broad St., administration building No. 6, Warinanco Park. C. G. Poggi, 275 Morris Ave., archt.; adv. E. N.-R. May 29.

N. J., Woodbury—County—June 12, by Bd. Freeholders Gloucester Co., Court House, 3 story and basement, 97 x 117 ft., rein.-con., brick and limestone, plain foundation, Delaware Ave., $300,000. C. R. Peddier, 136 South 4th St., Phila., Pa., arch. Noted Mar. 27.

O., Cleveland—Apartment and Garage—S. Newman, 10710 Drexel Ave., taking bids 3 story, 80 x 100 ft. apartment, and 2 story, 50 x 100 ft. garage, brick, Overlook Rd. $200,000. A. F. Janowitz, 811 Prospect Ave., engr.

Mich., Flint — Armory — June 4, by L. Pearson, Lt. Col. Q. M. C., Michigan Natl. Guard, State Military Bd., Lansing, 1 story, rein.-con., brick, concrete and steel, plain foundation, here. $150,000. L. W. Fry, Ann Arbor, archt.

Wis., Burlington—School—June 16 (extended date), by School Bd., 2 story and basement, brick, tile and concrete, plain foundation. $200,000. Oppenhamer & Obel, Bellin Bldg., Green Bay, archts. Noted May 22.

Wis., Kenosha—High School—June 12, by Bd. Educ., Senior High School, 3 story and basement, 250 x 250 ft., brick, concrete and tile, plain foundation, $1,000,000. J. D. Chubb, 109 North Dearborn St., Chicago, Ill., archt. Noted May 1.

Wis., Milwaukee—Apartment—June 1, by Irving Realty Co., c/o W. Lillydahl, 379 Frederick Ave., 3 story, 60 x 60 ft., brick, concrete and tile, plain foundation, Ogden Ave. $150,000. Private plans.

Wis., Milwaukee—Store and Office—June 1, by Ielz & Siebert, archts., 373 Broadway, 2 story and basement, 117 x 120 ft., brick and tile, plain foundation, for F. L. Barczak, 738 Forest Home Ave. $150,000. Noted Feb. 26.

Buildings (Continued)

Mo., Kirksville—Library—June 7, by Bd. Regents Northeast Missouri State Teachers College, J. A. Cooley, secy., 3 story and basement, rein.-con., brick and stone. R. H. Sanneman, Lee Bldg., Kansas City, archt.

Ark., North Little Rock—Schools—June 6, by Bd. Dirs. North Little Rock School Dist., 8 room addition to High School, 8 room buildings on 18 and Levy Sts., 4 room addition to Riverside School, 4 room buildings at Rose City and Park Hill, all brick or brick and tile. $200,000. R. Burks, 307 Southern Trust Bldg., Little Rock, archt. Noted Mar. 27.

Tex., Abilene—Bank and Office—May 26, by J. M. Alexander (owner), and D. S. Castle Co., archts., 26-31 Radford Bldg., 7 story and part basement, 75 x 100 ft., rein.-con., brick and terra cotta, 1st and Pine Sts. $225,000.

Tex., Dallas—Hotel—June 15, by Lang & Witchell, archts., Amer. Exch. Natl. Bank Bldg., 14 story and basement, 84 x 94 ft., concrete and brick, Main and Harwood Sts., for Hilton Hotel Co., c/o Waldorf Hotel. $1,000,000. Noted May 8.

Tex., Lubbock — College — June 27, by Sanguinette, Staats & Hedrick, archts., 1st Natl. Bank Bldg., administration building and presidents home, brick and concrete, here, for Texas Technological College, Ft. Worth. $325,000. Noted Apr. 24.

Calif., Huntington Park (branch of Los Angeles)—Bank and Office—A. S. Heineman, archt., San Fernando Bldg., Los Angeles, taking bids, 3 story and basement, 40 x 150 ft., brick, Pacific Blvd., here, for Hellman Commercial Trust & Savings Bank, 601 South Main St., Los Angeles. Noted May 15.

Calif., Long Beach—School—June 9, by Bd. Educ., 2 story, 18 room, brick, Edison Elementary School. $150,000 or more. H. L. Gogerty, Marine Bank Bldg., Long Beach, archt., and Noerenberg & Johnson, Railway Bldg., Los Angeles, associated archts. Noted Mar. 20.

Calif., Los Angeles—Exchange—Bliss & Faville, archts., Balboa Bldg., San Francisco, taking bids 9 story, 120 x 170 ft., brick and steel, Olive St., here, for Southern California Telephone Co., 740 South Olive St. Noted May 8.

Calif., Los Angeles—Store, Garage and School—F. Dorn, archt., Marsh-Strong Bldg., taking bids 2 story, 145 x 207 ft., brick, 6th St., for Rampart Blvd. Co., c/o architect. Noted May 1.

Calif., Los Angeles—Store and Loft—Walker & Eisen, archts., Great Republic Bldg., taking bids 13 story and basement, 50 x 90 ft., rein.-con., 7th and Los Angeles Sts., for S. Goodman, c/o architects. Noted Mar. 20.

Calif., San Francisco—Club—Bakewell & Brown, archts., 251 Kearney St., taking bids 2 story, rein.-con. and stucco, Lakeside Dist., for Olympic Club, Olympic Club Bldg. $175,000.

BIDS RECEIVED

N. Y., New York—Nurses School—Medical Superintendent, Bellevue Hospital, 415 East 26th St., additional wings to Bellevue training school for nurses, general contract from P. J. Carlin, Grand Central Terminal, $423,400; heating, from T. F. Hall, Inc., 405 Lexington Ave., $31,100 plus $2,015; plumbing, from P. F. Kenny Sons, 33 Old Bway., $89,000. Noted May 15.

Tex., San Antonio — Office — San Antonio Builders Exch. Co., 206 Bedell Bldg., general contract, 9 story, basement and roof garden, brick, plain foundation, Pecan and North St. Marys Sts., from J. Aiken, 802 Delmar St., $179,815.

Wash., Tacoma—School—School Bd., J. T. Stewart School, 2 story, 140 x 290 ft., concrete and steel, from J. Blehn, 202 Bway., $299,885. Engrs. est. $250,000.

CONTRACTS AWARDED

N. H., Nashua—School—T. M. James Co., archts., 3 Park St., Boston, 2 story and basement, 80 x 150 ft., brick and stone, known as Mt. Pleasant school, to Cunningham & Burwood, Lynn, Mass. $164,850.

Mass., Boston—Office—J. M. Howe, 10 State St., 3 story, 30 x 150 ft., brick, marble and stone, Bromfield and Province Sts., to I. F. Woodbury & Son, 185 Summer St. Archts. est. to exceed $150,000.

Mass., Malden—High School—Bd. Educ., Junior high school, 2 story, 65 x 108 ft., and 87 x 128 ft., brick and stone, Bway., to C. H. Cunningham & Son, 23 Central Ave., Lynn. Archts. est. $350,000. Noted Apr. 3.

Mass., Worcester — Office — Lockwood & Green & Co., engrs., 24 Federal St., Boston, 10 story, 100 x 125 ft., rein.-con., to G. A. Fuller Co., 710 Board Trade Bldg., Boston, for Worcester Investment Co. Noted Jan. 24.

R. I., Providence—School—Blessed Sacrament Roman Catholic Parish, 3 story, brick, Smith St. to E. Turgeon, Weybosset St. To exceed $500,000.

N. Y., New York—Apartment—Seventeen West Seventy First St. Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 15 story, 75 x 80 ft., brick, steel and stone, plain foundation, West End Ave., by day labor. $600,000.

N. Y., New York — Apartment — Two Hundred Twenty Five West Seventy First St. Corp., c/o G. F. Pelham, archt. and engr., 200 West 72nd St., will build 9 story, brick, steel and stone, plain foundation, 8 East 85th St., by day labor. $350,000.

N. Y., New York—Garage—B. Zinick, 965 Putnam Ave., Brooklyn, will build 7 story, 100 x 150 ft., rein.-con., brick and steel, plain foundation, West 134th St., here, by day labor. $600,000. M. Klein, 39 Graham Ave., Brooklyn archt. and engr.

N. Y., New York — High School — Bd. Educ., 500 Park Ave., steel, stone and brick addition to High School of Commerce, 65th St. and Amsterdam Ave., to Stevenson & Cameron, Inc., 35-37 West 25th St., $930,627. Noted May 22.

N. J., Orange—High School—Bd. Educ., Main and Cleveland Sts., new high school, to Nelson-Pedley Co., Corn Ex. Bldg., Phila., $642,602. Noted Apr. 10.

Pa., Phila.—School—St. Benedicts Parish, W. C. Farrell, pastor, 2005 Chelton Ave., 3 story and basement, 76 x 150 ft., stone and brick, plain foundation, Chelton Ave. and Medary St., to D. W. O'Dea, 420 Duncannon St. Archts. est. $200,000.

La., New Orleans—Hospital—New Orleans Anti-Tuberculosis Assn., 3 story, rein.-con., Bayou St. John and Bayou Rd., to G. J. Glover, Whitney Bldg.

O., Cleveland — Office, Apartment and Garage—Ancaster Co., c/o J. H. Drummond, 7500 Euclid Ave., 4 story, 50 x 300 ft., to Drummon-Miller Co., 7500 Euclid Ave. Archts. est. $400,000.

O., East Liverpool—Bank—Potters Natl. Bank, 1 story and basement, 70 x 80 ft., terra cotta, brick and concrete, 5th and Washington Sts., to Potters Lumber Co., Bway. Archts. est. $150,000-$175,000. Noted Apr. 3.

O., Loudonville—High School—Bd. Educ., 2 story and basement, 116 x 135 ft., rein.-con. and brick, to Zicher & Miller, Sandusky, $115,200. Noted May 22.

Mich., Highland Park (Detroit, P. O.)—Office—C. R. Murphy, 812 Free Press Bldg., Detroit, general contract, 10 story and basement, 60 x 75 ft., brick, concrete and terra cotta, plain foundation, Woodward Ave., here, to O. Misch Co., 159 East Columbia Ave., Detroit. Archts. est. about $350,000. Noted Apr. 17.

Mich., Pontiac—High School—Bd. Educ., 3 story and part basement, 93 x 229 ft., and 78 x 129 ft., rein.-con., brick and steel, plain foundation, Sanford St., to Pryale Constr. Co., 701 East Pontiac Commercial Bank Bldg., $310,078. Noted May 1.

Ill., Springfield—Hotel—Abraham Lincoln Hotel Co., 1st Natl. Bldg., 12 story and basement, South 5th St., general contract to J. C. Evans, 509 South 6th St. Archts. est. $1,500,000.

Wis., Fond du Lac—Hospital—St. Agnes Hospital, 390 East Division St., plain foundation and concrete skeleton only hospital unit, 6 story and basement, 46 x 198 ft., brick and concrete, to Hutter Constr. Co., 128 Western Ave. Archts. est. $400,000. Noted Mar. 13.

Wis., Milwaukee — Convent and High School—Our Lady of Mercy Academy, 705 Natl. Ave., 3 story and basement, 130 x 220 ft., brick, tile and concrete, plain foundation, to Paul Riesens Sons, 1012 Humboldt Ave. Archts. est. $400,000. Noted May 15.

Wis., Shorewood (Milwaukee, P. O.)—High School—School Dist. 4, 3 story and basement, 95 x 180 ft. (1st unit, brick, tile and concrete, plain foundation, Oakland Ave., general contract, to Paul Riesens Sons, 1012 Humboldt Ave., Milwaukee. Archts. est. $285,000. Noted May 22.

Wis., Superior—Hotel—Citizens Hotel Co. 6 story and basement, 100 x 121 ft., concrete, brick and steel, concrete pile foundation, 1209-15 Tower Ave., to Jacobs Bros., Columbia Bldg., Duluth, $300,000. This corrects report in May 22 issue.

Minn., Minneapolis—Theatre, etc.—Clinton & Meyers, 203 Lyceum Bldg., Duluth, remodeling and converting auditorium-office building into 3 story and basement, 165 x 220 ft., rein.-con. theatre, store and office, 11th St. and Marquette Ave., to J. Leck Co., 211 South 11th St., $300,000. Noted Feb. 14.

Kan., Chanute—Memorial—City, general contract 3 story and basement, 108 x 198 ft., rein.-con., brick and stone, to G. H. Siedhoff Constr. Co., 402 North Belmont St., Wichita, $239,890.

Tex. Dallas—Hotel—Baker Hotel Co., c/o Texas Hotel, 18 story and basement, 141 x 200, L shaped, brick, terra cotta, steel and concrete, Commerce and Akard Sts., to Gilsonite Constr Co, Great Southwestern Life Bldg., $3,250,000. Noted Apr. 3.

Tex., Dallas—Warehouse—Southwestern Bell Telephone Co., Western Inc. Bldg., 2 story, 100 x 150 ft., brick and concrete, along Sante Fe R.R. tracks at Horton St., to Hickey & Montgomery, 808½ Commerce St., $150,000. Noted May 1.

Colo., Denver—High School—School Dist. 1, general contract South High School, 3 and 4 story, 326 x 386 ft., Franklin, Louisiana and South Gilipin Sts., to Dunn & Gibson Constr. Co., 1328 Inca St., $866,100; heating, to J. Pfeiffer, 1140 California St., $129,115. Noted May 8.

Wash., Seattle—Forestry—University of Washington, 4 story fireproof, campus, to J. Arrington, 2451 Federal Ave., $193,360. Noted Dec. 20.

Calif., Los Angeles—Hotel—S. Lewis, c/o S. H. Brown, archt., Union League Bldg., will build 3 and 5 story, and basement, 50 x 150 ft., brick, 3rd St., by day labor. $150,000. Noted Apr. 3.

Calif., San Pedro—Warehouses—Petroleum Export Corp., Pacific Electric Bldg., Los Angeles, will build six 6 story, rein.-con., here, by day labor. $2,500,000.

Que., Quebec — Hospital — June 2, by Beauel & Morrissette, archts., Quebec, 6 and 7 story, hospital, St. Sacrement St., for Sisters of Providence. $1,000,000.

Federal Government Work

PROPOSED WORK

Ky., Fords Ferry—Ties—U. S. Engineer, P. O. Box 72, Louisville, soon takes bids 5,000 cross and switch ties for Dam 50, Ohio River, here.

Ky., Louisville—Truck—U. S. Engineer, P. O. Box 72, plans to purchase one ton steel dump body truck.

Ky., Owensboro—Dwellings—U. S. Engineer, P. O. Box 72, Louisville, plans 2 lock keepers dwellings at Dam 46, Ohio River, here.

BIDS DESIRED

Mass., Rutland—Hospital—June 24, by U. S. Veterans Bureau, Room 791 Arlington Bldg., Wash., D. C., constructing and finishing 7 buildings at U. S. Veterans Hospital 89, here. F. T. Hines, dir.; adv. E. N.-R. May 29.

N. Y., Tupper Lake—Laundry—June 17, by U. S. Veterans Bureau Room 791 Arlington Bldg., Wash., D. C., laundry building at U. S. Veterans Hospital 96, here. F. T. Hines, dir.; adv. E. N.-R. May 29.

Pa., Greensburg—Post Office—June 13, by Treas. Dept. office Superv. Architect, Wash., D. C., remodeling post office here.

Md., Baltimore—Dredging—June 26, by U. S. Engineer, Baltimore, dredging in Baltimore Harbor and Channels; adv. E. N.-R. May 29.

Md., Federal Park—Buildings, etc.—June 24, by U. S. Veterans Bureau, Room 791 Arlington Bldg., Wash., D. C., constructing buildings and utilities at U. S. Veterans Rehabilitation Center No. 2, here. F. T. Hines, dir.; adv. E. N.-R. May 29.

Md., Salisbury—Post Office—June 18, by Treas. Dept. at office Supervising Architect, Wash., D. C., 55 x 88 ft., brick and tile post office, here.

Ala., Florence—Screens, etc.—June 18, by U. S. Engineer Office, Florence, furnishing screens, headgates, roller trains, etc., for power house at Wilson Dam, Tennessee River; adv. E. N.-R. May 29.

Ind., Bluffton—Post Office—June 19, by Treas. Dept. at office Superv. Architect, Wash., D. C., 55 x 59 ft. brick and tile post office here.

Okla., Fort Sill—Hospital Ward—June 10, by War Dept. at office Constructing Quartermaster, Fort Sill, 2 story, 34 x 48 ft. hospital ward here; adv. E. N.-R. May 29.

BIDS RECEIVED

Pa., Aspinwall—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash.,

Federal Government Work (Continued)

D. C., constructing U. S. Veterans Hospital, here, from W. F. Trimble, 1719 Penna. Ave., Pittsburgh, Item 1 (a) $711,099 (b) $44,153 (c) $56,283 (d) $72,186 (e) $28,280 (f) $20,000, Item 2 (a) $125,000 (b) $4,350 (c) $6,000 (d) $5,000 (e) $4,500 (f) $4,100, Item 3 (a) $93,000 (b) $3,789 (c) $2,328 (d) $5,125 (e) $2,347 (f) $2,668, Item 4 (a) $65,000 (b) $2,000 (c) $2,000 (d) $5,000 (e) $1,920 (f) $1,920, Item 5 (a) $2,000 (b) $10,000 (c) $12,000, Item 6 $12,500, Item 7 $5,000, Item 9 deduct $9,000. Unit prices $2.50, $7.50, $25, $60, $2, $100, $0.25, $0.20, $0.33, $1.25, $0.19, $0.54; plumbing and heating combined from Virginia Eng. Co., Newsport News, Va., Item 2 (a) $120,375 (b) $5,546 (c) $5,835 (d) $4,157 (e) $4,240 (f) $4,200, Item 3 (a) $72,225 (b) $3,160 (c) $2,066 (d) $4,070 (e) $2,066 (f) $2,308. Noted Apr. 24.

Wyoming—Bureau Pub. Rds., 301 Customhouse, Denver, Colo., grading and surfacing 4 mi. Buffalo-Tensleep Rd., Washakie Co., from Wicksham Bros. & Schwieger, Billings, Mont., $24,960. Noted May 8.

CONTRACTS AWARDED

Md., Annapolis—Swimming Pool—Spec. 4972—Bureau Yards & Docks, Navy Dept., Wash., D. C., swimming pool, scum gutter at U. S. Naval Academy, here, to W. H. Jackson, 2 West 47th St., New York City, $12,960.

Fla., Jacksonville — Barge — U. S. Engineer, one steel barge, to C. W. Johnson, Lewes, Del., $19,800. Noted Apr. 3.

Miss., Gulfport—Mess Hall, etc.—June 24, by U. S. Veterans Bureau, Room 791 Arlington Bldg., Wash., D. C., mess hall addition, roads and walks, etc. at U. S. Veterans Hospital 74, here. F. T. Hines, dir.; adv. E. N.-R. May 29.

Ky., Fords Ferry—Lock—U. S. Engineer, P. O. Box 72, Louisville, will build Lock 50, Ohio River, here, by day labor. $1,500,000. Noted Mar. 27.

Ky., Louisville—Coffer Rods—U. S. Engineer, P. O. Box 72, furnishing 6,000 soft steel ⅜ in. coffer rods from Pidgeon Thomas Iron Co., 94 North 2nd St., Memphis, Tenn., $2.63 per cwt.

Ky., Louisville—Derricks—U. S. Engineer, P. O. Box 72, Louisville, furnishing 5 steel derricks, 40 ft. boon, to Amer. Hoist & Derrick Co., 63 South Robert St., St. Paul, Minn., $8,890.

Ky., Louisville—Pumps—U. S. Engineer, P. O. Box 72, furnishing sixteen 4 x 6 x 6 in. steam pumps, from Vogt Bros. Mfg. Co., 1402 West Main St., $1,468.

Ky., Louisville—Steel Boat Hulls—U. S. Engineer, P. O. Box 72, Louisville, furnishing 5 steel maneuver boat hulls, one for Louisville, 3 for Cincinnati and one for Huntington, W. Va., Dists., to C. Hegewald Co., New Albany, Ind., $52,790. Noted Apr. 3.

Mo., St. Louis—Dredge Pontoons—U. S. Engineers Office, War Dept., Wash., D. C., 12 steel dredge pontoons to Ruemmeli-Dawley Mfg. Co., 3900 Chouteau St., St. Louis, Mo., $35,880.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

462—H. V. Gates, The Dalles, Ore.—Wants license for small power plant on Crooked River, Jefferson Co.

463—D. P. Cooper, 217 Summer St., Buffalo, N. Y.—Wants preliminary permit to develop tidal power at Passamaquoddy Bay, and Head Harbor on Bay of Fundy in Maine and New Brunswick.

464—H. M. Thurman, Randsburg, Calif.—Wants license for small high head development in Birch Creek, Inyo Co.

465—H. M. Thurman, Randsburg, Calif.—Wants license for small high head development in Jail Canyon, Inyo Co.

466, 469, 472, 476, and 477 are constructed projects and are applying for license to operate, in compliance with Commissions rules and regulations.

467—Idaho Power Co., 7th and Bannock Sts., Boise, Idaho—Wants license for transmission line 8 mi. long in Baker and Malheur Counties, Ore.

468—J. A. Shafer, 1008 Odd Fellows Bldg., Indianapolis, Inc.—Wants preliminary permit for power project in Wabash River, Cass Co., near Logansport.

470—Pringle Falls Electric Power & Water Co., 500 Journal Bldg., Portland, Ore.—Wants preliminary permit for power project on West Fork of Deschutes River in Dechutes Co.

471—San Joaquin Light & Power Corp., 1801 Tulare St., Fresno, Calif.—Wants license for transmission line in Kern, San Luis, Obispo and Santa Barbara Counties, Calif.

473 — Kentucky Northern Power Co., Frankfort, Ky.—Wants preliminary permit for dam in Licking River, 3 mi. above Falmouth.

474—Southern Sierras Power Co., Riverside, Calif.—Wants license for transmission line about 17 mi. long, known as Cajon-Lime Products extension transmission line, in San Bernardino Co., Calif.

475—Hiawasse River Power Co., Murphy, N. C.—Wants preliminary permit for series of power dams in Hiawasse River in Cherokee and Clay Counties, N. C.

478—Great Falls Power Co., Butte, Mont.—Wants license to build 3.2 mi. transmission line in Cascade Co.

479—Montana Power Co., Butte, Mont.—Wants license for 12 mi. transmission line in Granite Co.

480—Southern Sierras Power Co., Riverside, Calif.—Wants license for 6.15 mi. transmission line near Victorville, San Bernardino Co.

481—Southern Sierras Power Co., Riverside, Calif.,—Wants license for transmission line in Riverside Co.

482—Gila Valley Power Dist., Wellton, Ariz.—Wants license for transmission line in Yuma Co.

483 — Nevada — California Power Co., Riverside, Calif.—Wants license to divert north fork of Rush Creek into Gem Lake Reservoir, Mono Co., Calif.

484—H. V. Gates, Terrebonne, Ore.—Wants preliminary permit for power project in Crooked River, Jefferson Co., irrigation and lighting for commercial purposes.

485 — Columbus Electric & Power Co., Columbus, Ga., Wants preliminary permit for power project on Chattahoochee River in Chambers and Lee Counties in Alabama and Harris Co. in Georgia.

487—Pennsylvania Power & Light Co., Allentown, Pa.—Wants license for dam and power house in Wallenpaupack Creek, Wayne and Pike Counties, near Hawley.

488—Thermalito Irrigation Dist., Oroville, Calif.—Wants license for 80 ft. dam in Concow Creek, Butte Co., near Oroville, diverting water through Coal Canyon plant of Pacific Gas & Electric Co.

489—City of Aberdeen, Wash. — Wants preliminary permit for 240 ft. dam across Wynoocke River and power house in Grays Harbor Co.

490—San Diego Consolidated Gas & Electric Co., 861 6th St., San Diego, Calif.—Wants license for transmission line between Escondidi and Rincon, 15.8 mi. long in San Diego Co.

492 — J. E. Walker, Mackay, Idaho — Wants preliminary permit for 10 ft. diversion dam and power house in Big Boulder Creek, Custer Co., near Mackay and Challis.

493—L. E. Foster, Buckhorn, Grant Co., New Mexico—Wants preliminary permit ror power project on Gila River, Hidalgo and Grant Counties, to develop 30,000 h.p.

494—Dell & Potter, Clifton, Ariz.—Wants preliminary permit for power project on Black River in Apache, Greenlee and Graham Counties.

Unclassified

PROPOSED WORK

Wharf—Plymouth, Mass.—Plymouth Relocation Com. plans wharf. To exceed $25,000. F. Eastwood, chn.

Transmission Line — New York — St. Lawrence Co. Utilities Inc., Ogdensburg, plans 8-9 mi. 3 phase high tension line, transmission line from Ogdensburg to Morristown. To exceed $25,000.

Development Play Grounds, etc.—Phila., Pa.—Dept. Welfare, Bureau Recreation, plans developing and improving as follows: Mill Creek Play Ground, 47th and Ashland Sts., $14,000; Hancock Sq. Play Ground, Mascher, Hancock, Master and Jefferson Sts., $7,000; East Germantown Playground, Chelton Ave. and Anderson St. $17,538; plot at American, Phillips, Reed and Earp Sts., $21,000; plot at Richmond, Buchius, Ash and Bath Sts., $15,000; Roxborough Playground Pennsdale and Mitchell Sts., $39,200; Belmont Playground, 21st and Chew Sts., $16,300; Pennse Memorial Playground, Susquehanna and 12th Sts., $29,800; Francisville Recreation Center, Francis and Shirley Sts., $42,000; Weccacoe Playground, Catherine St., $13,500; plot C. D. Ontario and Wesmoreland Sts. $1,000; equipping and constructing pool Whitehall Commons Playground, Torresdale and Wakeling Sts., $40,000. Private plans.

Park, etc. — Melbourne, Fla. — Election June 9, $35,000 bonds, park, incl. fill and hydraulic dredging.

Fire Walls—New Orleans, La.—Bd. Port Comrs., 200 New Court Bldg., plans 4 new fire walls, two at 1st and Robin St. sheds, and two in lower end of city below Canal St.

Stadium — Wooster, O. — College of Wooster having plans prepared rein.-con. stadium, 5,000 seating capacity. $25,000. Osborn Eng. Co., 7016 Euclid Ave., Cleveland, engrs. Noted Jan. 10.

Stadium—Madison, Wis.—University of Wisconsin having plans prepared by A. Peabody, State Capitol, one 25 x 62 ft., one 50 x 62 ft., and one 22 x 450 ft., concrete additions to athletic stadium at Camp Randall. $50,000. Noted Apr. 24.

Grand Stands—St. Louis, Mo.—Dodier Realty Investment Co., 2906 North Spring Ave., making preliminary plans baseball park stands, concrete and steel, 10,000-15,000 seating capacity. $100,000. Private plans.

Pipe Line—Texas—Magnolia Petroleum Co., Beaumont, making plans 210 mi. gas pipeline from Webster Parish, La., to here. $500,000. Private plans.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., plans 29,043 ft. 4 in. c.i. gas mains in 33 streets and avenues, $66,039, and 12,237 ft. 6 in. c.i. gas mains in 10 streets and avenues, $35,573, 4,955 ft. 8 in. c.i. pipe in 3 streets $16,803. E. S. Stanton, supt. gas distribution.

Power Development — Ontario — Ontario Hydro Comn. Ottawa, plans development on Ottawa River on sites between Ottawa and Pembroke Chats Falls, Du Ford Falls, Des Joachin Falls and Alumette Falls, to result in generation of 700,000 hp.

BIDS DESIRED

Subway — Cincinnati, O. — June 6, by Rapid Transit Comrs., City Hall, 5.3 mi. rapid transit line, incl. 1,600 ft. subway, 415,000 cu.yd. excav., 20,200 cu.yd. rein.-con., 910 tons reinforcing, 5,200 cu.yd. plain concrete, 235 ton structural steel, etc. $1,000,000. F. Krug, City Hall, engr. Noted May 15.

Street Lighting System—Calif., Hawthorne—See "Streets and Roads."

Seawall — California — See "Streets and Roads."

BIDS RECEIVED

Wharf & Transfer Shed—Corpus Christi, Tex.—Corpus Christi and Neuces Co. Navigation Dist. 1, wharf and transfer shed, from Sumner Sollit Co., Natl. Bank Commerce, San Antonio, $745,070. Noted Apr. 10.

CONTRACTS AWARDED

Coal Pocket—Everett, Mass.—New England Fuel & Transportation Co., 111 Devonshire St., Boston, trestle, bulkhead, etc., here, to Aberthaw Constr. Co., 27 School St., Boston. Engrs. est. $100,000.

Coal Handling Plant—Fall River, Mass.—A. J. Richards & Sons, Weymouth, new coal handling plant, to G. P. Carver, Inc., 261 Franklin St., Boston. Archts. est. to exceed $100,000.

Coal Handling Plant—Hartford, Conn.—Capitol Coal Co., new plant on property of New York, New Haven & Hartford R.R., to G. P. Carver Inc., 261 Franklin St., Boston. Archts. est. about $100,000.

Trolley Tunnel—Phila., Pa.—Fairmount Park Comn., City Hall, completion trolley tunnel in front Art Museum, to O'Neill Co., 127 East Mermaid Lane, $200,000. Noted May 8.

Retaining Wall—Wheeling, W. Va.—See "Streets and Roads."

Retards, etc.—Lexington, Mo.—State Hy. Dept., Jefferson City, 2,400 lin.ft. current retards along north bank Missouri River, above here, in connection with bridge over Missouri River, here, to Woods Constr. Co., Lincoln, Nebr., $140,400. Noted May 15.

Grain Elevator—Ft. Worth, Tex.—Kimbell Milling Co., South Main St., concrete addition to grain elevator, to Jones-Hettelsater Constr. Co., Mutual Bldg., Kansas City, Mo., $125,000. Noted Feb. 28.

Heating—Denver, Colo.—See "Buildings."

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., will build 28,358 ft. 4, 6, 8, 12 and 16 in. c.i. gas mains in 29 streets and avenues, by day labor, $104,159. E. S. Stanton, supt. gas distribution. Noted May 15.

Tunnel—British Columbia—British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, 3,561 ft. tunnel, 14 x 14 ft. diameter, from Alouette Lake to Stave Lake, to O. Olson, Maple Valley, Wash., $331,600. Noted Apr. 24.

Material and Equipment

PROPOSED WORK

Road Oil—Syracuse, N. Y.—Pub. Wks. and Park Comn., plan to purchase road oil. $33,000.

Road Oil—Watervliet, N. Y.—Common Council plans to purchase 20,000 gal. road oil.

Snow Removal Machinery—Racine, Wis.—Racine Co., plans to purchase snow removal machinery. W. Bechthold, hwy. comr.

Tractors, etc.—Minneapolis, Minn.—F. S.

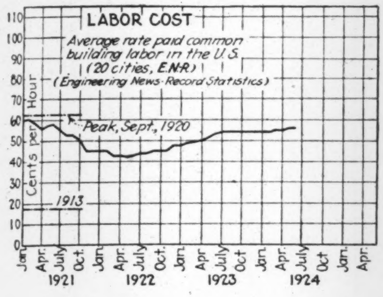
CONSTRUCTION NEWS

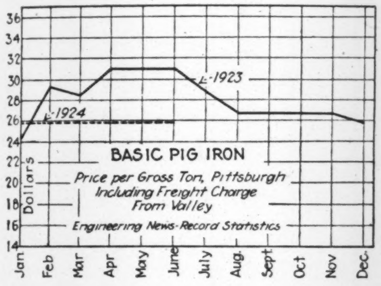
Engineering News-Record, June 5, 1924

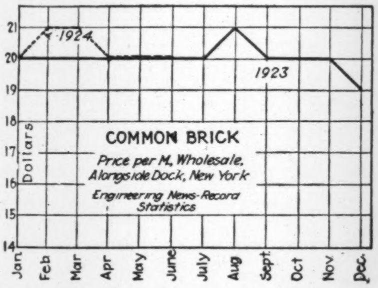
The Construction Barometer

Lower Cost Resulted in May Volume Twenty Per Cent Greater Than That for Preceding Month or Corresponding Period in 1923

CONSTRUCTION is apparently the only one of the principal industries not adversely affected by the present general slump in business. In every other direction there is falling off in demand and consequent curtailment of production. The price trend is downward in certain of the basic materials, as shown by the charts, while in others there is a tendency to remain suspended at present levels. It is evident, then, that lower cost has resulted in a volume of May construction at least 20 per cent greater than that for the preceding month or the corresponding period in 1923. Comparisons of *Engineering News-Record's* Construction Cost and Volume Index Numbers are shown on p. 997 of this issue.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
May 15	$21,484,000	$25,500,000	$46,984,000
May 22	35,046,000	13,689,000	48,735,000
May 29	24,429,000	19,422,000	43,851,000
3 weeks	$80,959,000	$58,611,000	$139,570,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

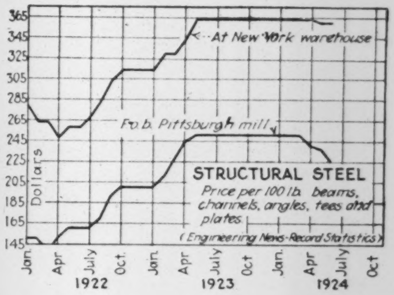
Week Ended	No.	Public Work	No.	Private Work
May 15	9	$2,261,000	38	$20,937,000
May 22	19	12,021,000	24	8,348,000
May 29	11	4,377,000	19	12,425,000
3 weeks	39	$18,659,000	81	$41,710,000

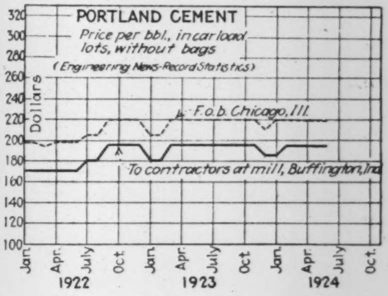
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

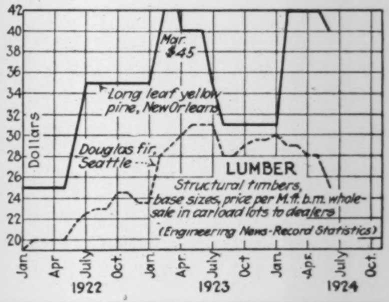
			Public		
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
May 15	38	44	98	41	214
May 22	30	41	111	41	248
May 29	24	45	84	35	213

TREND OF STEEL AND PINE LUMBER DOWNWARD

	Quoted on June 5 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.10 @2.30	$2.10 @2.35	May 15
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	59.00	60.00	May 29
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.56	.55	Apr. 24







PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
June 4	Sunflower, Miss.	June 5
June 6	Fulton, N. Y.	May 22
June 6	Garfield Heights, (Cleveland P. O.), O.	May 29
June 6	New York, N. Y.	May 29
June 9	Iron Mountain, Mich.	June 5
June 9	Hawthorne, Calif.	May 29
June 10	Toronto, Ont.	June 5
June 10	Philadelphia, Pa.	June 5
June 10	Hannibal, Mo.	June 5
June 10	New York, N. Y.	June 5
June 11	Coushatta, La.	May 29
June 11	Milwaukee, Wis.	June 5
June 12	Akron, O.	June 5
June 12	Cleveland, O.	May 15
June 12	Athens, Wis.	May 29
June 12	Houston, Tex.	June 5
June 13	Aiken, S. C.	June 5
June 13	East Boston (Boston P. O.), Mass.	June 5
June 14	Tucumcari, N. M.	May 15
	Adv. May 15 to June 5.	
June 17	Glenmore, La.	May 29
June 17	Morganfield, Ky.	June 5
June 17	New York, N. Y.	June 5
	Adv. May 29 and June 5.	
June 18	Union City, Tenn.	June 5
June 18	San Francisco, Calif.	June 5
June 18	Daytona, Fla.	June 5
	Adv. June 5.	
June 18	Quincy, Ill.	June 5
June 18	Jackson, Mich.	June 5
	Adv. June 5.	
June 19	Lewisburg, Tenn.	May 29
June 19	Lewisburg, Tenn.	May 29
	Adv. May 29 and June 5.	
June 21	Oakland, Neb.	June 5
June 24	Tampa, Fla.	May 22
June 24	Jackson, Miss.	June 5
June 24	Morganfield, Ky.	June 5
June 26	Durham, N. C.	May 29
	Adv. May 22 to June 5.	
July 2	Jackson, Mich.	May 29
July 16	Shreveport, La.	June 5
	Adv. June 5.	
July 24	Dallas, Tex.	June 5

SEWERS

Bids Close		See Eng. News-Record
June 4	Cleveland, O.	June 5
June 9	Ames, Ia.	June 5
June 9	Wellesley (Boston P. O.), Mass.	June 5
June 10	Boston, Mass.	June 5
June 10	Royal Oak, Mich.	May 29
	Adv. May 29 and June 5.	
June 11	Baltimore, Md.	June 5
	Adv. June 5.	

Bids Close		See Eng. News-Record
June 12	Inverness, Miss.	May 29
June 17	Bradentown, Fla.	June 5
June 18	Union City, Tenn.	May 15
	Adv. May 15 to June 5.	
June 18	Daytona, Fla.	June 5
	Adv. June 5.	
July 1	St. Louis .Mo.	June 5

WASTE DISPOSAL

June 3	Rutherford, N. J.	June 5
June 9	Sewickley, Pa.	May 29
July 7	Ambridge, Pa.	June 5
	Adv. June 5.	

BRIDGES

May 31	Cozad, Neb.	June 5
June 9	Alabama	May 15
June 9	Perryville, Ill.	May 29
June 9	Northampton, Mass.	June 5
June 10	Florida	May 29
June 10	Montana	May 29
June 10	Missouri	June 5
June 12	Albany, Ore.	May 15
June 12	Guelph, Ont.	June 5
June 16	Beans Mill, W. Va.	June 5
June 18	Philadelphia, Pa.	May 22
	Adv. May 22 to June 5.	
June 20	Tennessee	June 5
	Adv. June 5.	
June 27	Seattle, Wash.	May 15
	Adv. May 15 to June 5.	
June 27	La Grange, Tex.	June 5
	Adv. May 29 and June 5.	
June 30	Alabama	June 5

EXCAVATION, DRAINAGE IRRIGATION

June 9	Corinth, Miss.	May 29
June 11	New York	May 29
	Adv. May 29 and June 5.	
June 11	Clarksdale, Miss.	June 5
June 14	Newbern, Tenn.	May 29
June 17	Lake Village, Ark.	May 22

STREETS AND ROADS

June 3	Omaha, Neb.	June 5
June 3	Clinton, Ia.	June 5
June 4	Baltimore, Md.	June 5
June 4	Boston, Mass.	June 5
June 5	East Boston (Boston P. O.), Mass.	June 5
June 6	Bedford, Ind.	June 5
June 7	Brownstown, Ind.	June 5
June 9	Bainbridge, O.	June 5
June 9	St. Paul, Minn.	May 29
June 9	South Bend, Ind.	May 29
June 9	Alabama	May 15
June 9	Sweetwater, Texas	May 22
June 9	California	May 29
June 9	Hawthorne, Calif.	May 29
June 9	Los Angeles, Calif.	May 29
June 9	Michigan	May 29
June 9	West Allis, Wis.	June 5
June 9	Louisville, Ky.	June 5
June 9	Sioux Falls, S. D.	June 5
June 9	Brookline (Boston P. O.), Mass.	June 5
June 9	Plattsburgh, N. Y.	June 5
June 10	Michigan	May 29
June 10	Montana	May 29
June 10	Birmingham, Ala.	May 22
June 10	Oskaloosa, Kan.	May 22
June 10	Maryland	May 29
	Adv. May 29 and June 5.	
June 10	Ft. Wayne, Ind.	May 29
June 10	Hot Springs, Ark.	May 29
June 10	Kentucky	May 29
June 10	St. Catherines, Ont.	June 5
June 10	South Dakota	June 5
June 10	Massachusetts	June 5
June 10	Fond du Lac, Wis.	June 5
June 10	Jasper, Fla.	June 5
June 10	Columbus, O.	June 5
June 10	New York Mills, N. Y.	June 5
	Adv. June 5.	
June 10	Missouri	June 5
June 10	New York, N. Y.	June 5
June 11	San Antonio, Tex.	June 5
June 11	Columbus, O.	June 5
June 11	Rhode Island	June 5
	Adv. May 29 and June 5,	
June 11	West Roxbury (Boston P. O.), Mass.	June 5
June 11	Brooklyn, N. Y.	June 5
June 12	Atlantic City, N. J.	May 29
June 12	Louisiana	May 29
June 12	Altoona, Pa.	June 5
June 12	Houtzdale, Pa.	June 5
June 12	Louisiana	June 5
June 12	New York, N. Y.	June 5
June 13	Nebraska	June 5
June 13	Ohio	June 5
June 16	Sarasota, Fla.	June 5
June 16	Pennsylvania	June 5
	Adv. May 29 and June 5.	
June 16	New Jersey	June 5
	Adv. May 29 and June 5.	
June 16	Alabama	May 22
June 16	Michigan	May 22
June 16	Akron, O.	May 29
June 16	California	May 29
June 16	Patchogue, N. Y.	June 5
	Adv. June 5.	
June 16	Plainfield, N. J.	June 5
	Adv. June 5.	
June 17	Michigan	June 5
June 17	Morehead City, N. C.	May 29
	Adv. May 29 and June 5.	
June 17	Shenandoah, Pa.	May 29
	Adv. May 29 and June 5.	
June 17	Bartow, Fla.	June 5
June 17	Charleston, Mo.	June 5
	Adv. June 5.	
June 17	Williamson, W. Va.	June 5
June 17	Pennsylvania	June 5
	Adv. May 29 and June 5.	
June 17	Bradentown, Fla.	June 5
June 17	Minneapolis, Minn.	June 5
June 18	Independence, Kan.	May 29
June 18	Pecos, Tex.	May 29
June 18	Quebec	June 5
June 18	Michigan	June 5
June 19	Marion, Kan.	June 5
June 19	Van Buren, Ark.	June 5
June 20	Baird, Tex.	May 29
June 20	Wichita, Kan.	May 29
June 20	Tennessee	Junt 5
June 24	South Highlands, La.	June 5
	Adv. June 5.	
June 24	Howard, Kan.	May 29
June 25	Ansonia, Conn.	June 5
	Adv. June 5.	
June 26	Huntsville, Tex.	June 5
June 26	Newton, N. J.	June 5
	Adv. June 5.	
June 27	Carthage, Mo.	June 5
June 30	Tennessee	June 5
July 1	Lisbon, O.	May 15
July 1	Lisbon, O.	May 22
July 1	St. Louis, Mo.	June 5
July 15	Faribault, Minn.	June 5

INDUSTRIAL WORKS

June 10	Harrisburg, Pa.	May 22
	Adv. May 22 to June 5.	
June 17	Saratoga Springs, N. Y.	May 22

BUILDINGS

June 6	Baltimore, Md.	June 5
June 7	Madison, Wis.	June 5
June 9	Irvington, N. J.	May 22
June 9	Elizabeth, N. J.	May 29
June 9	Long Beach, Calif.	May 29
June 9	Towson, Md.	June 5
June 9	Minneapolis, Minn.	June 5
June 9	Portsmouth, O.	June 5
June 9	Kenosha, Wis.	June 5
June 10	Somerville, Mass.	June 5
June 10	Bridgeton, N. J.	June 5
June 10	Cumberland, Md.	June 5
June 10	New York, N. Y.	May 15
June 10	New York, N. Y.	May 22
June 10	Burlington, Wis.	May 22
June 11	Wilson, Pa	June 5
June 12	Philadelphia, Pa.	June 5
June 12	Woodbury, N. J.	May 29
June 13	Flint, Mich.	June 5
June 14	Brooklyn, N. Y.	May 22
June 14	Detroit, Mich.	June 5
June 15	Dallas, Tex.	May 29
June 15	Hibbing, Minn.	June 5
June 15	Omaha, Neb.	June 5
June 16	Greigsville, N. Y.	May 22
	Adv. May 15 to June 5.	
June 16	Burlington, Wis.	May 29
June 18	Asbury Park, N. J.	May 22
June 20	New York, N. Y.	June 5
June 20	Trenton, N. J.	June 5
June 21	Woodland, Calif.	June 5
June 23	Kenosha, Wis.	June 5
June 23	Delanco, N. J.	June 5
June 24	New York, N. Y.	May 29
June 27	Lubbock, Tex.	May 29
June 28	Kent, O.	June 5
June 30	Ardmore, Pa.	June 5
July 1	Dallas, Tex.	May 22

FEDERAL GOVERNMENT WORK

June 10	Dredging, etc.—Jacksonville, Fla.	May 22
June 10	Hospital Ward—Ft. Sill, Okla.	May 29
June 11	Post Office—Saranac Lake, N. Y.	May 8
June 11	Generating Plants—Pittsburgh, Pa.	May 15
	Adv. May 15 to June 5.	
June 11	Compass Station, etc.—Hog Island, Va.	June 5
June 12	Tower—Philadelphia, Pa.	May 22
June 12	Post Office—Dubois, Pa.	May 22
June 13	Post Office—Greensburg, Pa.	May 29
June 14	Operating Machinery—Florence, Ala.	May 15
	Adv. May 15 to June 5.	
June 16	Breakwater—Dunkirk Harbor, N. Y.	May 22
	Adv. May 22 to June 5.	
June 16	Post Office—Scranton, Pa.	June 5
June 16	Dredging — New York, N. Y.	June 5
June 17	Retaining Wall—Altoona, Pa.	June 5
June 17	Laundry—Tupper Lake, N. Y.	May 29
	Adv. May 29 and June 5.	
June 18	Screens, etc.—Florence, Ala.	May 29
	Adv. May 29 and June 5.	
June 18	Post Office — Salisbury, Md.	May 22
June 18	Dump Scows—Pittsburgh, Pa.	May 22
	Adv. May 22 to June 5.	
June 18	Compass Station—Galveston, Tex.	June 5
June 18	Roads and Gutters—Washington, D. C.	June 5
June 18	Compass Station—Bar Harbor, Me.	June 5
June 19	Post Office—Bluffton, Ind.	May 29
June 20	Steel Boats—Huntington, W. Va.	June 5
June 23	Dredging — Philadelphia, Pa.	June 5
June 23	Bridge—Quantico, Va.	June 5
June 24	Hospital—Rutland, Mass.	May 29
	Adv. May 29 and June 5.	
June 24	Mess Hall, etc.—Gulfport, Miss.	May 29
	Adv. May 29 and June 5.	
June 24	Buildings, etc.—Federal Park, Md.	May 29
	Adv. May 29 and June 5.	
June 25	Bridges—Wilmington, Del.	May 1
June 26	Dredging—Baltimore, Md.	May 29
	Adv. May 29 and June 5.	
June 26	Current Retards—Lexington, Mo.	June 5
June 30	Post Office — Cohoes, N. Y.	June 5
	Adv. June 5.	
July 7	Steamboat Hull—Nashville, Tenn.	June 5
July 9	Radio Building—Destruction Island, Washington	June 5
July 9	Radio Building—Point St. George, Calif.	June 5
July 30	Store House Depot, etc.—Pearl Harbor, H. T.	June 5
Aug. 5	Bridge—Florence, Ala.	May 15
	Adv. May 15 to June 5.	

UNCLASSIFIED

June 7	Louisville, Ky.	Jnue 5
June 10	Plumbing System, etc.—New York, N. Y.	June 5
June 13	Removing Head Block, etc.—Ottawa, Ont.	June 5
June 16	Street Lighting System — Redondo Beach, Calif.	June 5

MATERIAL AND EQUIPMENT

June 3	Underground Cables—Boston, Mass.	June 5
June 10	Concrete, Sand, etc.—Minneapolis, Minn.	June 5
June 10	Road Oil—Montreal, Que.	June 5
June 11	Posts and Brackets—Milwaukee, Wis.	June 5
June 12	Street Flushers and Sprinklers —New Ulm, Minn.	June 5
June 12	Steel Castings—Cement, etc. —New York, N. Y.	June 5
Aug. 29	Dredger—Brisbane, Queensland, Australia	Apr. 10

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Fla., Homestead—Making plans waterworks. $150,000. C. W. Murray, Miami, engr.

Fla., Lake City—Election June 24, $35,000 bonds extending waterworks. C. R. Horn, city engr.

Fla., Okeechobee—Election June 17, $90,000 bonds, waterworks system, mains, etc.

Tenn., Morristown—Voted $150,000 bonds improving water system and electric light plant. Noted Mar. 6.

Ky., Pikeville — Plans filtration plant with high and low service pumping stations, reservoir, etc. $130,000. J. N. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa.

O., Carrollton — Plans enlarging water supply by putting down 3 deep water wells and constructing 300,000 gal. reservoir, also an electrically operated pumping station, $85,000; also extending 4 and 6 in. mains in various sections of village, $18,000. W. Lambright, member of comn. McClaskey & Reese, Renkert Bldg., Canton, consult. engrs. Noted May 15.

Wis., Janesville—Making plans 4 in. c.i. mains in Yuba and Monroe Sts.; 6 in. c.i. mains in Prospect Ave., Ringold, Court, Monroe, Harding, Washington, Palm, Cherry and High Sts.; 8 in. c.i. mains in Garfield and Milwaukee Aves., St. Marys and Walker Sts.; 12 in. c.i. mains in Sharon St. To exceed $15,000. C. V. Kerch, City Hall, engr.

Waterworks (Continued)

Neb., Omaha—Metropolitan Utilities Dist. c/o T. Leisen, making plans 45 mi. 6- to 8-in. water-main and 20 mi. 4- to 6 -in. gas-mains. $500,000. H. Beal, engr.

Mo., Charleston — Making preliminary plans 100,000 gal. steel tank on tower, additional pumping units, new wells, etc. L. T. Bertha, City Hall, engr.

Mo., Portageville — Plans new election soon $40,000 bonds waterworks and distribution. Former election defeated. A. C. Moore, Joplin, engr. Noted May 8.

Mo., Washington—Plans election soon $60,000 bonds, for 250,000 gal. tank on tower, pumps and several miles 6 and 8 in. c.i. mains, fire hydrants, etc. $60,000. W. B. Rollins & Co., Exch. Bldg., Kansas City, engrs.

Okla., Seminole — Making surveys new waterworks incl. well, tower, valves, mains and hydrants. $40,000. Gantt-Baker, 1st Natl. Bank Bldg., Oklahoma City, engrs.

Calif., Anaheim—Voted $110,000 bonds new mains and fire protection extensions. O. E. Steward, city engr. Noted Apr. 3.

Calif., Niles—Spring Valley Water Co., 425 Mason St., San Francisco, having plans prepared rein.-con. reservoir, here. $35,000. G. A. Elliott, ch. engr.

Calif., Oxnard—Plans election to vote on $16,000 bonds, waterworks improvements, principally deep well pumps.

Que., Hull—Plans filtration plant. $175,000. T. Lanctot, city engr.

BIDS DESIRED

Mass., East Boston (Boston, P. O.)—June 13, by Dept. Pub. Wks., City Hall, Boston, mains and sewers in Ashley St. from Breen to Boardman St., here. $25,000. J. A. Rourke, comr.

New York—June 17, by Bd. Water Supply, Municipal Bldg., New York City, furnishing gate valves, etc., for Williamsburg conduit of Catskill aqueduct, Contr. 217. G. J. Gillespie, pres.; adv. E. N.-R. June 5.

N. Y., Brooklyn — June 10, by N. J. Hayes, comr. Water Supply, Gas and Electricity, Municipal Bldg., New York, mains and appurtenances in Fort Hamilton Pkway., Delamere Pl., Howard, Sutter, 9tn, 15th, 16th, M, N and O Aves., 52nd, 54th, 56th, 70th, 81st, East 8th, East 9th, East 27th, East 46th, East 52nd, East 54th, East 55th, East 56th, East 98th, West 1st and West 23rd Sts., here.

Pa., Phila. — June 10, Director Pub. Wks., Room 216, City Hall, 200 tons 16 in. and under c.i. mains, etc., in Margaret and Lackawanna Sts., Contr. 673; 8 sootblowers for 8 Bodenhousen water tube boilers at Queen Lane Pumping Station, Contr. 678; 12,220 ft. c.i. laterals, Contr. 684; 500 kw. generator together with electric works, Contr. 685. Private plans.

S. C., Aiken—June 13, by City Comn. 600,000 gal. steel stand pipe for water plant. H. Sudlow, supt.

S. C., Inman—Town asked bids for May 30, water and sewerage systems. This report was published in May 22 issue under Texas.

Fla., Daytona—June 18, by L. E. Hough, city clk., extending mains. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., consult. engrs. Noted Feb. 14 under "Sewers."

La., Shreveport—July 16, by W. T. Mayo, comr. Pub. Utilities, City Hall, extending waterworks and sewerage systems. N. J. Chester Engineers, Union Bank Bldg., Pittsburgh, Pa., engrs.; adv. E. N.-R. June 5.

Tenn., Jackson—June 24, by Mayor and Comrs. at office of City Recorder, high duty pumping engine, S. C. Lancaster, consult. engr.; adv. E. N.-R. June 5.

Tenn., Union City — June 18, by City Clerk, waterworks supplies, incl. air compressor, 55 lb. pressure, with 3 phase 220 volt motor, 1 domestic supply pump, 750 g.p.m. two boiler feed pump, 40 g.p.m., 1 fire service pump 1,500 g.p.m., 1 feed water heater of c.i. open type 3 superheaters for 208 hp. boilers and 3 rein.-con. settling tanks, 14 x 70 x 13 ft., 6 x 30 x 12 ft., and 10 x 50 x 12 ft. C. H. Jenks, Union City, engr. Noted Dec. 20.

Ky., Hazard—Taking bids 6,800 ft. 2- to 6-in. class B c.i. pipe, 40 fittings, 25 valves, 16 fire hydrants, 5,000 lb. lead, 200 lb. jute, etc.; 800 ft. 14 in. c.i. sewer pipe, 10 connections, 6,060 ft. 6- to 12-in. vitr. sewers, 30,000 brick, 30 manhole covers, 3 lamphole covers, 25 road box covers, etc. Shield Eng. Co., Hazard, engrs.

Ky., Morganfield—June 24, by W. Young, mayor and City Council, at office of A. F. Waller, city clk., river intake, pumping station, filter plant, pumping equipment and 6 mi. 8 in. c.i. or wood stave pipe line. Gannett, Seelye & Fleming, 236 Randolph Bldg., Memphis, Tenn., engrs.; adv. E. N.-R. June 6.

O., Akron—June 12, by M. P. Tucker, supt. Water Works, 2 m.g. coagulation basin, at water works plant. $100,000.

FILTER PLANT—PROVIDENCE, R. I.

Following are lowest three bids opened by Water Supply Bd., May 21, for filtration system, Contr. No. 30, (A) Winston & Co., 240 Fair St., Kingston, N. Y., (awarded contract); (B) Wilson & English Constr. Co., 50 Church St., New York City; (C) Whiting-Turner Constr. Co., 404 Stewart Bldg., Baltimore, Md. The unit bids were as follows:

	A	B	C
100 acres clearing	$60.00	$150.00	$168.00
20 acres grubbing	200.000	300.00	502.00
8,000 cu.yd. removal of soil	1.00	1.25	2.30
33,000 cu.yd. earth excavation for aqueduct and appurtenance west of station 93+25	1.00	1.50	1.10
20,000 cu.yd. earth excavation for South Basin Dam, south of Station 14+50	2.00	1.75	2.35
2,000 cu.yd. earth excavation in sheeted trench	2.50	7.00	6.20
80,000 cu.yd. earth excavation for all other purposes not included in items 4, 5 and 6	1.30	.90	1.38
15,000 cu.yd. rock excavation where blasting is permitted	3.00	4.00	4.73
1,000 cu.yd. rock excavation where blasting is not permitted	6.00	10.00	7.00
55,000 cu.yd. refilling and embanking of rolled soil	1.50	1.60	2.20
1,000 cu.yd. refilling and embanking compacted by pneumatic tampers	2.00	2.50	3.00
35,000 cu.yd refilling and embanking, other than soil, compacted by rolling	.80	1.00	1.04
215,000 cu.yd. refilling and embanking, other than soil, in dams	.70	.80	.76
30,000 cu.yd. miscellaneous refilling and embanking not included in items 10 to 13	.70	.70	.85
10,000 cu.yd. soil dressing	1.50	1.00	2.30
10,000 cu.yd. screened gravel and broken stone	2.50	2.50	3.65
20,000 cu.yd. riprap	2.00	1.50	3.60
200 cu.yd. stone paving	7.00	6.00	6.90
8,000 sq.yd. bituminous macadam surfacing	1.20	2.00	3.50
46,000 bbl. portland cement	3.00	3.30	3.47
5,500 cu.yd. concrete in filters and other structures composed principally of reinforced concrete	22.00	27.00	19.20
3,500 cu.yd. concrete in mixer, influent control chamber and in aqueduct east of filters	17.00	22.00	15.35
5,000 cu.yd. concrete in aqueduct west of influent control chamber and in settling basin structures	11.00	14.00	13.25
3,000 cu.yd. concrete in cut-off walls and blankets for foundations of dams	9.00	9.00	8.20
180 cu.yd. concrete in wash water gutters for filters, solution boxes etc.	47.00	40.00	62.00
12,000 cu.yd. concrete masonry not included under other items	12.00	16.00	16.10
68,000 sq.ft. mortar lining of steel pipe	.30	.25	.35
Cast iron pipe and special castings, mainly for areators (lump sum)	55,000.00	60,000.00	58,700.00
Cast iron pipe and special castings in filters and for coagulant pipes (lump sum)	60,000.00	69,000.00	60,300.00
Mortar lining of pipe furnished under item 29 (lump sum)	20,000.00	12,000.00	17,500.00
900,000 lb. steel for reinforcing concrete	.06	.06	.0514
1,300,000 lb. furnishing and laying 94-in. steel pipe and appurtenances for aqueduct	.07	.085	.08
850,000 lb. furnishing and laying 60-in. and 48-in. steel pipe and appurtenances	.075	.09	.09
310,000 lb. furnishing 60-in. steel pipe and appurtenances	.06	.07	.072
Lateral pipes in filters (lump sum)	20,000.00	19,000.00	21,670.00
250,000 lb. miscellaneous steel and iron	.10	.10	.11
300 ton caring for and setting valves, gates, meters and other metal work furnished by the City	60.00	30.00	34.50
1,300 cu.yd. brick masonry	33.00	45.00	46.50
Buildings, except garage, not including portions paid for under other items (lump sum)	34,000.00	150,000.00	44,100.00
Garage, not including portions paid for under other items (lump sum)	6000.00	17,000.00	6,400.00
Furnishing and installing heating system (lump sum)	17,000.00	6,000.00	20,100.00
Furnishing and installing plumbing (lump sum)	3,500.00	3,000.00	3,115.00
Furnishing and installing electric wiring (lump sum)	8,000.00	2,000.00	7,430.00
Furnishing and installing car elevator. (lump sum)	8,500.00	7,000.00	7,810.00
Furnishing and installing bucket elevator and conveyor (lump sum)	4,000.00	3,500.00	3,500.00
Furnishing and installing crane (lump sum)	3,000.00	2,500.00	2,100.00
500 lin.ft. 24-in. vitrified pipe	3.00	2.00	3.50
1,000 lin.ft. 12-in. vitrified pipe	1.00	1.50	1.40
500 lin.ft. 8-in. vitrified pipe	.50	1.00	.70
1,000 lin.ft. 4-in. agricultural tile	.35	.50	.35
3,000 lb. copper	.50	.25	.70
2,000 lin.ft. drilling holes in rock and masonry	1.00	1.00	1.44
1,000 cu.yd. grout	6.00	4.00	6.00
1,000 cu.yd. filter gravel	4.00	8.00	15.00
1,800 cu.yd. filter sand	12.00	12.50	16.30
2,000 lin.ft. stone walls	4.00	2.00	3.45
8 acres grassing	50.00	100.00	230.00
Cleaning up (lump sum)	1,000.00	4,000.00	2,000.00
Extended totals	$1,799,210	$2,118,450	$2,147,440

Mich.—Iron Mountain—June 9, by Bd. Water Comrs., 1 m. g. capacity rein.-con. equalizing reservoir flat slab roof type, 100 ft. square, 13 ft. average depth, 43,000 lb. reinforcing, etc. Hoad, Decker, Shoecraft & Drury, Ann Arbor, engrs.

Mich., Jackson—June 18, furnishing c.i. pipe, fittings, valves and lead, etc. J. E. Whittaker, city mgr.; adv. E. N.-R. June 5.

Ill., Quincy—June 18, by W. R. Gilston, city supt., and Mead & Seastone, engrs., Journal Bldg., Madison, Wis., Clearwater reservoir, rein.-con., 20 ft. diameter, 1 m.g. capacity. Noted Mar. 13.

Wis., Milwaukee—June 11, by Central Bd. Purchases, City Hall, furnishing one 48 in., two 54 in. and four 30 in. gate valves.

Mo., Hannibal—June 6, by Burns & McDonnell Eng. Co., engrs., 402 Interstate Bldg., Kansas City, 676 tons c.i. pipe and specials, switchboard, and 9 motor driven centrifugal pumps as follows: three 2,500 g.p.m. raw water, one 3,150 g.p.m. and one 4,200 g.p.m. filtered water, one 500 g.p.m. wash water and three 500 g.p.m. booster pumps.

Tex., Cisco—Taking bids concrete filter plant and standpipe, 40 x 75 ft. $50,000. Elrod Eng. Co., 3124 Elm St., Dallas, engrs. Noted Apr. 17.

Tex., Dallas—July 24, by City Comn., reservoir at Garza, also viaduct across reservoir for Denton-McKinney Rd. $5,000,000. E. A. Kingsley, city engr. J. C. Nagle and R. A. Thompson, Municipal Bldg., consult. engrs.

Tex., Houston—June 12, by H. L. Washburn, aud. Harris Co. Navigation Dist., Court House, 100,000 gal. water tank, tower, mains, etc., Ship Channel. $20,000. E. A. Tucker, Court House, engr.

Calif., Long Beach—Taking bids 70,000 ft. 30 in., 50,000 ft. 20 in., 32,000 ft. 8 in. and 70,000 ft. 6 in. water pipe. R. D. Van Alstine, city engr.

Calif., Mission Beach — City Trustees taking bids, 27,945 lin.ft. 6 in., 5,470 lin. ft. 10 in., 6,781 lin.ft. 12 in. cement concrete pipe, 865 lin.ft. 8 in. c.i. pipe, 40,186 lin.ft. trench and laying sewers from 4 to 12 ft. deep, 87 concrete manholes, 40 concrete drop manholes, 46 dead ends with cross, 6 flush tanks, 3 pumping stations, etc. F. A. Rhodes, San Diego, engr.

Calif., San Francisco—June 18, by Bd. Pub. Wks., flexible joint c.i. pipe for submarine portions Hetch Hetchy Aqueduct, Bay Crossing Division, Hetch Hetchy Project, for City and San Francisco Co. $200,000. M. M. O'Shaughnessy, city engr. Noted May 15.

Ont., Toronto—June 10, by W. W. Hiltz, mayor, City Hall, portable air compressor Tender 47, and 2 air pumps Tender 48, for waterworks. R. C. Harris, city engr.

Waterworks (Continued)

BIDS RECEIVED

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Hegeman, Prospect, Flatland, Lott, Bedford, Riverdale, Sheffield Aves., etc., here, from G. V. Cornell, Rosebank, S. I., $11,664. Noted May 22.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Skillman Ave., Buckley and Packard Sts., here, from S. Galiucci, 38 Railroad Ave., Corona. Noted May 22.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Chauncey, Calamus and Clermont Sts., etc., here, from Kennedy & Smith Inc., 93 Amity St., Flushing, $6,999. Noted May 22.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Arnow, Adee, Barnes and Paulding Sts., from Melrose Constr. Co., 230 East 162nd St., $5,600; Longfellow, Sheridan and Teller Aves., from Beaver Eng. & Contg. Co., 51 Chambers St., $9,910. Noted May 22.

Calif., Glendale — See "Streets and Roads."

Que., Montreal — Tunnel under Lachine Canal at Wellington St. to carry three 48 in. water conduits, from D. G. Loomis & Sons, St. Patrick St., $274,780. Noted Apr. 10.

CONTRACTS AWARDED

Mass., Brighton (Boston P. O.)—C. J. Garvin, Water Div., Pub. Wks. Dept., City Hall, Boston, laying and relaying mains in Cleveland Circle, Commonwealth Ave., Southerland and Colonial Rds., here, to De Christaforo Bros. Co., Glendover St., Roxbury, $16,913. Noted May 29.

Mass., Roxbury (Boston P. O.) — See "Sewers."

N. Y., Brooklyn — N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg, New York, mains in 21 streets and avenues, to Paladino Contg. Co., 437 East 120th St., New York, $10,389, and in U and Danforth Aves., to Gripp Contg. Co., 85 Webster Ave., Long Island City, $12,615. Noted May 15.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Bronx Blvd., Unionport Rd., Sexton and Lamport Places, Adee, Barnes, Bissel, Cruger, East Tremont, Hobart, Monticello Roberts, Wilcox and Young Aves. East 212th and Victor Sts., Bronx Boro., to Knight & Demicco Inc., 448 East Tremont Ave., $14,899. Noted May 15.

Pa., Phila.—Bureau Water, Dept. Pub. Wks., City Hall, supply pipe and fittings to Central Fdry. Co., 41 East 42nd St., New York City, $99,560, valves and fire hydrants, to A. P. Smith, East Orange, N. J., $17,460, Contr. 668; Contr. 669, to J. J. McHugh, 1617 Race St., $105,665; Contr. 680 to Service Supply Corp. 20th and Venango Sts., $9,210. Noted May 29.

Md., Baltimore — Bd. Awards, Pumping Station 2, Contr. 213, incl. c.i. pipe lines, sludge pumping station and sludge well, 9 gate valves, 65 tons c.i. pipe and special castings, etc., to D. W. Glass, 2000 30th St., $30,500. Noted May 15.

La., Alexandria—Rein.-con. reservoir to Caldwell Bros., 816 Howard St., New Orleans $56,250. Noted May 8.

O., Cleveland—For 1,730 ft. 36 in. c.i. main in Ridge Rd. Sect. 2, to J. Kalill & Jackson Co., Bangor Bldg., $39,222. Noted May 29.

O., Cleveland—Mains in Woodland Ave., Sect. "M," 31 tons 60 ft. c.i. or steel pipe, 11,000 cu.yd. earth excav., to Winterbottom & Connelly, 2644 Southington Rd., $106,235. Noted May 15.

Mich., Ecorse—Detroit Ecorse Land Co., 11,739 ft. 6-16 in. c.i. mains in Oakwood Blvd., to W. Blanck & Co., 40 Seven Mile Rd., Detroit, $49,500.

Ill., Vandalia—For 100 tons 4 and 6 in. c.i. pipe, to United States Cast Iron Pipe & Fdry. Co., 122 South Michigan Ave., Chicago, $6,000; laying c.i. pipe, to J. W. and W. C. Debrun, Assumption, $3,170.

Wis., Milwaukee—Dept. Pub. Wks., c.i. mains in various streets, to Wenzel & Henoch, 498 27th St., $20,800. Noted May 29.

Minn., Winona—For 13,398 ft. 4- to 14-in. Class B c.i. pipe, 28 brick manholes, 15,400 lb. c.i. specials, 28 gate valves, 17 fire hydrants, to S. Johnson, 818 East 3rd St., Duluth, $27,608. Noted May 8.

Mo., Chillicothe—Waterworks improvements: boiler room, etc., to G. P. Rientjes Co., Kansas City, $25,000; boilers, to Power Machine Co., 505 Interstate Bldg., $12,637; concrete smokestack, to Webe Chimney Co., Chicago, $6,000; chain grate stoker, etc., to Combustion Engineering Corp., 1002 Coca Cola Bldg., Kansas City, $4,156. Noted May 8.

Tex., Dallas—For 200 tons 6 in. c.i. pipe, to U. S. Cast Iron Pipe & Fdry. Co., Scollard Bldg., $0.946 per lin.ft.

Tex., Jacksonville—Will lay 4- to 6-in. main extensions in various additions, by day labor. $15,000.

Neb., Howell—For 7,205 lin.ft. 4 in. c.i. pipe, fire hydrants, valves, fittings, etc., to Asflund Constr. Co., Tecumseh.

Calif., Compton — See "Streets and Roads."

Que., Montreal — Water main culvert under Canadian Natl. Ry. tracks at Atwater Ave., to Atlas Constr. Co., Belmont St., $24,680. Noted May 15.

B. C., Vancouver — Provincial Government, Victoria, new process (de la Vand) water system 1,600 ft. 8 in., 12,500 ft. 6 in. and 1,600 ft. 4 in. c.i. pipe in University site, to Canadian Fairbanks Morse Co., 798 Betty St., $20,000, also 5,000 ft. 6 in. pipe to City $4,500, and 2,000 ft. 6 in. and 25 ft. 4 in. to Pacific Mills Ltd., Ocean Falls, $2,400.

Sewers

PROPOSED WORK

Mass., Medford—Plans sewers in various streets. $42,000. C. Cannock, city engr.

Fla., Dunedin—Plans storm and sanitary sewers. $25,000.

Fla., Homestead—Making plans sewerage system. $150,000. C. W. Murray, Miami, engr.

Tenn., Jackson—Bd. City Comrs. takes bids in about 60 days 15,000 lin.ft. 6- to 12-in. sewers. To exceed $25,000. E. R. Dike, city engr.

O., Columbus—Making plans 9,207 ft. 6- to 12-in. sewers in alley east Cleveland Ave., $21,861; 3,600 ft. 8- to 6-in. sewer in Olentangy St., $5,881; 1,440 ft. 6- to 18-in. combined sewer in alley west Lockbourne Ave., $2,768; 1,100 ft. 8- to 10-in. sewer in Lockbourne Rd., $2,985; 5,495 ft. 8 in. sewer in Ryan Ave., $14,392; 750 ft. 6- to 10-in. sanitary sewer in Chittenden Ave., $2,016. R. H. Simpson, city engr.

O., Columbus—Franklin Co. making plans laying 13,255 ft. 8- to 12-in. sewers and 28 manholes in Sewer Dist. Clinton 2, Highland Garden Areas, approximately $30,000. E. G. Bradbury, 262 South High St., county engr.

Ind., Evansville—Bd. Pub. Wks. having revised plans prepared shortening length, etc., Howard Roosa Trunk Sewer. $400,000. J. D. Saunders, city engr. Noted Apr. 24.

Wis., Wausau—Soon takes bids 32,390 lin.ft. 10- to 18-in. vitr. sewers in various streets. To exceed $25,000. B. C. Gowen, City Hall, engr.

Mo., Portageville — Plans new election soon, $30,000 bonds for sewers. Former election defeated. Noted May 8.

Tex., Dallas—Making plans 8 mi. 18- to 24-in. vitr. sewer in White Rock Creek. $125,000. E. A. Kingsley, city engr.

Okla., Seminole—Making surveys new 7 mi. sanitary sewerage system and disposal plant. $38,000. Gantt-Baker Co., 1st Natl. Bank Bldg., Oklahoma City, engrs.

Calif., Alhambra—Plans election to vote on $30,000 bonds, storm drains, sewers, etc. T. B. Downer, city engr.

Calif., Exeter—Plans sewerage system with septic tank.

Calif., Fresno—Had plans prepared 6 in. vitr. sewers with lampholes and concrete manholes, etc., Fairmont addition. To exceed $25,000. W. Stranahan, city engr.

Calif., Laguna Beach — Laguna Beach Sanitary Dist. voted $95,000 bonds for sewers and disposal plant.

Ont., London—Making plans extending sewers in Florence St. area. $62,000. W. P. Near, city engr.

BIDS DESIRED

Mass., Boston—June 10, by Dept. Pub. Wks., City Hall, concrete paving and sewers in South Sanitary Yard, Albany St., etc. J. A. Rourke, comm. $25,000.

Mass., East Boston (Boston P. O.)—See "Waterworks."

Mass., Wellesley (Boston P. O.)—June 9, by Sewer Comrs., Taylor Block, Wellesley Sq., 5,600 ft. cast iron and vitr. sewers in various streets, 670 cu.yd. ledge excav. W. H. Blood, chn. sewer commissions.

N. Y., New York — See "Streets and Roads."

Md., Baltimore — June 11, by Bd. Awards, City Hall, sanitary sewers and appurtenances in Dists. 1-B, 33-C and 47-D, Sanitary Contr. 212. S. Purcell, ch. engr.; adv. E. N.-R. June 5.

Fla., Bradentown—June 17, by R. K. Van Camp, engr., Bradentown, storm and sanitary sewers, in various streets, for city. $26,000.

Fla., Daytona—June 18, by L. E. Hough, city clk., extending storm and sanitary sewers. Harrington, Howard & Ash, Orear Leslie Bldg., Kansas City, Mo., engrs. Noted Feb. 14.

La., Shreveport—See "Waterworks."

Ky., Hazard—See "Waterworks."

Ia., Ames—June 9, 12,600 lin.ft. 8 in. vitr. sewers, 35 manholes, 3,350 lin.ft. 10- to 15-in. storm sewers, 22 catch basins and 8 manholes. $25,000. A. B. Maxwell, city clk.

Ark., Van Buren — See "Streets and Roads."

Mo., St. Louis—July 1, by Bd. Pub. Serv., Room 208, 5,500 ft. 10- to 24-in. vitr. clay sewer, etc. in Galisa Creek Dist. Sewer 20, $20,525; Southern Sewer, 540 ft. rein.-con. pipe. $53,000. W. W. Horner, city engr.

BIDS RECEIVED

N. Y., Long Island City—M. E. Connolly pres. Queens Boro., Queens Subway Bldg., from Kennedy & Smith Inc., 93 Amity St., Flushing, sewer in National Ave., etc., $4,011; from Green Contg. Co., 734 Vernon Ave., Astoria, sewer in Lake St., Way and Roosevelt Aves., $3,115; from Johnson & McHugh, 37 Britton Ave., Elmhurst, sewer in 146th St. (Brewster Ave.), $9,185; from J. Gallo, 203 Division St., Brooklyn, sewer in 95th St., A $32,345, B $30,732 and sewer in Sandol St. A $70,328, B $60,136; from D. A. Gross, 8515 Fulton St., Woodhaven, sewer in 92nd St., $10,372. Noted May 22.

O., Cleveland—Cuyahoga Co., 23,800 ft. 8- to 27-in. tile sewer in Impvt. 54, from D. Zullo, 706 The Arcade, $117,795.

Ill., Astoria—City, May 29, 2,650 lin.ft. 10-in. and 24,900 lin. ft. 8 in. sewer, etc., from V. E. Taylor & Co., Webster Groves, Mo., $33,574. Engrs. est. $41,235. Noted May 22.

Neb., Omaha—Sewer in Grace St. from 15th St. to Missouri River, from Jones Eng. & Constr. Co., 315 Courtney Bldg., $338,347. Engrs. est. $400,000. Noted Feb. 22.

Calif., Glendale — See "Streets and Roads."

Calif., La Habra—La Habra Sanitation Dist., **(a)** vitr. **(b)** concrete sewers, from Janes Contg. Co., South West Life Bldg., Dallas, Tex., 1,515 ft. 15 in. **(a)** $1.31 **(b)** $1.18, 2,843 ft. 12 in. **(a)** $1.02 **(b)** $0.92, 4,907 ft. 10 in. **(a)** $0.86 **(b)** $0.74, 1,814 ft. 8 in. **(a)** $0.70 **(b)** $0.65, all foregoing 0-to 6 ft. trench, 42 deep manholes and casting $58, disposal plant $13,370, total using **(a)** $29,209, **(b)** $27,763. Noted Apr. 24.

Que., Montreal—From Toussaint Bros., 2353 St. Dennis St., 2,200 ft. 12 in. tile sewer in Gouin Blvd., $5,594, 3,960 ft. 2 x 3 brick sewer in 12th Ave. from Rosemount Blvd. to Belanger St., $25,744, and 1,926 ft. from Massom St. to Rosemount Blvd., $11,450, 1,282 ft. 2 x 3 brick in Lafond St. $10,851, 1,899 ft. 2 x 3 brick in 13th Ave. $11,907, 1,743 ft. 2 x 3 brick in 14th Ave. $11,106.

CONTRACTS AWARDED

Mass., Roxbury (Boston P. O.) — Pub. Wks. Dept., City Hall, Boston, sewers and water works in Harrishoff St. from Warren St. to Hunbolt Ave., here, to J. Williams & Co., 58 Wales Pl., Dorchester, $20,807. Noted May 29.

Pa., Phila.—Dept. Pub. Wks., Bureau Surveys, City Hall, branch sewers to J. J. McHugh, 1617 Race St., Aikens St., $2,262, Georges Lane $10,555, Magnolia St. $6,376, Mitchell St. $7,691, Oxford St. $15,577, Trinity St. $360,366; to O'Neill Co., 127 East Mermaid Lane, Broad St. $2,546, Edgemoor Rd., $11,178, Judson St. $1,652, Linmore St. $4,669, Malvern Ave. $37,329; to W. H. Garson, 5033 Brown St., Cobbs Creek Pkwy. $11,602, Flanders Rd. $8,670; to A. Jaffala, 139 South 56th St., Dicks Ave. $19,963; to P. Ventresco, 6325 Chew St., Durham St. $8,841, Edna St. $5,097, Haines St. $16,370; to A. J. Henderson, 5807 Chew St., Dupont St. $244,380, Middleton St. $65,788; to J. Perna, Jr., 316 North 65th St., 57th St. $21,543, Sheridan St. $736, Spring St. $4,688; to McCoal Constr. Co., 5033 Duffold St., Janney St. $5,126, Weikee St. $422,315. Noted May 8.

Pa., Phila.—To O'Neill Co., 127 East Mermaid Lane, branch sewers in Dudley St. $5,255, L St. $3,297, M St. $3,820, Newkirk St. $7,767, Pierce St. $4,205, Sepviva St. $3,103, 7th St. $8,340, 16th, Buest, Theodore and Edgewood Sts., $14,433, 67th St. $17,496, 71st St. $2,089, Tulip St. $5,479, Weikel St. $2,983; to F. T. Buchins, Jr., 16th, 4050 Kensington Ave., Granite St. $2,317; to E. Pascuzzi, 601 Lincoln Blvd., Luzerne St. $6,432, M St. $7,713, McCallum St. $11,232; to J. J. McHugh, 1617 Race St., Manayunk Ave. $12,182; to W. H.

Sewers (Continued)

Yetman, 601 Lincoln St., Parrish St. $6,549, Rittenhouse St. $13,734, Smick St. $16,774, 22nd St. $5,085; to V. Pontarelli, 523 Race St., 16th St. $6,287; to A. De Sandos & Son, 3906 North 5th St., Sedgley Ave. $6,930; to A. J. Henderson, 5807 Chew St., 12th St. $5,334.

Ala., Birmingham—For new sanitary and storm sewers up 4th Ave. from 10th to 19th St., sanitary sewers on 19th St. from Morris to 8th Aves., North, branches in alleys from 19th to 26th Sts., to Mackintosh Co., 1st National Bank Bldg., Oklahoma City, Okla., $251,609. Engrs. est. $266,536. Noted May 15.

O., Cleveland—Cuyahoga Co., 17,000 ft. 8- to 48-in. brick sewer in Impvt. 300, to Haddad Mall Co., Schofield Bldg., $130,075. Noted May 8.

Mich., Detroit—Dept. Pub. Wks., Joann Ave. Extension Sewer, to Anderson & Campbell, Penobscot Bldg., $19,801; Harper Ave. Arm East of Ashland Ave. Sewer, to W. Blanck Co., 40 Seven Mile Rd. $53,916. Noted May 29.

Mich., Pleasant Ridge—For 13,127 ft. 12- to 24-in. vitr. sewers in Woodward Ave. and Ten Mile Rd. Dist., to Rennie & Dibble, 11565 Oakwood Blvd., Detroit, $46,000.

Wis., Milwaukee—Metropolitan Sewerage Comn., 508 Market St., concrete extensions to Delaware Ave. Sewer, to Wenzel & Henoch Co., 498 27th St., $69,227; sewers in Vliet St., Chicago Rd. and Delaware Ave. extensions, to G. E. Zimmermann, 3402 Grand Ave., $26,186, $136,673 and $124,262 respectively, also sewer in East Milwaukee Ave. in Wauwatosa, $8,017.

Kan., Wichita—Sewers in various Dists., incl. 9,359 ft. 8- to 12-in. vitr. clay pipe, 50 manholes, etc., to A. A. Dobson Co., Wichita.

Calif., Compton — See "Streets and Roads."

Calif., Los Angeles—See "Streets and Roads."

Calif., Los Angeles — Bd. Pub. Wks., Main St., storm and sanitary sewer, incl. 9,000 lin.ft. double barrel rein.-con. rectangular section 6 ft. 9 in. high and width varying from 6 ft. 5 in. to 9 ft. 7 in. for each section, 8,000 ft. rectangular rein.-con. section from 5 ft. high by 6 ft. 7 in. wide to 6 ft. 9 in. high by 8 ft. 4 in. wide, 12,500 ft. rein.-con. rectangular section from 3 ft. 5 in. by 5 ft. wide to 5 ft. high by 5 ft. 3 in. wide, 9,800 ft. non-reinforced arch section from 5 ft. 11 in. wide high by 7 ft. wide to 6 ft. 6 in. high by 7 ft. wide, 11,100 ft. circular non-reinforced concrete pipe from 60 to 70 in. diam., 59,000 ft. rein.-con. pipe from 24 to 66 in., 23,000 ft. cement pipe from 12 to 21 in., 20,000 ft. cement pipe sanitary sewer from 6 to 12 in., 787 catch basins, 179 manholes, to P. R. Gadd, Van Nuys Hotel, $2,706,000. Noted May 15.

Ont. Toronto—York Twp. constructing 8 mi. Keele-Dufferin Sewer, vitr. tile and concrete pipe 8 in. up, to J. H. McKnight Constr. Co., 88 St. David St., $216,567.

Ont., Windsor — Extending sewers in Campbell Ave. Dist., to Merlo, Merlo & Rae, Walkerville, $230,191. Engrs. est. $230,000.

B. C., Point Grey—Installing sewers in University site and subdivision, to F. J. Dawson, 1905 16th Ave. W., Vancouver, $90,000; furnishing 1,000 ft. 24 in., 3,000 ft. 18 in., 6,000 ft. 12 in. and balance in 6, 8 and 10 in. concrete sewer pipe, to British Columbia Concrete Co. Ltd., Oak and Goodmurphy Sts., Marpole, $15,000.

Waste Disposal

BIDS DESIRED

Pa., Ambridge—July 7, at office A. W. Johns, boro mgr., garbage incinerators and chimney; adv. E. N.-R. June 5.

CONTRACTS AWARDED

Md., Baltimore—Bd. Awards, 3 story, 55 x 173 ft., brick disposal plant, plain foundation, 28th and Sisson Sts., to Price Constr. Co., Maryland Trust Bldg., $103,900. Noted May 22

O., Euclid—For 30 ton incinerator plant, to Decarie Incinerator Co., 817 McKnight Bldg., Minneapolis, Minn., $35,200. Noted May 15.

Bridges

PROPOSED WORK

Fla., Sarasota — Sarasota Co. election June 24, $45,000 bonds, bridge over Little Sarasota Bay at Caseys Key; $12,000, over Cowper Slough; $40,000 over Little Sarasota Bay near Stickney Point; $16,000, over Whitaker Bayou; $40,000, over Miakka River, in Sect. 21.

Ohio—See "Streets and Roads."

Tex., Brownsville—Cameron Co. making plans 340 ft. steel and concrete bridge with one 80 ft. steel span, concrete pile trestle approach, concrete piers, etc., over Arroya Colorado. $45,000. W. O. Washington, co. engr. Noted May 22.

Calif., Los Angeles—Making plans Sherman Way bridge near Tujunga, Wash., $130,000; Chatsworth bridge across San Fernando Creek, $25,000; Universal City Bridge, $40,000; South Sherman Way bridge, $45,000; Little Tujunga bridge, $30,000. J. A. Griffin, city engr.

Calif., Oakland — See "Streets and Roads."

Calif., Santa Barbara — Making plans viaduct, 56 ft. roadway, to connect Carilio and Milpitas Sts. $60,000 to $75,000. G. D. Morrison, city engr.

BIDS DESIRED

Mass., Northampton—June 9, by Bd. Pub. Wks., City Hall, removing present bridge over Mill River on West St., and constructing on present substructure, two 56 ft. span rein.-con. arch bridge, 33 ft. wide, with bracketed sidewalk on one side. T. F. McGrath, chn.

W. Va., Beans Mill—June 16, by E. Phillips, clk. Upshur Co., Buckhannon, 112 ft. concrete span bridge, 14 ft. roadway across Buckhannon River and 50 ft. concrete span bridge, 14 ft. roadway across the mill race, here.

Alabama—June 30, by State Hy. Comn., Montgomery, repairing and painting 860 ft., 3 span steel bridge, across Alabama River, at Selma, Dallas Co., incl. 110,000 lb. structural steel, removing and relaying 1,250 sq.yd. creosoted wood block floor and plank sub-floor on fixed and swing spans, 15,000 ft. creosoted timber, etc. $25,000. W. S. Keller, highway engr.

Tennessee—June 20, by State Dept. Hys. & Pub. Wks., Nashville, one 32 ft., one 40 ft. and one 24 ft. rein.-con. span girder with concrete piers, between Brighton and Covington, Federal Aid Project 31-B, Tipton Co., thirty 26 ft., one 30 ft. and two 24 ft., rein.-con. span bridge, on concrete piles, also one rein.-con. span bridge between Gibson Co. and Jackson, Federal Aid Project 29-B, Madison Co. J. G. Creveling, highway comr.

Tennessee—June 20, by State Dept. Hys. & Pub. Wks., Nashville, 2 bridges over Caney Fork River, 1 on Federal Aid Project 203-A, Warren and White Counties, and other on Federal Aid Project 163-B, Dekalb Co. J. G. Creveling, highway comr.; adv. E. N.-R. June 6. Noted Apr. 24.

Neb., Oakland — June 21, by E. J. Wickstrom, city clk., concrete settling basin and filtration plant and equipment. $20,000. Prince & Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs.

South Dakota—June 10, by St. Hy. Comn. Pierre, 23 ft. viaduct on F. A. P. 170 B, Lake Co. 6,581 lbs. reinforcing, etc., 36 and 48 ft. viaduct on F. A. P. 175, Hand Co., 19,249 lbs. reinforcing and 71,174 lbs. structural steel; 102 ft. bridge on F. A. P. 162 B, Haakon Co., 19,650 lbs. reinforcing and 67,886 lbs. structural steel; 23, 34, 130 and 144 ft. bridges on F. A. P. 163 Butte & Lawrence Counties, 59,447 lbs. reinforcing and 180,750 lbs. structural steel, also 3 box culverts; bridge on F. A. P. 149 B and C, Spink Co., 90,854 lbs. reinforcing and 84,706 lbs. structural steel, etc. F. D. Hudgins, ch. engr.

Missouri—June 10, by State Hy. Dept., Jefferson City, two 20 ft. rein.-con. slab spans, etc., over Wolf Creek and two 20 ft. rein.-con. slab spans, etc., over Wet Fork Creek, both Wayne Co.; one 25 ft. rein.-con., etc., deck girder span, etc., over North View Branch, and one 80 ft. steel truss span, etc., over Niaugua Creek, both Webster Co.; two 10 ft. rein.-con. slab spans, etc., over stream and one 80 ft. steel truss, etc., over Cooper Creek, both Henry Co.; twenty-two 25 ft. I-beam spans, etc., over over flow Grand River and Shoal Creek, both Livingston Co.; one 40 ft. rein.-con. deck girder span, etc., over Hooney Creek and one 40 ft. rein.-con. deck girder span, etc., over Little Honey Creek, both Lawrence Co.; two 10 ft. rein.-con. slab spans, etc., over stream and two 16 ft. rein.-con. slab spans over Dry Branch, both St. Francois Co.; one 40 ft. rein.-con. deck girder span, etc., over Creek, and two 10 ft. rein.-con. slab spans etc., over stream, both Warren Co. B. H. Piepmeier, chief engr.

Tex., Carthage — See "Streets and Roads."

Tex., Dallas—See "Waterworks."

Tex., La Grange—June 27, by G. Hausler, aud. Fayette Co., bridge over Colorado River. J. P. Ehlinger, co. judge; adv. E. N.-R. June 5.

Ont., Guelph—June 12, by J. Beatty, c/o Wellington Co. Council, Court House, for following bridges: Arnold Bridge 68 ft. 6 in., deck Warren truss bridge, lot 1, concession 17, Peel Twp., alternate prices for concrete and wooden floor and for repairs to existing abutments; Atkinson Bridge at lot 8, concession 16, Nichol Twp., 80 ft. concrete truss bridge and 1 concrete abutment; Fox Bridge on Co. Rd. 33 in the village of Drayton, 10 ft. concrete slab; McCrory Bridge on town line of Peel and Nichol, 4½ mi. from Alma; Lindsay Bridge, lot 9, concession 8, West Garafraxa, 15 ft. concrete beam span; Rogers Bridge, lot 24 concession 6, Erin Twp., 10 ft. concrete slab span. A. W. Connor, 1005 Royal Bank, Toronto, engr.

BIDS RECEIVED

New Jersey—State Hy. Dept., Trenton, two 61 ft. concrete encased plate girder spans, plain concrete pier and abutments for 30 ft. roadway, removing existing bridge and constructing temporary bridge, etc. over Musconetcong River, M. P. 20 on Route 5, Sect. 2A, Warren and Morris Counties, from R. T. and C. D. Stewart Constr. Co., Easton, Pa., $66,480; two 95 ft. concrete encased plate girder spans, one 34 ft. I-beam and eighteen 20 ft. rein.-con. approach spans, 4 rein.-con. approach spans, all on concrete piers and abutments for 30 ft. roadway rein.-con. and asphalt paving, constructing temporary bridge and removing existing bridge, etc. over North branch of Raritan River and creek at M. P. 25.6 and 29.5 Route 9, Sect. 8, Somerset Co., from F. W. Schwiers, 90 West St., New York City, 92.5% of (eng. est. $220,861). Noted May 15.

Pa., Phila.—See "Streets and Roads."

North Carolina — State Hy. Comn., Raleigh, **(S. P. means State Project)** rein.-con. bridges and culverts on S. P. 891, Yancey Co., from J. M. Ogden, Ervington, Va., $30,971; S. P. 888, Yancey Co., from Booze, Boyde & Co., Route 1, Raleigh, $28,707; S. P. 617, Catarrus Co., from J. S. Bowers, Whiteville, $37,062; S. P. 432, Granville Co., from J. A. Peterson, Montgomery, Ala., $36,614; S. P. 422, Franklin Co., from Kuehn, Englehardt & Thorns, Kinston, $34,725; S. P. 580 B, Randolph Co., from Dameron & Sparling, Smithfield, $45,630; S. P. 415, Durham Co., from J. A. Peterson, Montgomery, Ala., $57,678; S. P. 212, Craven Co., from Pittsburgh-Des Moines Steel Co., Virginia Ry. & P. R. Bldg., Richmond, Va., $45,902; S. P. 134, Gates Co., from Grathmey-Saddler Co., Norfolk, Va., $32,172. Noted May 8.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, one 100 ft. steel and nineteen 26 ft. concrete spans over Harpeth River, Federal Aid Project 205, Cheatham Co., from Montgomery & Parker Constr. Co., Rockport, Ind., $62,050.

Ohio—See "Streets and Roads."

Wis., New Richmond—State Hy. Comn. at office city clk., City Hall, Willow River Bridge, two 45 ft. 9 in. deck concrete girder spans, 30 ft. roadway and two 6 ft. sidewalks, here, St. Croix Co., from J. E. Hinman, Glenwood City, $23,834. Noted May 22.

Arkansas—State Hy. Comn., Little Rock, about 37 truss and I-beam bridges, 20 to 200 ft. wide, on North Arkansas Rd., impvt. Dist. 2, Independence, Izard and Fulton Counties, 5,429 cu.yd. excav., 3,077 cu.yd. concrete, 4,420 lin.ft. piling, 152,428 lb. reinforcing, 341,500 lb. structural steel in truss bridges and 728,373 lb. structural steel in I-beam bridges, also raising and repairing one 133 ft. truss bridge, from W. H. Dennison, Cushman, $162,260.

Tex., Clarendon—Donley Co., 9 span, 312 ft. steel truss bridge with I-beam approaches, concrete piers, etc., over Salt Fork Red River, from Austin Bridge Co., 1813 Clarence St., Dallas, $17,958. Noted May 8.

CONTRACTS AWARDED

Pa., Harrisburg — For 15 span, open spandrel type, etc., rein.-con. arch bridge over Susquehanna River at junction of Juniata and Susquehanna Rivers, about 12 mi. above here, to Vang Constr. Co., Cumberland, Md.

Pa., Phila.—See "Streets and Roads."

Miss., Greenville—Washington Co., 330 ft. bridge with two 90 ft. and one 150 ft. steel truss spans, on Federal Aid Project 166, to O. A. Hanna, Jackson. Noted Apr. 3.

Ohio—See "Streets and Roads."

Minn., Benson—See "Streets and Roads."

Kan., Troy—Doniphan Co. Bridge 6, 100 ft. long 20 ft. wide, on Federal Aid Project 169, to A. L. Cook, Ottawa, $26,457, engrs. est. $25,552.

Neb., Silver Creek—Merrick Co., c/o W. L. Stanley, Central City, 1,000 ft. riveted steel bridge with ten 100 ft. spans over Platte River, south of here, to Western Bridge & Constr. Co., 748 Peters Trust Bldg., Omaha, $92,000. Engrs. est. $95,000.

Bridges (Continued)

Tex., Corpus Christi—City and Nueces Co. Navigation Dist. 1, combination railroad and highway bridge across Bay, to Wisconsin Bridge & Iron Co., North Milwaukee St., Milwaukee, $400,000. Noted May 29.

Tex., San Angelo—Tom Green Co. 340 ft. steel span and concrete girder bridge over Middle Concho River, 12 mi. west of here, to Austin Bridge Co., 1813 Clarence St., Dallas, $29,108. Engrs. est. $30,000. Noted May 15.

Calif., Newberg (Fortuna P. O.) — See "Railways" under California.

Dams

PROPOSED WORK

Tex., Cotulla—International Great Northern Ry., Palestine and La Salle Co. plan rein.-con. dam across Nueces River, 50 ft. high. $3,000,000. Private plans.

Calif., Los Angeles—Had plans prepared Pacoima Dam, concrete, constant angle arch type, 375 ft. high, incl. 7,000 cu.yd. loose and 5,000 cu.yd. solid rock excav., 130,000 cu.yd. plain and 5,000 cu.yd. rein.-con., 310 lin.ft. tunnel excav., concrete tunnel lining, one 4 x 7 and one 30 in. sluice gates, one 30 in. needle valve, 375 ft. high with 520 ft. chord length and 102 ft. wide at base, etc. J. W. Reagan, ch. engr. Los Angeles Flood Control Dist.

Calif., Wheatland — See "Excavation, Drainage, Irrigation."

CONTRACTS AWARDED

Okla., Oklahoma City—Dam extension and 26 flood gates, to Smith Bros., Amer. Exch. Bldg., Dallas, Tex., $220,000. Engrs. est. $200,000. Noted May 8.

Ont., Island Falls via Cochrane — See "Industrial Works."

Railways

PROPOSED WORK

California — Southern Pacific Co., 65 Market St., San Francisco, had plans prepared replacing present rails with 141 lb. rails, and paving portion Central Ave., in Alameda, 2 course 7 in. asphaltic concrete, (first unit of work). $67,000. G. W. Boschke, ch. engr.

Quebec—Montreal Tramways Co., Craig St. W., Montreal, plans constructing 14.937 mi. tracks on concrete slab foundation, standard 6 x 8 ties, 2 ft. centers, steel tie rods, 6 ft. centers, electric welded joints, etc., in 19 streets and avenues, $915,500; also 1.6 mi. 115 lb. rails in Notre Dame St. $120,000, 1.805 mi. in Ontario St. $125,000, and 2.397 mi. in St. Denis St. $113,000. P. A. N. Seurot, ch. engr.

CONTRACTS AWARDED

Illinois—Illinois Power & Light Corp., Illinois Merchants Bank Bldg., Chicago, will build street railway from Galesburg to Lincoln Park (Chicago P. O.), by day labor. $35,000.

California—E. J. Dodge Co., 16 California St., San Francisco, 4 mi. logging railroad (rails and tiles furnished by owner), incl. pile and timber bridge, at Newburg, to Englehart Constr. Co., Eureka. To exceed $25,000.

Excavation, Drainage, Irrigation

PROPOSED WORK

Indiana—Vanderberg Co. (Evansville), Spencer Co. (Rockport) and Warrick Co. (Boonville), making surveys, widening, deepening and straightening, approximately 10 mi. channel changes of Pigeon Creek from Chandler to Evansville. E. E. Watts, Evansville, drainage engr. $300,000.

Tex., Edinburg—Hidalgo Co. election June 13, $1,260,000 bonds, flood control project, reclamation, protecting levees, irrigation system, etc. Address County Commissioners.

Ariz., Buckeye—Buckeye Water Conservation & D. D. plans election to vote on $850,000 bonds for weir, canals, etc. Former election defeated. C. K. Fox, I. W. Hellman Bldg., Los Angeles, Calif., engrs. Noted Apr. 3.

Calif., Elsinore—Ladera Irrigation Dist., c/o Olmsted & Gillelen, engrs., Hollingsworth Bldg., Los Angeles, having plans prepared irrigating 7,000 acres land, incl. 2 small reservoirs, pipe lines, etc., here. Noted Feb. 7.

Calif., Red Bluff—G. B. Champlain, c/o W. A. Fish, atty., Red Bluff, plans irrigating 1,500 acres, incl. 14,600 ft. canals, 11 ft. wide on top, 5 ft. wide on bottom, 2 ft. deep; 2 centrifugal pumps, one 8 sec.ft. and one 3 sec.ft. capacity, 35 ft. lift, operated by 100 hp. electric motors. $26,000.

Calif., Wheatland—Camp Far West Irrigation Dist., plans election $125,000 bonds, concrete storage dam, 55 ft. high, 230 ft. long on top, also 2 mi. main and system of distributing canals.

BIDS DESIRED

Miss., Clarksdale—June 11, by Bd. Levee Comrs. for Yazoo-Mississippi delta, new 6,500 ft. levee at Polks Landing, levee section 24, 280,000 cu.yd. excav. W. L. Head, ch. engr.

BIDS RECEIVED

Wis., Bear Creek—Farm Drainage Bd. 3, H. W. Wieckert, secy., 816 Summer St., Appleton, tile and open ditch excav., here, from J. Corbett, Babcock, 100,000 cu.yd. earth excav. at $0.105 per cu.yd. and 25,000 cu.yd. rock excav. at $2 per cu.yd. Engineers est. $15,000. Noted Apr. 24 under "Appleton."

CONTRACTS AWARDED

N. Y., Buffalo—Commissioner Pub. Wks., Municipal Bldg., dredging Buffalo Inner Harbor for maintenance of channel, to Great Lakes Dredge & Dock Co., Morgan Bldg., $0.41 per cu.yd.

Miss., Yazoo City—Silver Creek D. D., drainage ditches, levee, etc., to S. A. Redding, Louisville. Engrs. est. $200,000.

Ill., Paxton — Comrs. Ford Co., Sibley D. D., main ditch, 119,149 cu.yd. excav., branch 1, 3,575 lin.ft. hard shale tile, etc., to W. F. Sternberg Co., Piper City, $17,822. Noted May 8.

Minn., Minneapolis — Bd. Park Comrs., City Hall, dredging in Powderhorn Lake, 15th Ave. S. and 34th St., 140,000 cu.yd. excav., to Minneapolis Dredging Co., 2429 University Ave. S. E., $0.305 per cu.yd. Noted May 15.

Tex., Corpus Christi—City and Nueces Co. Navigation Dist. 1, deep water port project, 3,100,000 cu.yd. excav., to R. A. Perry, Galveston, $473,150. Noted May 29.

Tex., Ft. Worth — Tillar Estate, 1030 Elizabeth Blvd., excavation for 3 story and basement, 100 x 100 ft., brick and concrete store for Monnig Dry Goods Co., Main St., to J. T. Taylor, Burkburnett Bldg., $25,000. Noted May 8 under "Buildings."

Calif., Westley—Bertschmann Ranch, to J. Phillips, 637 Santa Ray Ave., Oakland (by dragline), 184,000 cu.yd. levee construction $0.135, 60,000 cu.yd. main canal excav. $0.135, 10,000 cu.yd. drainage canal excav. $0.135; to J. T. Moorehead, Stockton (by teams), 80,000 cu.yd. upland canal excav. $0.13 to G. Murray, Modesto, (by teams), 40,000 cu.yd. bottom land canal excav. $0.18, 8,000 cu.yd. main canal excav. $0.17.

Streets and Roads

PROPOSED WORK

Mass., Medford (Boston P. O.)—Plans constructing 12 new streets, widening Salem St. and reconstructing part of Boston and Riverside Aves. $163,000.

Mass., Springfield — Dept. Pub. Wks., plans Boulevard from Locust St. northwest to Columbus Ave., near Marble St. $125,000. F. C. Parker, chn.

N. Y., Mt. Kisco—High School—Village sold $225,000 bonds for addition to high school. F. W. Andrews, chn. Bd. Educ.

N. J., Camden—Soon takes bids widening, curbing, guttering and 8 in. rein.-con. paving approximately 6,800 ft. Park Ave., in Pensaucken Twp., 20 ft. wide.

N. J., Rahway — Plans to pave West Grand, Maple, Central, Pierpont and Elizabeth Sts., asphalt. $266,500. F. L. Foulks, 191 East Milton Ave., mayor.

N. J., Trenton—Plans asphalt paving Stuyvesant Ave. and Cottage alley. $133,700. J. E. English, City Hall, engr.

Maryland—State Rds. Comn., Baltimore, rejected bids May 20, paving 4.6 mi. highway along Eastern Ave., Baltimore Co., Contr. B-63. Will readvertise. J. N. Mackall, chn. Noted May 27.

Fla., Center Hill—Plans paving various streets, vitr. brick and Finley method, Type B. $60,000.

Fla., Dunedin — Plans paving various streets, vitr. brick or equivalent. $30,000.

Fla., Kissimmee—Osceola Co., election June 28, $100,000 bonds, improving highway from Narcoossee to Orange Co. line. J. E. Johnson, Kissimmee, probably engr.

Fla., Lake City—Election, June 24, $100,000 bonds, grading, paving and curbing streets. C. R. Horn, city engr.

Fla., Okeechobee — Election June 17, $50,000 bonds, paving various streets.

Fla., Sarasota — Sarasota Co., election June 24, $50,000 bonds, paving with macadam, alternate proposals, Tamiami Trail, from Manatee Co. line to Venice; $40,000, 7.5 mi. Siesta Rd.; $192,000, 13 mi. Miakka Rd.; $25,000, Crescent Beach, Stickney Bridge and Blackburn Point Rds.; $240,000 hard surfacing 13.5 mi. Sugar Bowl Rd.; $33,000, 3.5 mi. Lockwood Ridge Rd.; $40,000, 3 mi. Bradentown Rd.; $39,000, 3.1 mi. Venice By-Way; $30,000, 3.5 mi. Verna Rd.; $27,000, Hancock-Stickney Point Rds.; $33,000, 4.1 mi. Bee Ridge Rd.; $77,000, bituminous on shell or rock, 11.3 mi. Venice-Englewood Rd.; $31,000, 2.5 mi. hard surfacing and 8.6 mi. bituminous surface treatment, Madison and Englewood-Miakka Rds. C. G. Benson and W. M. Mason, Sarasota, engrs.

Ala., Birmingham—City Comn. takes bids about July 1, 2 in. bitulithic paving on 6 in. concrete, about 10 blocks Arkadelphia Rd., Bankhead Highway, 16th, and 12th Aves. West, 9th, 3rd, 11th and Court St. West, 30 ft. A. J. Hawkins, city engr.

Ala., Haleyville—Soon takes bids guttering, paving streets and sidewalks. $75,000.

Ala., Troy — Soon takes bids paving streets. $188,000 bonds sold.

Tenn., Jackson—Takes bids about June 20, paving 80,000 to 90,000 sq.yd. various streets. $500,000. E. R. Dike, city engr. Noted May 15.

Tenn., Knoxville — City and property owners plans to expend $1,064,597 improving streets. City's share of cost $531,778. A. Brownslow, city mgr.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids opened May 23, grading, bridging and paving 3.331 mi. Sect. "G" Columbus-Cincinnati Rd., Butler Co.; 1.85 mi. Sect. "C" Ottawa-Findlay Rd., Hancock Co.; 3.274 mi. Sect. "F-2" Canton-Massillon Rd., Stark Co., bituminous macadam, asphalt or tar, bituminous concrete or brick. Noted May 15.

Ohio—Dept. Highways and Pub. Wks., Columbus, cancelled bids which were to be opened May 23, grading, bridging and paving 3.331 mi. Sect. "G" Columbus-Cincinnati Rd., Butler Co., and 1.85 mi. Sect. "C" Ottawa-Findlay Rd., Hancock Co., bituminous macadam, asphalt, tar, bituminous concrete or concrete. Noted May 15.

O., Columbus — Making plans grading, laying necessary water services, sewer connections and paving with **(a)** brick **(b)** concrete **(c)** asphalt 2,123 ft. alley north Livingston Ave., 12.6, 16.6 and 20 ft. wide, **(a)** $16,908 **(c)** $14,972; 1,014 ft. alley north Mithoff St., 18 ft., **(a)** $3,951 **(b)** $3,519; 444 ft. Ludlow St., 21 ft., **(a)** $5,182 **(b)** $3,898 **(c)** $4,205; 727 ft. 2nd alleys north Main and West 9th Sts., 20 ft., **(a)** $5,500 **(b)** $4,894; 758 ft. 4th Ave., 24 ft., **(a)** $12,017 **(c)** $10,007; 424 ft. alley north Granville St., 15 and 17 ft. wide, **(a)** $2,807 **(b)** $2,474; 940 ft. Jefferson Ave., 32 ft., **(a)** $9,367 **(c)** $7,192; 1,620 ft. Columbian and Washington Aves., 24 ft., **(a)** $28,932 **(b)** $13,740 **(c)** $24,872; 688 ft. alleys north Bryden Rd., 16 ft., **(a)** $4,366 **(b)** $3,899; 7,503 ft. Mound St., 46 ft., **(a)** $151,994 **(c)** $114,062; 1,205 ft. alley north Stewart Ave., 21 ft., **(a)** $15,471 **(b)** $11,556 **(c)** $12,760; 15,205 ft. alley north Woodruff Ave., 23.6 ft., **(a)** $14,182 **(b)** $12,537; 402 ft. alley north Mt. Pleasant Ave., 12 ft., **(a)** $1,841 **(b)** $1,610; 561 ft. City Park Ave., 26 ft., **(a)** $10,227 **(c)** $7,465; 303 ft. alley north 1st Ave., 10 ft., **(a)** $1,159 **(b)** $1,024; 8,352 ft. Nelson Rd., 36 ft., **(a)** $196,035 **(c)** $150,633. R. H. Simpson, city engr.

O., Lisbon—Columbiana Co. soon takes bids improving 3.105 mi. Wellsville-Salineville Rd., in Yellow Creek Twp., 16,392 ft. grading, bridges and culverts. $42,000. L. C. Kirk, Lisbon, engr.

O., New Lexington — Perry Co. plans paving Intercounty Highway 355, $75,000; 3 mi. Intercounty Highway 10, $60,000. State to appropriate $37,500 on each project.

O., New Philadelphia—Plans widening 7 mi. New Philadelphia-Uhrichsville Rd., from 16 to 20 ft. $25,000. G. E. Arnold, city engr.

O., New Philadelphia—Making plans repaving West High St. and Bway., brick on heavy concrete. $99,462. G. E. Arnold, New Philadelphia, engr.

O., Sebring—Plans repaving with brick 0.5 mi. 15th St., 40 ft. $40,000.

O., Struthers—Soon takes bids improving 0.75 mi. Terrace St. and about 1 mi. Spring St., 30 ft. $30,000 and $40,000 respectively.

O., Youngstown — Plans resurfacing Front St. $35,000. G. Turner, city engr.

Minn., South St. Paul—Election June 16, $150,000 bonds, paving various streets.

Wis., Wausau—Soon takes bids paving Chicago Ave., Adams, Plumer and Lemke Sts., 7,500 sq.yd. rein.-con., brick or vibrolithic concrete, etc. To exceed $25,000. B. C. Bowen, City Hall, engr. Noted Apr. 24.

Ia., George—Plans paving, etc., about 10 blocks various streets. $40,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Minnesota—State Hy. Dept., St. Paul, withdrew bids which were to be opened May 27, grading 5.5 mi. State Project 8-42,

Streets and Roads (Continued)

Federal Aid Project 302 between Lengby and east Polk Co. line, 132,611 cu.yd. excav. $32,000. Will readvertise. Noted May 15.

Kan., Chanute—Soon takes bids grading and paving 16 blocks South Evergreen and South Central Aves., approximately 25,000 sq.yd. 3 in. vertical fibre brick on present rock base with asphalt filler.

Neb., University Place—Having plans prepared 3½ blocks asphaltic concrete paving, 80 ft. wide in Dist. 22. $55,000. Grant, Fulton & Letton, Lincoln, engrs.

Wyo., Cheyenne—Plans grading, curbing, guttering, etc., Pershing Blvd., McComb, Cribbon, Dey, Dillon, Snyder, Reed, Bent, O'Neil, Thomes, Pioneer, Capitol, Central, Warren, House, Evans, Van Lennen, Maxwell, Seymour, Pebrican, Russell, Morrie, Bradley, Duff and Alexander Aves., 15th to 32nd St. inclusive, Ames, Talbot, Richardson and Cosgriff Courts. C. C. Carlisle, city engr.

Mo., Charleston—Mississippi Co. soon takes bids grading and concrete surfacing Pinhook Special Rd. Dist. $30,000. Swank-Tanner Eng. Co., Charleston, engrs.

Ark., Russellville—Soon takes bids grading and surfacing with 2 in. asphalt on 5 in. concrete or solid concrete, concrete curb and gutters approximately 75 biocks in Impvt. Dist. 4. $140,000 to $163,000. F. Ragsdale, Russellville, engr.

Tex., Brownsville—Making plans and soon takes bids permanent paving 17 blocks various streets. $50,000. Address City Engineer.

Tex., Center—Shelby Co. making plans grading and gravel surfacing 11.45 mi. State Highway 35, 16 ft. $60,000. Titus & Dillon, co. engrs.

Tex., Floresville—Wilson Co. making plans hard surfacing 2¼ mi. San Antonio-Cuero Rd., 18 ft. $25,000. F. E. Hess, co. engr.

Tex., Jasper—Jasper Co. making plans grading and gravel surfacing 9.09 mi. State Highway 8, 16 ft. $150,000. C. P. Hunter, co. engr.

Tex., Palestine—Anderson Co. plans grading and rein.-con. paving 10.28 mi. State Highway 19, 18 ft. $357,000. E. W. Davis, co. engr.

Tex., San Antonio—Making plans widening and paving West Nueva St. between Flores and Laredo Sts., 13 ft. on each side donated by property owners. $25,000. I. Ewig, city engr.

Tex., San Marcos—Voted $25,000 bonds permanent paving various streets. Address F. Erck, mayor. Noted May 8.

Tex., Sweetwater—Nolan Co. making plans grading and surfacing 15.5 mi. State Highway 1, 18 ft., bituminous on macadam. $300,000. J. A. Focht, co. engr.

Tex., Texarkana—Bowie Co., Precinct 1 voted $490,000 bonds improving roads. State and Federal Aid appropriated $78,000 additional. O. B. Pirkey, New Boston co. judge.

Oklahoma—Miller Twps., voted $65,000 grading and graveling 85,000 sq.yd. road from Marland in 101 Ranch to Ponca City through Miller Twp., Kay Co. J. M. Page, Capitol Bldg., Oklahoma City, highway engr.

Okla., Enid—Garfield Co. voted $1,000,000 bonds grading and paving 99 mi. roads, 18 ft. J. M. Page, Capitol Bldg., Oklahoma City, engr. Noted May 1.

Okla., Okmulgee—Okmulgee Co. voted $400,000 bonds concrete surfacing 22.5 mi. road and graveling 9.2 mi. roads, 18 ft. H. C. King, Court House, engr. Noted May 8.

Okla., Okmulgee—Okmulgee Co. voted $400,000 bonds concrete surfacing 30 mi. Henryetta Rd., 18 ft. Noted May 1.

California—State Highway Comn., Sacramento, rejected bids grading 5.2 mi. road between South San Francisco and Bway. Sta., San Mateo Co. Noted May 1.

Calif., Alameda—See "Railways" under California.

Calif., Alhambra—Plans election to vote on $240,000 bonds paving Main St. and portions Valley Blvd. T. B. Downer, city engr.

Calif., Bakersfield—Kern Co. had plans prepared improving Rd. 269, Sect. 2, 71,-91 sq.ft. 7 in. concrete or asphaltic con-rete paving, etc. J. R. Thornton, co. surv.

Calif., Chico—Had plans prepared improving Normal Ave., Chestnut St., etc., 75,200 sq.ft. 5 in. asphaltic concrete, 3,168 q.ft. 5 in. concrete, 10,000 sq.ft. concrete walks, 581,040 sq.ft. grading, etc. C. M. Ennis, city engr.

Calif., Fairfield—Making plans paving pproximately 2 mi. road near Suisun; also Merchan, Sacramento Sts., etc., approximately 450,000 sq.ft. willite. F. A. Steiger, ity engr.

Calif., Fresno—Had plans prepared improving Vagedes Ave., 67,959 sq.ft. grading, 50,063 sq.ft. asphaltic concrete, 7,411 sq.ft. concrete gutters, 1,216 lin.ft. concrete curb, 3,337 sq.ft. walks, etc. W. Stranahan, city engr.

Calif., Hawthorne—Making plans on 2½ in. asphalt concrete grading, curbing, guttering, laying sidewalks and paving portions of Eucalyptus and Truro Aves., etc., 1½ in. willite. To exceed $25,000. City Eng. Dept., engrs.

Calif., Hayward—Sunset Blvd. and Soto St., had plans prepared grading, curbing, guttering and paving 1½ in. asphalt on 3½ in. asphaltic concrete. $26,000. J. B. Holly, town engr.

Calif., Los Angeles—City and Los Angeles Co. plan repaving San Fernando Blvd., 1½ in. warrenite bitulithic on 7 in. concrete. $350,000. (City will pay $250,000 of total cost.) G. W. Jones, co. rd. comr.

Calif., Martinez—Contra Costa Co. had plans prepared paving highway from Giant Rd. to San Pablo Tank Farm, 7,200 ft. asphaltic concrete; 1½ mi. Concord-Avon Rd. and 1½ mi. Lone Tree Rd., both asphaltic macadam. R. R. Arnold, co. surv.

Calif., Marysville—Making plans paving approximately 15 blocks various streets. To exceed $25,000. W. M. Meek, city engr.

Calif., Oakland—Had plans prepared improving Fillmore St., 17,700 sq.ft. grading, 10,225 sq.ft. oil macadam, 1,175 sq.ft. concrete gutter, bridges; Washington St., 64,200 sq.ft. grading (fill and light cut), 1,020 lin.ft. concrete curb, 17,510 sq.ft. oil macadam, 2,350 sq.ft. concrete gutter, bridges. W. W. Harmon, city engr.

Calif., Ontario—Plans paving and storm culverts approximately 15 blocks various streets. $50,000.

Calif., Placerville—Making plans paving various streets, 5 in. concrete. $25,000. C. H. Wildman, Placerville, engr.

Calif., Porterville—Had plans prepared improving intersections Doris and Sunnyside Aves., etc., 53,989 sq.ft. grading, 53,989 sq.ft. 5 in. concrete paving, 2,475 lin. ft. concrete curbs, etc. F. W. Pease, city engr.

Calif., San Francisco—Rincon Hill Regrade Project, Inc., E. H. Wiel, interested, 25 1st St., plans regrading Rincon Hill Area. $3,500,000. M. M. O'Shaughnessy, city engr.

Calif., San Leandro—Plans widening Babcock Ave. $150,000 to $200,000.

Calif., Santa Cruz—Making plans improving 4 mi. Cliff Dr., 18 ft. Bids will probably be asked on various types of paving. H. S. Williams, city engr. Noted Sept. 27.

Calif., Santa Rosa—Sonoma Co. making surveys improving highway between Bodega Rds. and Bodega Corners. To exceed $25,000. E. A. Peugh, co. surv.

Ont., Brampton—Plans concrete paving West, Railroad, Frederick and Elizabeth Sts. $28,000. C. M. Corkett, City Hall, engr.

Ont., Niagara Falls—Making plans asphalt paving Morrison, McRae and Queen Sts. $80,000. W. J. Seymour, city engr.

Ont., Ottawa—Ottawa Suburban Roads Comn., soon takes bids asphalt paving, 17,000 sq.yd. Bowesville Rd. $70,000. A. K. Hay, 279 Carling Ave., engr.

Ont., Toronto—Soon takes bids grading Cottingham Rd., Glen Edyth, Boulton and Roycroft Drives, 150,000 cu.yd. excav., $75,000. R. C. Harris, city engr.

Que., Montreal—Plans 2,042 ft. concrete pavements on 5 streets $13,685, 5,776 ft. asphalt pavements on 10 streets $62,309, 20,889 ft. concrete sidewalks on 21 streets $112,481, 30,995 ft. concrete slab on 20 streets $30,468. E. Gauthier, asst. city clk.

Que., Montreal—Plans 7,300 sq.yd. asphalt and 1,500 sq.yd. granite block paving in Moreau St. $65,930, 5,600 sq.yd. asphalt in Belanger St. $31,710, 9,000 sq.yd. asphalt, in Ontario St. $56,070, 4,300 sq.yd. asphalt in Craig St. $28,340, 8,450 sq.yd. asphalt in Buboeuf St. $49.600. 6.900 sq. yd. asphalt in Richhardson St. $39,275. T. A. Terreault, City Hall, engr.

Que., Verdun—Plans asphalt paving ⅓ mi. Wellington St., to Lasalle Rd., 66 ft. wide. $110,000. H. Hadley, city engr.

BIDS DESIRED

Massachusetts—June 10, by Dept. Pub. Wks. Div. of Highways, State House, Boston, 43,231 ft. bituminous concrete patching and widening hignway in Reading and North Reading, Middlesex Co., and Andover, Essex Co. To exceed $25,000. W. F. Williams, comr.

Mass., Boston—See "Sewers."

Mass., Brookline (Boston P. O.)—June 9, by Bd. Selectmen, Town Hall, paving about 1 mi. Beacon St., from Coolidge Corner to St. Marys St. E. L. McEttrick, secy. To exceed $25,000.

Mass., Charlestown (Boston P. O.)—June 4, by Dept. Pub. Wks., City Hall, Boston, granite block paving Chelsea St. from Vine to Chelsea Bridge, here. $25,000.

Mass., East Boston (Boston P. O.)—June 5, by Dept. Pub. Wks., Boston, granite block paving Border St. from North Ferry to William J. Kelly Sq., here. J. A. Rourke, Boston, comr.

Mass., West Roxbury (Boston P. O.)—June 11, by Dept. Pub. Wks., City Hall, Boston, sheet asphalt or bitulithic paving Grove St. from Centre to Washington St., here. $31,000. J. A. Rourke, comr.

Rhode Island—June 11, by State Bd. Pub. Rds., Providence, reconstructing 3.54 mi Ashaway relocation of Hopkinton-Westerly Rd., in Hopkinton, Contr. 2402, Federal Aid Project 20, Div. A; 2.05 mi. Fall River-Tiverton main Rd., in Tiverton, Contr. 2403, Federal Aid Project 21, Div. A; adv. E. N.-R. June 5.

Conn., Ansonia—June 25, by Bd. Pub. Wks., City Hall, reconstructing rein.-con. flooring and other appurtenant work thereto on bridge at Maple St. V. B. Clark, city engr. Adv. E. N.-R.

N. Y., Brooklyn—June 11, by E. Riegelmann, boro pres., Boro Hall, paving and repaving with asphalt on 6 in. concrete, Farragut Rd., Bushwick and Pitkin Aves., Malta, Osborn, Troutman, 85th and Marginal Sts., grading, curbing and flagging East 12th, East 15th, and West 9th Sts.

N. Y., Buffalo—June 5, by Commissioner Pub. Wks., paving or repaving Minnesota Ave. and various other streets, vitr. brick, or asphalt. To exceed $30,000. C. E. P. Babcock, Municipal Bldg., engr.

N. Y., New York—June 10, by H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., repaving with granite blocks intersection of Boston and West Farms Rds. and Tremont Ave, Boscobel Ave., East 175th, East 165th and East 163rd Sts., also sewers and appurtenances in John, Crosby and Riverdale Aves., West 230th, West 256th Sts., and Middletown Rd.

N. Y., New York—June 12, by J. Miller, pres. Manhattan Boro, Municipal Bldg., grading, etc., Chittenden Ave.; grading, curbing and flagging West 186th St., and altering and improving sewer in Cedar St., widening and repaving with sheet asphalt Madison Ave.; curbing, recurbing, flagging, reflagging and paving with sheet asphalt Haven Ave.; repaving with granite block 44th St.

N. Y., New York Mills—June 10, by Bd. Village Trustees, 24,000 sq.yd. rein.-con. pavement, etc. W. G. Stone & Son, 31 Mann Bldg., Utica, engrs.; adv. E. N.-R. June 5.

N. Y., Patchogue—June 16, by Village Bd., Syndicate Bldg., improving Terry St. A. L. Wicks, clk.; adv. E. N.-R. June 5.

N. Y., Plattsburgh—June 9, by Plattsburgh Centenary Comm. filling and grading Thomas McDonough Memorial Monument, 12,500 cu.yd. mixed material, 7.500 cu.yd. top soil. Engrs. est. about $25,000. J. F. O'Brien, chn.

New Jersey—June 16, by State Hy. Comn., Trenton, constructing Route 2, Sect. 6, Burlington Co., Route 3, Sect. 11, Camden Co., and Route 9, Sect. 15, Union Co. A. L. Grover, secy.; adv. E. N.-R. June 5.

N. J., Newton—June 26, by Bd. Chosen Freeholders Sussex Co., improving Main St. in Hamburg Boro. H. Snook, co. engr.; adv. E. N.-R. June 5.

N. J., Plainfield—June 16, by Common Council, 9,400 sq.yd. paving, 4,870 lin.ft. curb and gutter. J. J. Carroll, city clk.; adv. E. N.-R. June 5.

Pennsylvania—June 16, by Dept. Hys., Harrisburg, constructing 16 projects, totaling 44 mi. in various counties, and June 17, constructing 15 projects, totaling 54 mi. in various counties, either bituminous on concrete or rein.-con. P. D. Wright, Harrisburg, secy. highways; adv. E. N.-R. June 5.

Pa., Altoona—Jun 12, by City Comrs., rein.-con. paving 48,000 sq.yd. 20 streets. H. J. Baum, city engr.

Pa., Houtzdale—June 12, by Boro Council, C. G. Dickey, secy., 7,502 lin.ft. bituminous macadm tarvia penetration paving together with grading, curbing, guttering and scarifying Good and Brisbin Sts.

Maryland—June 4, by Bd. Awards, grading, curbing and 6,560 sq.yd. sheet asphalt paving streets listed in Contr. 258-NA; grading 22,000 cu.yd. streets listed in Contr. 257-OA. R. K. Compton, 214 East Lexington St., chn. Paving Comn.

W. Va., Williamson—June 17, by Court Mingo Co. shaping and constructing Pigeon Creek-Trace Creek Rd., 18 ft., 4.4 mi. Project 18-A, 23,000 lin.ft. clearing, 36,300

Streets and Roads (Continued)

cu.yd. excav., 610 lin.ft. 15- to 24-in. rein.-con. pipe, or 360 lin.ft. 15 in. standard strength vitr. clay pipe, 250 lin.ft. 15- to 24-in. double strength vitr. clay pipe, 3.6 mi. Project 18-B, 19,500 lin.ft. clearing, 24,300 cu.yd. excav., 620 lin.ft. rein.-con. pipe or 360 lin.ft. standard strength vitr. clay pipe, 260 lin.ft. 18- to 24-in. double strength vitr. clay pipe, 3.1 mi. Project 18-C, 16,500 lin.ft. clearing, 25,200 cu.yd. excav., 500 lin.ft. 15- to 24-in. rein.-con. pipe or 200 lin.ft. 15 in. standard strength vitr. clay pipe, 300 lin.ft. 15- to 24-in. double strength vitr. clay pipe, bids will be received on 3 projects separately, also on same as a whole; 7 mi. Burch-Trace Creek Rd., 18 ft., Project 27, 36,900 lin.ft. clearing, 78,600 cu.yd. excav., 960 lin.ft. 15- to 24-in. rein.-con. pipe or 470 lin.ft. 15 in. standard strength vitr. clay pipe, 400 lin.ft. 15- to 24-in. double strength vitr. clay pipe. L. G. Bray, pres.

Fla., Bradentown—June 17, by R. K. Van Camp, engr., Bradentown, paving Bear, Oak, Stewart, Pearl and Kentucky Sts., $35,000; Lee, Alma, Orange and Stockbridge Sts., $35,000; Earl Court, Woodrow, New Jersey, Leonard and Chestnut Sts., $35,000, all vitr. brick on sand, alternate proposals.

Fla., Jasper—June 10, by Hamilton Co. Comn., constructing 6½ mi. Rd. 2, clearing 27 acres, 65,532 cu.yd. excav., shaping, etc., 76,001 sq.yd., 4,412 cu.yd. sand, 2,940 cu.yd. clay, etc. $30,000.

Fla., Sarasota—June 16, by City Council, paving various streets, 16,400 sq.yd. asphalt block and 8,000 lin.ft. concrete curbing. $40,000.

Louisiana—June 12, by State Hy. Dept., Reymond Bldg., Baton Rouge, gravel surfacing 9.3 mi. State Project 379 C, and 5.4 mi. State Project 379 D, Opelousas-Oakdale Highway, also 6.67 mi. State Project 380 B, all in Evangeline Parish. J. M. Fourmy, ch. engr.

Louisiana—June 12, by State Hy. Dept., Reymond Bldg., Baton Rouge, gravel surfacing 10 mi. Sect. A, 9.1 mi. Sect. B, 10.16 mi. Sect. C and 1.37 mi. Sect. D. Shreveport-Natchitoches Highway, State Project 343, Red River Parish. J. M. Fourmy, ch. engr.

La., South Highlands—June 24, by E. M. Bodenheimer, mayor and Bd. Aldermen, Municipal Bldg., grading, paving and otherwise improving various streets and avenues. H. C. Daigre, Municipal Bldg., engr.; adv. E. N.-R. June 5.

Tennessee—June 30, by J. G. Creveling, highway comr., Nashville, **(F. A. P. means Federal Aid Project, S. A. P. means State Aid Project)**, surfacing with giant macadam (limestone) 9 mi. Rutherford Co. line to point 5 mi. of Manchester, 16 ft., S. A. P. 151-C, Coffee Co.; grading and surfacing with macadam (limestone), 4.625 mi. from S. A. P. 136 to point near Battle Creek, 16 ft., S. A. P. 170, Marion Co., incl. 4 bridges, 5.02 mi. Warren Co. line-Tarlton Rd., 9 ft., S. A. P. 171, Grundy Co., incl. two 20 ft. span timber bridges; grading 9.5 mi. Madison Co. line Rd., 18 ft., Gibson Co., 2.25 mi. Humbolt-Jackson Co. line Rd., 18 ft., Federal Aid Project 29-A, Gibson Co., incl. two 20 ft. span concrete bridges, 9.413 mi. Milan-Madison Co. line Rd., 16 ft., S. A. P. 167, Gibson Co., incl. one 20 ft. span concrete bridge, 3.66 mi. Gibson Co. line to F. A. P. 29-B, 16 ft., S. A. P. 168, Madison Co., incl. one 20 ft. span bridge, 8.026 mi. Troy-Hornbeak Rd., 16 ft., S. A. P. 169-A, incl. one 20 ft. span concrete bridge and 4.6 mi. Hornbeak to F. A. P. 71-B, 16 ft., S. A. P. 169-B, Obion Co. 9.86 mi. Brighton-Shelby Co. line Rd., 18 ft., F. A. P. 31-A, incl. one 20 ft. concrete bridge, and 7.37 mi. Brighton-Covington Rd., 18 ft., F. A. P. 31-B, Tipton Co., 7.78 mi. Gibson Co. line to point 4.6 mi. of Jackson, 18 ft., F. A. P. 29-B, Madison Co. Noted Apr. 24.

Ky., Louisville—June 9, by Fiscal Court Jefferson Co., reconstructing Brush Run Rd. from Dawsons Hille to Route; grading and constructing Black Mud Lane from Shepherdsville Rd. to Poplar Level Rd., and from Preston Street Rd. to Ashbottom Rd., Strawberry Lane from Highland Park to Strawberry Station. To exceed $25,000. M. Drane, Louisville Trust Bldg., co. surv.

Ohio—June 13, by Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving roads in 23 counties, with bituminous macadam, asphalt or tar, bituminous concrete, concrete, brick, Kentucky rock asphalt, waterbound gravel, asphaltic concrete. A. V. Donaheys, dir. highways.

O., Bainbridge — June 9, at office Bd. Trustees Bainbridge Twp., improving 3.57 mi. Chagrin Falls-Bainbridge Center Rd., 22 ft., Geauga Co., 4 in. roadway and 16 ft. pavement. $76,725. C. S. Miner, Chagrin Falls, clk.

O., Columbus—June 10, by W. H. Duffy, dir. Pub. Serv., grading, laying necessary water services and sewer connections, and paving 1,775 ft. Ardmore and Malvern Aves., 24 ft., brick $31,934, asphalt $26,423; 1,054 ft. Atcheson St., 30 ft., brick $25,072, asphalt $20,714; 904 ft. alleys north 7th and 6th Aves., 16 ft., brick $5,519, concrete $4,877; 362 ft. alley north 11th Ave., 22.5 ft., brick $3,099, concrete $2,741; 126 ft. second alley west High St., 15 ft., brick $743, concrete $656; 322 ft. second alley west Kimball Pl., 14 ft., brick $2,054, concrete $1,838.

O., Columbus—June 11, at office of Bd. Comrs. Franklin Co., paving **(a)** sheet asphalt **(b)** rein.-con. **(c)** 3½ in. brick **(d)** 3 in. brick 4,221 ft. Schreyer Pl. and Dominion Blvd. West Rds., 24 ft., **(a)** $76,054 **(b)** $58,556 **(c)** $83,351 **(d)** $78,021; 1,329 ft. Rosemary Parkway and Zeller Rds., 50 ft. with 18 ft. parkway in center, **(a)** $32,935 **(b)** $24,418 **(c)** $35,356 **(d)** $33,329; 438 ft. Olentangy Blvd. Rd., 30 ft., **(a)** $10,701 **(b)** $8,400 **(c)** $11,446 **(d)** $10,787; 1,934 ft. Aldrick Rd., 26 ft., **(a)** $31,856 **(b)** $43,866 **(c)** $40,662 **(d)** $41,333. All foregoing in Clinton Twp. C. C. Lattimer, co. surv. Noted Apr. 4.

O., Port Clinton—June 13, by Comrs. Ottawa Co., brick paving 3 mi. Inter-County Highway 280, 20 ft. $121,000. State to appropriate toward cost.

Ind., Bedford—June 6, by Comrs. Lawrence Co. grading and graveling 4.1 mi. Spice Valley Church Rd., 24 ft., $27,538; 3.8 mi. Lincoln Ave. Rd., 24 ft., $25,364; 4.3 mi. Washington Ave. Rd., 24 ft., $29,826; 4 mi. Bedford and Peerless Rd., 24 ft., $27,369. H. McIntire, Bedford, engr. Noted May 22.

Ind., Brownstown—June 7, by Comrs. Jackson Co., paving Hughes Rd., 23,106 sq.yd. bituminous macadam. $38,702. E. B. Douglass, Brownstown, engr. Noted May 29.

Michigan—June 17, by State Hy. Dept. at office Comrs. Barry Co., Hastings, grading and gravel surfacing 2.271 mi. Assessment Dist. Rd. 458, Barry and Allegan Counties, 20,025 cu.yd. excav., 16,291 sq.yd. gravel. G. C. Dillman, Lansing, ch. engr.

Michigan—June 18, by State Hy. Dept. at office Comrs. Roscommon Co., Roscommon, grading and surfacing 6 mi. State Trunk Line Rd. 18-18, Sect. C, 37,487 cu.yd. excav., 56,308 sq.yd. gravel, G. C. Dillman, Lansing, ch. engr.

Wis., Fond du Lac — June 10, by J. Hohensee, city clk., improving Linden Ave., 8,216 sq.yd. asphaltic concrete or sheet asphalt, and 5,374 lin.ft. concrete curbing and gutter. To exceed $25,000. G. H. Stanchfield, City Hall, engr. Noted May 22.

Wis., West Allis—June 9, by Bd. Pub. Wks., improving 50th Ave. also 13 alleys, 17,390 sq.ft. one course concrete, vibrolithic concrete and sheet asphalt. To exceed $25,000. W. Darby, City Hall, engr.

Ia., Clinton—June 3, by F. W. Leedham, city clk., 19,354 sq.yd. grading and 3 in. vertical fibre brick, warrenite bitulithic or sheet asphalt paving, 8,670 lin.ft. curb and gutter. $60,000.

Minn., Faribault—July 15, by F. M. Kaisersatt, aud. Rice Co., gravel surfacing 19.55 mi. Job 2407, State Rd. 21-25, $30,000, and 5.25 mi. Job 2405, State Rd. 27, $7,500. J. C. McElherene, Faribault, engr.

Minn., Minneapolis—June 17, by J. A. Ridgway, secy. Bd. Park Comrs., City Hall, 3,000 lin.ft. colored curb and gutter, 2,800 sq.yd. concrete tile walks, 5,000 sq.yd. colored concrete tennis courts, Powderhorn Lake Park. Former bids rejected. Noted May 1.

Kan., Marion—June 19, by Clerk Marion Co., constructing 4.269 mi. Federal Aid Project 216-A. Former bids rejected. R. K. Walters, co. engr. Noted May 29.

Kan., Marion—June 19, by Clerk Marion Co. grading, etc., 8.766 mi. Federal Aid Project 218-A, 39,272 cu.yd. earth and 6,570 cu.yd. rock excav., 4,060 lin.ft. guard rail, 9,160 cu.yd. borrow, 36,122 lb. reinforcing, 1,230 ft. 15 to 36-in. rein.-con. pipe, 6,328 cu.yd. channel change, etc. E. C. L. Wagner, 608 Kemper Bldg., Kansas City, Mo., engr. Noted May 29.

Nebraska—June 13, by State Hy. Dept., Lincoln, gravel surfacing 106,550 yd. Hartington-Fordyce Rd., Federal Aid Project 72-A, Cedar Co., $25,000; 224,000 yd. Hartington-Wayd Rd., Federal Aid Project 4, Cedar Co., $44,800; 13,000 yd. Aurora-Central City Rd., Federal Aid Project 156-B, Hamilton Co., $6,000.

Neb., Omaha—June 3, by H. Beal, city engr., City Hall, 200,000 sq.yd. asphaltic concrete, concrete or brick on concrete paving, curb, gutters, etc.

South Dakota — June 10, by State Hy. Comn., Pierre, grading, etc., 13.02 mi. F. A. P. 170B, Lake Co., 88,933 yd. excav.; 10.12 mi. F. A. P. 170A, Brookings and Kingsbury Co., 120,450 yd. excav.; 21.69 mi. F. A. P. 185A, Jones Co., 86,193 yd. excav.; 13.65 mi. F. A. P. 175, Hand Co., 100,477 yd. excav.; 3.77 mi. F. A. P. 146B and 180B, Corson Co., 68,737 yd. excav., 5,831 lbs. reinforcing; 11.21 mi. F. A. P. 62A, Haakon Co., 110,889 yd. excav., 29,144 lbs. reinforcing. F. D. Hudgins, ch. engr.

S. D., Sioux Falls — June 9, by W. C. Leyse, city aud., about 9,410 sq.yd. concrete, bitulithic concrete or asphalt paving. $35,000. B. S. Howe, city engr.

Missouri—June 10, by State Hy. Dept., Jefferson City, 20,818 cu.yd. grading and 23,236 sq.yd. chat paving road in Laurence Co.; 63,320 sq.yd. graveling roads in Taney and Miller Counties; 188,988 sq.yd. concrete paving roads in Clay, Jefferson and Warren Counties; 168,643 cu.yd. grading and 271,221 sq.yd. graveling roads in Dunklin, Polk, Phelps, Knox, Lawrence, Mississippi and Wayne Counties; grading roads in Jefferson, Warren, Cole, St. Francois, McDonald, St. Clair, Christian, Henry, Montgomery, Douglas, Livingston, Webster, Clay and Wayne Counties 716,375 cu.yd. earth and 16,332 cu.yd. rock excav. B. H. Piepmeier, highway engr.

Mo., Higginsville—Taking bids grading, concrete curbing, and 7 in. concrete surfacing 5,330 sq.yd., East Green St. J. Walker, Higginsville, engr.

Mo., St. Louis—July 1, by Bd. Pub. Serv., Room 208, City Hall, paving Warrenite on concrete, bitulithic on concrete, granite paving, etc., Ohio Ave., Indiana, Chippewa South, Plateau, Blow, Enright, 25th and Dewey Sts. $125,365.

Ark., Van Buren—June 19, by D. E. Bryon, secy. Bd. Impvt. Dist. 4, 2,550 cu.yd. earth and 50 cu.yd. rock excav., 50 ft. 18 in. vitr. brick or concrete storm sewer, 5,655 sq.yd. 6 in. concrete paving, 5,430 lin.ft. curb and gutter, alternate bids on 7,224 sq.yd. 6 in. concrete with integral curb or vibrolithic paving with 6 in. integral curb. W. L. Winters, 311 Merchants Bldg., Ft. Smith, engr.

Ark., Van Buren—June 19, by C. M. Wofford, secy. Bd. Impvt. Dist. 5, 9,000 cu.yd. earth and 100 cu.yd. rock excav., 840 ft. 16- to 36-in. storm sewers, 30,850 ft. curb and gutter, 4,190 ft. curb, 33,810 sq.yd. 6 in. concrete paving, alternate bids on asphaltic concrete or vibrolithic with integral curb, etc. W. L. Winters, 311 Merchants Bldg., Ft. Smith, engr.

Tex., Carthage—June 27, by T. H. Dillon Center, engr. Panola Co., improving, grading and bridging 9.6 mi. State Highway 43, Beckville to Carters Ferry. $110,000.

Tex., Huntsville—June 26, by City Council, 38,000 sq.yd. standard paving, various types, 21,330 ft. curb and gutter, etc. $110,000. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs.

Tex., San Antonio—June 11, by A. C. Pancoast, engr., limestone rock asphalt surfacing 2½ mi. Cuppler Rd. from Frio City to Castroville Rds., etc. $30,000.

Calif., Richmond—City Council taking bids improving portion McLaughlin Ave., Lassen St., etc., 11,000 cu.yd. grading, 242,000 sq.ft. oil macadam, 87,000 sq.ft. walks, 33,000 sq.ft. gutters, 17,000 cu.ft. concrete curb, etc. To exceed $50,000. H. D. Chapman, city engr. Noted May 15.

Calif., Suisun City—City Trustees taking bids paving City Plaza streets, 19,924 sq.ft. 2 in., 85,346 sq.ft. 2½ in., 45,821 sq.ft. 3½ in. asphaltic conrete or warrenite-bitulithic. E. N. Eager, Courthouse, Fairfield, engr.

Calif., Sunnyvale—City Trustees taking bids, improving Washington, Taafe, Evelyn Aves., etc., 137,879 sq.ft. 1½ in. warrenite on 2½ in. asphaltic concrete, 10,710 lin.ft. concrete curb and gutter, etc. H. B. Fisher, Growers Bank Bldg., San Jose, engr.

Ont., St. Catherines—June 10, by A. H. Trapnell, Secy. Suburban Rds. Comn., 22,000 sq.yd. stone filled sheet asphalt on macadam, Lincoln Co. $60,000. F. N. Rutherford, 24 Queen St., engr.

Ont., Tara—May 31, by J. W. Sinclair, Tara, 72 ft. steel truss span bridge, concrete substructure, for Arran Twp. $25,000. G. E. Stephenson, Walkerton, engr.

Quebec—June 18, by Dept. Provincial Highways, Quebec, gravelling 67,057 ft. Montreal-Ottawa Highway via Hull High-

Streets and Roads (Continued)

way in Notre Dame de Bouscoeurs, St. Angelique, Plaisance, Papineauville, Massom and Angers. J. L. Boulanger, deputy minister.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving with granite roadway of Concord St., from F. J. Gallagher, 490 Park Pl., $13,880; repaving with asphalt DeKalb and Throop Aves., from Uvalde Asphalt Paving Co., 1 Bway., New York, $16,116 and $19,481 respectively; laying cement sidewalks on Havemeyer St., from Navy Constr. Co., 182 Navy St., $641; grading, curbing and flagging 15th Ave., from Grimm Contg. Co., 170 McKinley St., $3,188; repaving with asphalt 86th St., from Cranford Co., 52 9th St., $47,731; furnishing and applying 70,000 cu.yd. binder, from Standard Oil Co. of New York, 26 Bway., $10,500. Noted May 22.

N. Y., New York — H. Bruckner, pres. Bronx Boro, Municipal Bldg., 3rd and Tremont Aves., paving where not already paved and repaving with granite blocks Prospect Ave. from East 149th to East 163rd Sts., and from 163rd St. to Boston Rd., from Leonard Paving Co., 233 Bway., $220,588 and $243,692 respectively. Noted May 22.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., alterations and improvements to sewer in Beaver St., from P. J. Donlon Constr. Co., Snyder Ave. and East 56th St., Brooklyn, $27,626; curbing, recurbing, flagging and reflagging, etc., pavement in West 176th St., from Asphalt Constr. Co., 208 Bway., $8,989; grading, regrading, curbing and recurbing, etc., in West 177th St., from M. Del Baso, 660 East 221st St., $29,060; curbing, recurbing, flagging, reflagging and paving with asphalt blocks on Payson Ave., from Burnside Constr. Co., 270 Burnside Ave., $12,397; sidewalks on park strips on Park Ave., from P. Cramer, 154 East 50th St., $6,749. Noted May 15.

N. Y., St. George — J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving with granite block pavement Richmond Ave., from J. Johnson Sons, 455 Bway., West New Brighton, $91,664. Noted May 22.

N. J., New Brunswick—Middlesex Co., paving River Rd. and Stelton-New Market Rd., from C. Sebolt, 16 Richmond St., $42,161 and $47,821 respectively.

N. J., Plainfield—State Hy. Dept., Trenton, constructing Route 9, Sect. 11, Lincoln Ave., here, Middlesex Co., 6,558 cu.yd. excav., 18,231 sq.yd. concrete and 1,841 sq.yd. granite block paving, from C. H. Winans, 207 Broad St., Elizabeth, $137,437. Noted May 15.

Pa., Phila.—Grading, Schedule A, Flanders, Woodcrest, 64th and 66th Sts., from R. B. Weimer, 3106 Midvale Ave., $9,463, G St., from T. Flanagan, 531 East Girard St., $18,062, Ritner St., from F. Brennan, 2507 Tasker St., $984, 32nd St., from E. A. Mullen, Inc., 5512 Vine St., $6,363, 47th St., from Kelly Colgan Co., Inc., Wayne St., $3,817; asphalt paving (assessment work) Schedule B, Champlost St., from Eastern Paving Co., 401 Columbia Trust Bldg., $31,298; repairing and resurfacing asphalt streets, Schedule C, from Union Paving Co., 300 Locust St., $68,080; repairing, surfacing and resurfacing country roads, Schedule D, from Curtis Bros., State Rd., $8,250; repairs and reinforcement of bridge at 6th St. and Allegheny Ave., Schedule F, from G. F. Dobbins, 1020 South 47th St., $19,225.

Md., Baltimore—Concrete paving, Alley Contr. 109, from J. J. Bresnan & Co., 1625 Bank St., $42,005; Alley Contr. 94, from Arundel Constr. Co., Knickerbocker, Bldg., $34,361.

North Carolina—State Hy. Comn., Raleigh, **(S. P. means State Project)**, grading and concrete or asphalt paving 9.037 mi. S. P. 617, Catarrus Co., from Noll Constr. Co., Charlotte, $320,936, 13.392 mi. S. P. 791-B, Yadkin Co., from Ziegler & Dalton, Junction City, Kan., $518,247, 6.173 mi. S. P. 812, Burke Co., from Overstreet & Vance, Bedford, Va., $195,367, 8.134 mi. S. P. 318 Brunswick Co., from W. F. Bowe, Augusta, Ga., $94,915, 12 mi. S. P. 107-B, Bertee Co., from F. Mitchell Constr. Co., Greenville, $347,017; grading 6.487 mi. S. P. 432, Granville Co., from T. W. Chandler, Virgilina, Va., $25,183, 8.012 mi. S. P. 415, Durham Co., from B. F. Teeter, Harrisburg, $83,074, 10.768 mi. S. P. 212, Craven Co., from Eagle Eng. Co., New Bern, $71,574, 11.832 mi. S. P. 111 and 117, Camden and Currituck Counties, from N. L. Teer, Durham, $79,711; grading and top soiling 16.656 mi. S. P. 134, Gates Co., from Smith Bros., Inc., Allen Bldg., Raleigh, $67,148; grading and bituminous macadam surfacing 2.048 mi. S. P. 890, Yancey Co., from J. F. Mulligan Constr. Co., North Wilkesboro, $62,963; grading 7.275 mi. S. P. 891, and grading and waterbound macadam surfacing 11.259 mi. S. P. 888, both Yancey Co., to W. H. Anderson Constr. Co., Brevard, $153,836 and $160,967 respectively. Noted May 8.

Fla., Gulfport — Town Council, 115,600 sq.yd. vitr. brick, asphalt filler, paving, from Southern Clay Mfg. Co., Lewisburg, Ala., special brick $2.20, standard $2.37; from Kendrick & Bowyer, Tampa, brick $2.40. Noted May 8.

Alabama—State Hy. Dept., Montgomery, grading and surfacing 9.97 mi. Federal Aid Project 141 A, and 55, Hale Co., from W. H. Pattie, 720 North 16th St., Birmingham, $128,418. Engrs. est. $135,534.

Alabama—State Hy. Dept., Montgomery, grading and concrete surfacing 3.87 mi. roads in Montgomery Co., from J. Fromherz, Title Guarantee Bldg., New Orleans, La., $112,958; bridges, from Lawrence Constr. Co., Jackson, Miss., $13,908.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, grading 9.62 mi. Davidson Co. line-Dickson Co. line Rd., 18 ft., Federal Aid Project 205, Cheatham Co., from Womack Constr. Co., and Texas Willite Road Co., 1205½ Capitol Ave., Houston, Tex., $126,333. Noted May 15.

Kentucky—State Hy. Dept., Frankfort, **(S. P. means State Project)** bituminous surfacing 14.8 mi. Paris-Winchester Rd., 14 ft., S. P. 32-A, Bourbon Co., and 5 mi. Falmouth-Cynthiana Rd., 14 ft., S. P. 21-E, Harrison Co., from Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, $11,234 and $7,783 respectively; 1.9 mi. Louisvile-Paducah Rd., 14 ft., S. P. 8-S, McCracken Co., and 11.15 mi. Munfordsville-Bearwallow Rd., 14 ft., S. P. 11-J, Hart Co., from F. G. Breslin Co., 32nd and Market Sts., Louisvile, $6,426 and $5,300 respectively; 2.9 mi. Lexington-Georgetown Rd., 14 ft., S. P. 5-H, Fayette Co., and 8.09 mi. Cave City-Bowling Green Rd., 14 ft., S. P. 11-H, Edmonson Co., from R. B. Tyler & Co., 114 South 14th St., Louisville, $2,020 and $12,656 respectively; 13.1 mi. Frankfort-Shelbyville Rd., 18 ft., S. P. 17-D, and 5 mi. Frankfort-Georgetown Rd., 14 ft., S. P. 17-E, both Franklin Co., from Kentucky Road Oil Co., Frankfort, $9,665 and $3,424 respectively; 3.14 mi. Mt. Sterling-Frenchburg Rd., 14 ft., S. P. 32-C, Montgomery Co., from Eaton Oil Works, Sterrett St., Cincinnati, O., $7,539. Noted May 8.

O., Cleveland—Paving Edgewater Park Blvd., 7,000 sq.yd. bituminous concrete, from Rieley Bros., The Arcade, $46,134. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Washtenaw Co., Ann Arbor, grading and surfacing 0.52 mi. State Trunk Line Rd. 92.2, 6,882 sq.yd. concrete, from Koch Building & Supply Co., Ann Arbor, $25,251. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Huron Co., Bad Axe, grading and surfacing 0.41 mi. State Trunk Line Rd. 19-8, Sect. E, 2,527 cu.yd. excav., 7,477 sq. yd. concrete, from Schulz & Liken, Sebeawing, $24,408.

Michigan — State Hy. Dept. at office Comrs. Bay Co., Bay City, May 19, grading and surfacing 3.598 mi. State Trunk Line Rd. 20-14, 16,700 cu.yd. excav., 38,539 sq.yd. concrete, from Galarno Constr. Co., Bay City, $90,785. Noted May 8.

Michigan — State Hy. Dept. at office Comrs. Benzie Co., Beulah, grading and gravel surfacing 3.908 mi. State Trunk Line Rd. 22-12, 20,596 cu.yd. excav., 36,995 sq. yd. gravel, from Remus Constr. Co., Remus, $23,630.

Michigan — State Hy. Dept. at office Comrs. St. Joseph Co., Centreville, grading and surfacing 8.746 mi. State Trunk Line Rd. 60-3, 51,826 cu.yd. excav., 93,717 sq. yd. (a) bituminous macadam, or (b) 7 in. concrete, from Sturgis Road Machy. Co., Galesburg, (a) $71,045, Whitlow & Nelson, Muskegon, (b) $172,511. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Kent Co., Grand Rapids, May 20, grading State Trunk Line Rd. 13-50 C, 55,988 cu.yd. excav., etc., from W. Maxwell, 212 Fitzhugh St., Midland, $28,664. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Lapeer Co., Lapeer, grading and surfacing 0.68 mi. State Trunk Line Rd. 36-5, from 20 to 57 ft. wide, 5,657 cu.yd. excav., 14,404 sq.yd. concrete, from C. Frame & Son, Harbor Beach, $36,029, also 1.244 mi. State Trunk Line Rd. 36-4, 9,507 cu.yd. excav., 6,340 sq.yd. gravel, 7,660 sq. yd. concrete, from R. C. Bailey, Corunna, $26,651. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Schoolcraft Co., Manistique, grading and surfacing 3.5 mi. State Trunk Line Rd. 77-2, 17,166 cu.yd. excav., 32,698 sq. yd. gravel, from Peterson Constr. Co., 520 Globe St., Minneapolis, Minn., $32,962.

Michigan — State Hy. Dept. at office Comrs. Muskegon Co., Muskegon, grading and surfacing 1.045 mi. State Trunk Line Rd. 11-19, 3,442 cu.yd. excav., 12,204 sq. yd. concrete, from J. R. Edelman, Muskegon, $27,219.

Ill., Vandalia—City, May 29, paving 5th St. with (a) concrete (b) brick on concrete, from C. J. Moritz, Inc., Effigham, (a) $38,164 (b) $48,390. Noted May 15.

Neb., Kearney—Paving, curbing and guttering 20,000 yds. Paving Dist. 61, from E. D. Tyner Constr. Co., 14th and Elmwood Sts., Kansas City, Mo., asphaltic concrete $45,000, sheet asphalt $50,000.

Neb., North Platte—Paving Dist. No. 26, from Abel Constr. Co., Terminal Bldg., Lincoln, $27,500. Engineers est. $28,000.

Missouri — State Hy. Dept., Jefferson City, May 20, from H. H. Humphrey Constr. Co., Fredericktown, grading 2.836 mi. Sylvia-East Rd., 26 ft., Wayne Co., $12,908, 1.521 mi. Marble Hill-Advance Rd., 26 ft., Bollinger Co., $7,404, 1.957 mi. Marble Hill-Advance Rd., 26 ft., Bollinger Co., $18,562, graveling 1.294 mi. Coldwater North Rd., 12 ft., Wayne Co., $9,160; from Haller & Davis, Boonville, gravel surfacing 4.553 mi. Jefferson City-Kansas City Rd., 18 ft., Morgan Co., $53,775, 3.963 mi. Jefferson City-Kansas City Rd., 18 ft., Cooper Co., $69,533, from Gaines Bros., Fairland, Okla. 3.875 mi. Jefferson City-Kansas City Rd., 18 ft., Cooper Co., $57,965, from B. Layton, Muscatine, Ia., 2.793 mi. Memphis East Rd., 16 ft., Scotland Co., $26,104 from C. T. Fogle Constr. Co., Jefferson City, 0.389 mi. McBride South Rd., 12 ft., Perry Co., from Newton Constr. Co., California, 5 mi. Stockton East Rd., 12 ft., Cedar Co., $27,911, from A. M. Morrow, Charleston, 2.185 mi. Diehlstadt South Rd., 16 ft., Mississippi Co., $31,663, from T. P. Sparks, Kirkwood, 3.598 mi. St. Charles-West Alton Rd., 12 ft., St. Charles Co., $35,502; from C. Parker, Keytesville, grading 2.608 mi. Salisbury East Rd., 30 ft., Chariton Co., $9,932, 2.632 mi. East Salisbury Rd., 30 ft., Chariton Co., $16,620, from J. L. Simmons, La Plata, 2.106 mi. Milan North Rd., 30 ft., Sullivan Co., $15,496, 2.998 mi. Lemons South Rd., 30 ft., Putnam Co., $8,218, from Metropolitan Paving Co., St. Joseph, 7th & Olive Sts., 4.713 mi. Parkville South Rd., 30 ft., Platte Co., $4,996, from J. G. Nevels & Masonor, Willow Springs, 0.17 mi. Elsinore West Rd., 26 ft., Carter Co., $7.003; from M. E. Gillioz, Monett, chat surfacing 2.432 mi. Lockwood East Rd., Dade Co., $15,166, 2.528 mi. Lockwood East and West Rds., 12 ft., Dade Co., $12,607; from Louis Rich Constr. Co., East St. Louis, Ill., concrete surfacing 4.713 mi. Parkville South Rd., 18 ft., Platte Co., $77,027. Noted May 15.

Missouri — State Hy. Dept., Jefferson City, May 20, from Republic Concrete Constr. Co., Republic, two 10 ft. rein.-con. slab spans, etc., over Little Bear Creek, $2,285, one 40 ft. and two 30 ft. rein.-con. deck girder spans over Cedar Creek, $7,395, two 10 ft. rein.-con. slab spans, etc., over Black Bear Creek, $2,014, three 12 ft. rein.-con. slab spans, etc., over Polar Bear Creek $3,955, all Wayne Co.; from Wagner Bridge & Constr. Co., St. Louis, three 40 ft. rein.-con. deck girder spans, etc., over drainage ditch, Perry Co., $13,402, one 50 ft. and two 20 ft. I-beam spans, etc., over drainage ditch, Bollinger Co., $7,864; from J. G. Nevels & Masoner, Willow Springs, two 24 ft. rein.-con. deck girder spans, etc., over Brushy Creek, Carter Co., $7,003; from S. J. Groves & Sons, Minneapolis, Minn., five 20 ft. rein.-con. slab spans, etc., St. Louis Co., $8,639; from H. H. Hauerkrat, 53rd and Brooklyn Sts., Kansas Ciy, three 20 ft. rein.-con. slab spans, etc., over Long Branch, Cooper Co., $4,240; from Pittsburgh Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia., two 12 ft. rein.-con. slab spans, etc., over stream, Scotland Co., $2,807; from A. L. Cook, Ottawa, Kan., fifteen 20 ft. rein.-con. slab spans over overflow of east fork of Chariton River, Chariton Co., $15,252; from P. J. Murphy, Moberly, two 40 ft. and one 25 ft. rein.-con. deck girder spans, etc., over east fork of Chariton River, Chariton Co., $8,986.

Mo., St. Louis—From J. E. Perkinson, 3337 Carter Ave., paving Bates St., 13,300 sq.yd. rein.-con., $53,310, engrs. est. $61,000, Macklind Southwest Ave., brick on concrete $15,932, engrs. est. $18,000, Tholozen St., Kentucky rock asphalt, $13,-

Streets and Roads (Continued)

621, engrs. est. $15,700; from Skrainka Constr. Co., Security Bldg., Oleatha St., 3,500 sq.yd. concrete $10,702, engrs. est. $12,600, Sulphur Ave., brick on concrete, $25,716, engrs. est. $29,400.

Tex., Austin—Travis Co. grading, etc., 11.6 mi. Sect. A, Austin-Webberville Rd., 24 ft., and 7.85 mi. Sects. B and C, Austin-Webberville Rd., 24 ft., from H. J. Evans, 500 West 15th St., $31,394 and $24,422 respectively. Engrs. est. $30,000 and $38,000 respectively.

Tex., Dallas—Dallas Co. paving 303 mi. State Highway 1, 18 ft., from Smith Bros., Amer. Exch. Natl. Bank Bldg., asphalt $98,354, concrete $121,993. Noted Apr. 24.

Okla., Ponca City—Improving Dists. 42 and 43, etc., to R. H. Baldwin, Ponca City, $35,511.

Colorado — State Hy. Dept., Denver, gravel surfacing 7.703 mi. Federal Aid Project 242-A, Mesa Co., from D. Hinman, 3358 Race St., Denver, $81,256, engrs. est. $99,779; grading and graveling 3.239 mi. Federal Aid Project 258-A, Gunnison Co., from R. P. Morrison, Golden, $34,902, engrs. est. $45,303.

Colo., Denver—Surfacing 20 mi. North Denver Surfacing Dist. 7, crushed gravel, loam and sand, from H. C. Lallier Constr. & Eng. Co., Hudson, $109,613. Engrs. est. $118,954. Noted May 15.

Wash., Everett—Comrs. Snohomish Co. grading and gravel surfacing 6.9 mi. Woodinville cut-off, 52,262 cu.yd. earth excav., etc., from Wangsmo Bros. & Co., Arlington, $64,946. Engrs. est. $67,000. Noted May 15.

California—State Highway Comn., Sacramento, surfacing 6.9 mi. highway from point 2 mi. east of Parkfield Junction and Coalinga, Fresno Co., 9,100 cu.yd. gravel or stone surfacing, from Stewart & Bland, Fresno, $12,649, engrs. est. $30,030. Noted May 1.

Calif., Glendale—From E. L. Fleming, 324 west Dryden St., improving Hermosita, El Rito Aves., etc., 440,910 sq.ft. grading $0.015, 90,518 sq.ft. 5 in. oiled macadam $0.145, 185,704 sq.ft. 3 in. oil macadam $0.1075, 61,650 sq.ft. walks $0.16, 4,131 ft. 8 in. c.i. water pipe $17,507, 8,188 ft. 8 in. vitr. sewer pipe $2.35.

Calif., Los Angeles—Los Angeles Co. improving 3.71 mi. Michigan Ave., Rd. Dist. Impvt. 257, 20 ft., 17,948 cu.yd. excav., shaping 44,565 sq.yd. roadbed, 44,565 sq.yd. 5- to 8-in. concrete paving shaping 19,568 lin.ft. shoulders, etc., from Sully-Miller Co., 250 Bennett Ave., Long Beach, $96,490.

Calif., Stockton—Improving (1) Wilson Way (2) portions Market St., etc., 2 in. asphaltic macadam on 4 in. cementing gravel, concrete curbs, gutters and walks, etc., from J. E. Johnston, Savings & Loan Bank Bldg., (1) $29,595 (2) $15,227; Blumenkranz & Vernon, Farmers & Merchants Bank Bldg., (1) $29,595 (2) $15,179.

CONTRACTS AWARDED

Massachusetts—Dept. Pub. Wks. Div. of Highway, State House, Boston, about 5,000 ft. highway in Salisbury and Newburyport, bituminous macadam, to J. E. Watkins, 10 Fern Ave., Amesbury, $57,675; 25,300 ft. in Lakeville, rein.-con. and bituminous macadam, to Perrini & Sons, Ashland, $312,361; 13,000 ft. in Southampton, bituminous macadam, to D. O'Connor Sons, 480 Hampden St., Holyoke, $132,511; 26,000 ft. in Essex and Ipswich, bituminous macadam, to Cenedella & Co., 68 Schools St., Milford, $184,396. Noted May 15 and 22.

Mass., Boston—Dept. Pub. Wks., additional bitulithic, wood block and recut granite block paving, and artificial stone sidewalks on West, Bedford, Charles and Leverett Sts., to B. E. Grant Co., 100 Floyd St., Roxbury, $63,818; asphalt paving Fenway St. from Forsyth to Museum Rds., to Warren Bros. Co., Parkman Bldg., $63,128. Noted May 22.

Mass., Dorchester (Boston P. O.) — Bitulithic paving Blue Hill Ave. from Canterbury to River Sts., to Warren Bros. Co., 9 Cambridge St., Boston, $129,236. Noted May 22.

Mass., West Roxbury (Boston P. O.)—Dept. Pub. Wks., City Hall, Boston, bitulithic paving Washington St., here, to M. F. Gaddis, 5 Spaulding St., Roxbury, $63,818.

N. Y., Rochester—Bd. Contract & Supply, asphalt paving Chandler St., to J. Petrossi, Elwood Bldg., $12,145; Willite paving Dayton St., to Rochester Willite Corp., Rochester, $14,369; asphalt resurfacing Buena Pl., to Vulcanite Pavement Co., Exch. Pl. Bldg., $1,746; concrete paving Schlitzer and Dayton alleys, to J. E. Pidgeon, Rochester, $2,473.

N. Y., Watertown — Common Council, concrete paving Washington St., to Koetteritz & Blakeslee, Little Falls, $53,307, River St., to C. B. Colwell, 1140 Coffeen St., $32,051; Huntington, Newell, Engine and Leray Sts., to F. H. Allard, 712 Cadwell St., $14,053, $11,340, $3,538 and $11,804 respectively. Noted May 8.

N. J., Audubon—Boro Comrs., concrete paving and curbing alleys north of Merchant St., Princeton and Cornell Rds., Pine, Oak and Chestnut Sts., Edgewood, Audubon, 4th, Hampshire, and West Atlantic Aves., to Union Paving Co., 30th and Lancaster Sts., Phila., $168,222. Noted May 29.

N. J., Camden—Regrading and resurfacing 40,000 sq.yd. Princeton Ave., Line, 4th, Point, Elm, South 6th, Welsh, Liberty, Clare, Cedar and Auburn Sts., to Union Paving Co., 30th and Lancaster Sts., Phila., $123,957; patching and surfacing North 4th, Chestnut, Royden and Cherry Sts., to B. Foster & Co., 20th and Venango Sts., Phila., $26,510. Noted May 29.

N. J., Camden—Camden Co., to Union Paving Co., 30th and Lancaster Sts., Phila., paving Kings Highway $27,107, Warrick Rd., $50,835.

N. J., Haddonfield — For 198,000 sq.yd. bituminous surface and sheet asphalt paving, to Union Paving Co., 30th and Lancaster Sts., Phila., $342,025. Noted May 29.

N. J., Pitman—Laying 66,400 ft. concrete sidewalks, 20,600 lin.ft. curb and 780 sq.yd. concrete gutters in various streets, to G. C. Kindle, Pitman, $44,770. Noted May 29.

Pa., Butler—Paving Ziegler Ave., asphalt on concrete, to Allegheny Paving Co., Bakewell Bldg., Pittsburgh, $28,000. Engrs. est. $30,000.

Pa., Ebensburg—Cambria Co., concrete paving 9,100 lin.ft. Mencher Highway, Upper Yoder Twp., to C. T. Morgan, Johnstown, $110,786.

Pa., Pittsburgh—Repaving Fleetwood St., to M. O'Herron Co., 18th St., $32,725. Engrs. est. $35,000.

Pa., Sharon—Paving Baldwin Ave. and Florence St., 3 in. brick on 5 in. concrete, to W. McIntyre & Sons, Sharon, $3.35 per sq.yd.; North Water and Budd Sts., 3½ in. brick on 6 in. concrete, to W. M. Keesecker, Youngstown, O., $3.61.

Pa., Phila.—Bureau Hys., Dept. Pub. Wks., grading Schedule A, to T. P. Lee, 5629 Cherry St., Georges Lane, Columbia, Montgomery, Morse and Peach Sts. $13,676, Lebanon, Malvern and 59th Sts. $15,252, Warrington and 70th Sts., $11,979; to E. A. Mullen, Inc., 5512 Vine St., Hanson and St. Bernard Sts., $3,714; Root Bros., Ridge Ave. and Righter St., Houghton and Lauriston Sts., $8,699; to Byrne Bros., 335 Gates St., Mathias and Parker Sts., $3,934; to E. Tourison Jr., 1517 Bankers Trust Bldg., Weathan St., $14,392; asphalt repaving, Schedule B, to Eastern Paving Co., 401 Colonial Trust Bldg., Ellsworth St., also track area $34,897; to Barber Asphalt Co., Colonial Trust Bldg., Haverford St. $41,464, Huntingdon St. $13,505, 10th St. $10,243; redressed granite block repaving Schedule C, to Mazzaola & Marano, 414 Gross St., Clifton, Drury, Naudain, Percy and Sheridan Sts., $14,228, Spruce St. (track area), $17,096; to United Paving Co., Frankford St. (track area), $18,532, York Rd. (track area), $33,941, 24th & 25th Sts. $9,146; to Dunlap & Williams, Ridge and Girard Sts., Frankford St. $67,759, 22nd St. $28,510; to Eastern Paving Co., 401 Colonial Bldg., Orthodox St. (track area), $31,507; steel repairs to bridge at 49th St. over West Chester Branch of Pennsylvania R.R. Schedule D, to Amer. Fabricated Steel Co., 2442 North Bordine St., $525. Noted May 22.

Maryland—State Rds. Comn., Baltimore, concrete paving 1 mi. highway in Frederick Co., Contr. F-76, to L. R. Waesche & Sons, Thurmont, $53,128, 1 mi. in Garrett Co., Contr. G-28, to Kitzmiller Constr. Co., Kitzmiller, $44,544; gravel surfacing 3 mi. in St. Marys Co., Contr. SM-27, to St. Marys Constr. Co., Mechanicsville, $21,546. Noted May 29.

Maryland—State Rds. Comn., Baltimore, concrete paving 2 mi. highway in Montgomery Co., Contr. M-50, to M. J. Grove Lime Co., Lime Kiln, $61,833; 1.61 mi. in Caroline Co., Contr. CO-23, to P. D. Phillips & Bro., Salisbury, $38,467; 1.16 mi. in Anne Arundel Co., Contr. AA-40, to Christhilf & Ensey Co., 1625 Ridgely St., Baltimore, $26,711; 1 mi. in Frederick Co., Contr. F-75, to R. B. Poffenberger, Meyersville, $30,967; 4.43 mi. in Anne Arundel Co., Contr. AA-39, to D. Marine Co., 2 Lexington St., Baltimore $127,201; 2 mi. in Worcester Co., Contr. WO-32, to Smith & Renshaw, Snow Hill, $60,696. Noted May 15.

Md., Baltimore—Bd. Awards, improving, etc., area around Guilford School, York Rd. and Cold Spring Lane, 8,391 cu.yd. earth excav., 15,334 sq.yd. surfacing, also concrete work, etc., at Montebello School, Harford Rd. and 32nd St., 10,000 cu.yd. rock excav., 3,500 sq.yd. macadam surfacing, etc., to Huse & Knight, 2800 Montebello Ave., $19,539 and $35,533 respectively; playground at School 65, Poplar Grove and Lanvale Sts., 6,000 cu.yd. earth excav., etc., to C. J. Spielman Co., Maryland Ave., Westport (Baltimore P. O.), $14,659. Noted May 15.

Md., Baltimore — Bd. Awards, paving Footway Contr. 78, 4,900 sq.yd. concrete, etc., to A. Spampinato, 1603 North Eden St., $10,775; 20,800 sq.yd. 5th Ave., Spring, Gay, Jackson and Courtland Sts., sheet asphalt, to Baltimore Asphalt Block & Tile Co., 1320 North Monroe St., $56,148. Noted May 15.

North Carolina—State Hy. Comn., Raleigh, gravel surfacing 6.49 mi. State Project 704, Alleghany Co., to Tucker-Gamhill & Co., West Jefferson, $29,655.

Fla., Haines City — Curbing, guttering and paving various streets, 43,700 sq.yd. 2½ in. block asphalt, to Davis & Webb, Water St., Tampa, Fla. Noted May 1.

Fla., Milton — Paving Milton St. and Milton-Brewton Rd., to Lawrence Constr. Co., Jackson, Miss., clearing, etc., 20 acres $70 per acre, 23,000 cu.yd. common excav. $0.35, 4,000 cu.yd. clay pit stripping $0.30, 6,913 cu.dy. sand-clay surfacing $0.75, 17,686 sq.yd. rein.-con. $2.57, 43 cu.yd. Class A concrete $27, 277 cu.yd. Class B concrete $25, 27,952 lb. reinforcing $0.065, 8,866 lin.ft. combined curb and gutter $0.625, total calculated on screened sand, $75,746.

Fla., Punta Gorda—Charlotte Co. paving 9 mi. portion State Rd. 5, Punta Gorda to Lee County line, 17 ft., 8 in. compacted marl, to Boone & Webster, Punta Gorda, $66,615.

Fla., Tavares—To P. Dean, Haines City, paving with bituminous wearing surface on lime rock, concrete curb and gutter, Barrow, Sinclair, Texas and Joanna Sts., $30,000; Lake Shore, Rockingham, Given and Clifford Sts., $30,000; Caroline, Ianthe Sts. and Tavares Blvd., $32,000; Irma, Ruby, Maud and Alford Sts., $32,500; New Hampshire, Rockingham, St. Clair, Abram and Diston Sts., $30,000. Noted May 15.

Alabama—State Hy. Dept., Montgomery, grading and graveling 11 mi. Greensboro-Newbern Rd., 10 ft., Hale Co., to W. H. Patty, Demopolis, $128,418. Engrs. est. $130,000.

Ala., Tuscaloosa — Concrete paving 8 blocks business section, to Sullivan, Long & Hagerty, Bessemer, $93,000. Engrs. est. $97,000. Noted May 8.

Tenn., Knoxville—Will oil various streets. To exceed $25,000. Work will be done by city forces. J. H. Brownlow, City Hall, city mgr.

Tenn., Nashville — Standard Golf and Country Club, grading sprinkling equipment, stone and frame club house, to H. Lightman Constr. Co., Nashville, $55,000.

Ohio—Dept. Highways and Pub. Wks., Columbus, to F. H. Beckler, Athens, grading, bridging and paving with brick 1.11 mi. Sect. "A" Nelsonville-Murray-Straitsville Rd., Athens Co., $52,633; to N. B. Putnam, Van Wert, Sect. "G-2," 2.886 mi. Sect. "H" and 2.425 mi. Sect. "I" Bucyrus-Crestline Rd., Crawford Co., all bituminous macadam, tar, $22,404, $60,181 and $49,994 respectively, 4.327 mi. Sect. "B" Bryan-Eldon Rd., Williams Co., bituminous macadam, asphalt, $85,280, 0.536 mi. Sect. "Blakeslee" Bryan-Eldon Rd., Williams Co., rein.-con., $12,494; to Mannix Bros., Greenville, 1.463 mi. Sect. "A-2" Dayton-Greenville Rd., Darke Co., rein.-con., $41,454; to G. H. Heffner & Son, Celina, 4.225 mi. Sect. "B" Greenville-Union City Rd., Darke Co., rein.-con., $122,569; to W. Sousley, Ada, 1.01 mi. Sect. "G" Roundhead-Ada Rd., Hardin Co., $9,641; to F. E. Milligan, Sidney, 2.54 mi. Sect. "B" Nelsonville-New Straitsville Rd., Hocking Co., bituminous macadam, tar, and 3.163 mi. Sect. "B" Sidney-Bellefontaine Rd., rein.-con., $92,387 and $107,754 respectively; to L. G. Booth, Painesville, 4.844 mi. Sect. "F" Painesville-Euclid Rd., Lake Co., rein.-con., $181,571; to Patterson Constr. Co., Lorain, 1.97 mi. Sect. "N-1" Twinsburg-Elyria Rd., Lorain Co., rein.-con., $54,277; to Dehmer Bros., Tiffin, surface treating 5.31 mi. Sects. "A" and "B" Toledo-Ann Arbor Rd., Lucas Co.,

Streets and Roads (Continued)

$2,714; to L. Dehmer, Tiffin, surface treating 2.9 mi. Sects. "J-2" and "Waterville" Toledo-Napoleon Rd. (special asphalt), $1,419, 3.51 mi. Sect. "C" Waterville-Swanton Rd., $1,752, 4.11 mi. Sects. "F" and "H" Toledo-Napoleon Rd., $1,777, and 4.2 mi. Sect. "A" Ottawa-Grand Rapids Rd., $1,717, all in Lucas Co., to W. G. Owens, Mineral Ridge, 3.766 mi. Sects. "G-1," "G-2" and "U-1" Akron-Canfield Rd., Mahoning Co., bituminous macadam, asphalt, $54,846; to G. Mellert Co., Medina, 2.51 mi. Sect. "A" and 5.99 mi. Sect. "B' Akron-Medina Rd., Medina Co., plain concrete, $31,785 and $76,474 respectively; to Malloy & Sickle, Marion, 2.454 mi. Sect. "G" Marion-Galion Rd., Morrow Co., bituminous macadam, asphalt, $31,992; to Trumbull Constr. Co., Warren, resurfacing 1.989 mi. Sect. "T" Ravenna-Warren Rd., Portage Co., $18,186; to Kelley & Myer Co., Youngstown, 3.138 mi. Sect. "R" Warren-Sharon Rd., Trumbull Co., bituminous concrete, $79,955; to Holmes Constr. Co., Wooster, 2.063 mi. Sect. "H" Columbus-Wooster Rd., Wayne Co., brick, $85,234; to Daley Bros., Bolivar, 1.5 mi. Sect. "I" Orrville-Northern Rd., Wayne Co., brick, $18,202; to G. R. Stincomb, 1191 Oak St., Columbus, 3.82 mi. Sect. "K-1" Upper Sandusky-Bellevue Rd., Wyandot Co., rock asphalt with waterbound and gravel base, $95,501; to Modern Constr. Co., Fremont, 1.49 mi. Sect. "B" Carey-Fostoria Rd., Wyandot Co. brick on concrete, $61,675; to Timmons Bros., Cadiz, grading 1.695 mi. Sect. "B" Dennison-National Rd., Harrison Co., sandstone base, $36,043; to Acton Bros., Vaughnsville, widening with plain concrete 1.949 mi. Sect. "R" Norwalk-Mansfield Rd., Huron Co., $14,788, and 4.803 mi. Sect. "K" and "L" Norwalk-Ashland Rd., Huron Co., $52,502; to W. E. Burke & Sons, Athens, grading and bridges on 2.933 mi. Sect. "N" Ravenna-Parkman Rd., Portage Co., $20,510. Noted May 15.

Ohio—Dept. Highways and Pub. Wks., Columbus, grading, bridging and paving 2.86 mi. Sect. "G" Niles-Ashtabula Rd., Trumbull Co., Kentucky rock asphalt, to Mahoning Constr. Co., Warren, $52,362; 3.248 mi. Sects. "C" and "Marysville" Delaware-Marysville Rd., Union Co., surface treated with waterbound macadam, to Laubis Stone Co., Kenton, $51,717; 2.231 mi. Sect. "O" Columbus-Marysville Rd., Franklin Co., bituminous macadam, asphalt, to T. D. Van Camp Co., Hartman Bldg., Columbus, $57,588; concrete widening 1.05 mi. Sects. "A" and "L" Columbus-Marysville Rd., Franklin Co., to Yale Constr. Co., Yale Ave., Columbus, $10,331.

O., Cincinnati—Paving 5th St., 3,700 sq.yd. granite block, 800 cu.yd. concrete, 1,370 lin.ft. granite curbing, 2,000 sq.ft. cement sidewalk, to Byrnes & Conway Co., 32 Bodman Bldg., $36,559, engrs. est. $40,961; Hamilton Ave., 3,800 sq.yd. 4 in. granite block, 1,100 cu.yd. concrete, 820 lin.ft. granite curbing, 3,000 sq.ft. cement sidewalk, 8,000 lb. castings, etc., to Henkel & Sullivan, 105 Bell Block, $56,146, engrs. est. $65,000.

O., Cleveland—Grading, curbing, guttering and paving 4,850 sq.yd. East 112th and East 118th Sts., brick, to Enterprise Paving & Constr. Co., 8444 Bway., $31,452; 7,000 sq.yd. East 139th St., concrete, to Baldwin Bros., 4500 Euclid Ave., $34,266; 7,200 sq.yd. East 123rd St., vitr. brick, to Highway Constr. Co., 903 Lorain Co. Bank Bldg., Elyria, $45,591; 4,750 sq.yd. Durkee Ave., concrete, to A. M. Pejsa, 3161 Derbyshire Rd., $22,561; 2,710 sq.yd. East 37th St., asphalt, to River Constr. Co., 2402 Mapleside Rd., Cleveland Heights (Warrensville P. O.), $20,448; resurfacing 4,280 sq.yd. East 84th St., asphalt, to Cleveland Trinidad Paving Co., The Arcade, $17,144. Noted May 29.

O., Cleveland — Cuyahoga Co. Comrs., paving Lorain Rd. No. 2, 24,100 sq.yd. medina stone block (21,600 sq.yd. concrete base), 12,550 ft. 4 in. drain tile, 9,400 cu.yd. excav., to Roehl Bros., 7002 Denison Ave., $206,775. Noted May 29.

O., Columbus—Franklin Co., to R. J. Deinst, 480 South 5th St., sheet asphalt paving on 954 ft. bridge over Scioto River, known as Broad St. Bridge, 60 ft. wide, less 16 ft. 10 in. for car tracks, $15,161; brick paving 1,945 ft. bridge and approaches over Scioto River, known as Mound St. Bridge, 40 ft. wide, less 7 ft. 5 in for car tracks, $31,894. Noted May 8.

O., Massillon—Bd. Control, paving High St. from Main to Wellman Sts., Jarvis Ave. from Tremont to Walnut Sts. and Wallace St. from High to Pine Sts., asphalt, to General Asphalt Paving Co., 1268 Dueber Ave. S. W., Canton, $29,076, $31,840 and $26,698 respectively, engrs. ests. $30,000, $34,000 and $30,000 respectively; improving with brick Commonwealth Ave. from Akron to Mill Sts., to Elmer Vogt Paving Co., Massillon, $33,870, engrs. est. $30,000. Noted May 15.

O., Rocky River—Paving 7 streets, limestone surface, to Ohio Engineering Co., Lorain, $87,000. Noted May 8.

O., Zanesville—Paving State St. and Blue Ave., to Dunzweiler Bros. Constr. Co., Zanesville, $32,150. Engrs. est. $35,000.

Ind., Evansville — Resurfacing Fulton Ave. from Franklin to Water Sts., brick and asphalt to Western Constr. Co., Division and Rowley Sts., approximately $35,000. Noted May 22.

Ind., New Albany—Paving Market St. from East to Silver Sts. and Market St. from Silver St. to Beharrel Ave., to Goulding Bros., New Albany. Engrs. ests. $14,750 and $22,129 respectively. Noted Apr. 24.

Michigan — State Hy. Dept. at office Comrs. Huron Co., Bad Axe, grading and surfacing 4.04 mi. State Trunk Line Rd. 27-19, 38,527 sq.yd. gravel, 15,664 cu.yd. excav., etc., to Harbor Beach Mfg. Co., Harbor Beach, $58,794. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Lapeer Co., Lapeer, grading and surfacing road in Davison Village, concrete, to Rowe Constr. Co., Sebeawing, $37,960.

Michigan — State Hy. Dept. at office Comrs. Saginaw Co., Saginaw West Side, grading and concrete surfacing 1 mi. road in Merrill, to F. McNally, Saginaw, $34,293; graveling 3 mi. road in Birch Run and Frankenmuth Twps., to Bennett & Crane, St. Charles, $30,142.

Michigan — State Hy. Dept. at office Comrs. Calhoun Co., Marshall, grading and gravel surfacing 1½ mi. road in Leroy Twp. and 7 mi. Ceresco-Burlington Rd., to H. A. Drake & Son, Battle Creek, $8,639 and $49,900 respectively.

Michigan — State Hy. Dept. at office Comrs. Oakland Co., Pontiac, grading and surfacing 2.25 mi. State Trunk Line Rd. 10-39, Sect. D, 53,397 sq.yd. concrete, 44,217 cu.yd. excav., etc., to R. D. Baker & Co., 1454 Penobscot Bldg., Detroit, $186,956. Noted May 29.

Michigan — State Hy. Dept. at office Comrs. Sanilac Co., Sandusky, grading and sheet asphalt surfacing 1.464 mi. State Trunk Line Rd. 38-7 B, to Willite Road Constr. Co., 711 Union Trust Bldg., Detroit, $29,914.

Mich., Dearborn—Paving, curbs, sewers, ètc. in 34,000 sq.yd. Michigan Ave., 8 in. concrete, o Otis Cement Constr. Co., 806 Hammond Bldg., Detroit, $119,000.

Mich., Detroit—To Detroit Asphalt Paving Co., 909 Free Press Bldg., grading, curbing and paving with 3½ in. sheet asphalt on 8 in. concrete, St. Jean Ave. $13,099, Loyo Ave. $76,560, South St. $13,209, Winfield Ave. $33,263, Drexel Ave. $31,331, Longfellow Ave. $15,243; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Wilson Ave. $17,762, Kendall Ave. $13,409, Idaho Ave. $13,189; to Cooke Asphalt Paving Co., 1260 Penobscot Bldg., Charest Ave. $37,699, Colton Ave. $23,528, State Fair Ave. $41,458. Noted May 29.

Mich., River Rouge—Paving 29,131 sq.yd. Walnut, Chestnut, Palmerston, Batavia, Burke, Perrin, Dwight and Summitt Sts., 7 in. concrete to R. J. Powelson Co., 6415 Iroquois Ave., Detroit, $111,162.

Mich., Springwells—B. P. Esper, city clk., paving Schafer Rd. south of Michigan Central Ry. 42,105 sq.yd. 8 in. concrete, to M. R. Hanna Co., 1636 Dime Bank Bldg., Detroit, $227,030; 2,791 ft. 12- to 36-in. vitr. crock sewer in Detroit Seamless Steel Tube Co., Subdivision, here, to Wayne Constr. Co., Detroit, $14,000.

Ill., Quincy — Bd. Local Impvts., to Bauer-Johnson Constr. & Supply Co., 1124 Cass St., Omaha, Neb., asphalt paving 4th St. from Oak to Cherry Sts. $15,555, Cedar St. $14,324, Aldo Blvd. $37,620, Bway. St. from 24th to 30th Sts., Type A, $28,833. Noted May 15.

Wis., Fond du Lac—J. F. Hohensee, city clk., paving 10,795 sq.yd. Everett, 4th and Fond du Lac Sts., concrete, to A. Larson, & Co., Eau Claire; 24,594 sq.yd. Oak Ave., Bannister, Bank, Bell, Marr and Morris Sts., asphalt, to J. Rasmussen & Sons Co., Oshkosh. Noted May 1.

Wis., Horicon—E. H. Higbee, city clk., paving, etc., various streets, 18,300 sq.yd. rein.-con., to Schreiber & Waterford, Randolph, $51,334. Noted May 15.

Wis., Port Washington—A. Lynch, city clk., concrete paving and curbing 11,000 sq.yd. Spring St. and Grand Ave., to S. & H. Constr. Co., 92 Mason St., Milwaukee, $28,076. Noted May 22.

Ia., Anamosa — Paving, etc., to Ford Paving Co., Cedar Rapids, 21,312 sq.yd. bitulithic at $2.44 per sq.yd. Noted May 8.

Ia., Newton—Resurfacing with 1½ in. asphalt about 46,930 sq.yd. various streets, to J. S. McLaughlin & Sons, Mankato, Minn., at $1.03 per sq.yd.

Minn.,., Benson—Swift Co., improving Job 2401, Sects. A, B and C, 59,538 cu.yd. excav., 56,327 cu.yd. overhaul, to Martin & Johnson, Glenwood, $17,362; Job 2402, 23,062 cu.yd. excav., 8,533 cu.yd. overhaul, to Jorgenson & Son, Stewart, $10,222; one 100 ft. steel span bridge with rein.-con. abutments, and one 16 ft. I-beam bridge with rein.-con. abutments, to G. F. Johnson, Milan, $7,700 and $1,815 respectively; culverts on Jobs 2401 and 2402 to Wheeling Corrugating Co., 155 26th Ave. S. E., Minneapolis, $4,005. Noted Apr. 10.

Minn., Brainerd — Paving about 25,000 sq.yd. road, to S. A. Riches & Sons, Brainerd, concrete $1.88 and $1.95 per sq.yd.; to Welsh Paving Corp., 703 1st Natl.-Soo Line Bldg., Minneapolis, tarvia $1.30 per sq.yd.

Minn., Elbow Lake—Grant Co., grading 7 mi. Job 2401, State Rd. 9, to H. M. Nelson, Chokio, $12,687; grading 2 mi. of same, to Anderson & Anderson, Wheaton, $2,934, culverts to Elk River Concrete Products Co., Elk River, $1,000; gravel surfacing Job 2404, State Rd. 1, and 7 mi. Job 2405, State Rd. 2, to W. Cosh, Elbow Lake, $6,770 and $6,022 respectively. Noted Mar. 20.

Minn., Faribault—Rice Co., gravel surfacing 4.25 mi. State Rd. 48, Job 2401, 4 mi. State Rd. 53, Job 2402, and 8.5 mi. State Rd. 30, Job 2406, to Lundin Bros., Mankato, $4,174, $4,402 and $7,368 respectively; 6 mi. State Rd. 28, Job 2408, to Western Gravel Co., Minneapolis, $6,470; 7.3 mi. State Rd. 22, Job 2409, to G. Oswald, Gibbon, $5,570; 8.65 mi. State Rd. 6, Job 2410, and 3 mi. State Rd. 29, Job 2411, to Carpenter & Walker, Sauk Centre, $8,112 and $2,164 respectively. Noted Apr. 17.

Minn., LeSueur Center — LeSueur Co., grading Job 2304, State Rd. 13, 49,329 cu.yd. excav., to R. B. Fraser, Northfleid, $0.245 per cu.yd.; Job 2305, State Rd. 20, 42,340 cu.yd. excav., etc., to G. W. McNamara, Windom, $0.28 per cu.yd. Noted May 15

Minn., Minneapolis—**Plans to sell $610,000 bonds improving 45 streets involving chiefly grading. Work will be done by day labor. H. N. Knott, city clk.**

Minn., Minneapolis—J. A. Ridgway, secy. Bd. Park Comrs., City Hall, 93,000 ft. colored curb in Minnehaha Parkway, Lake Nokomis and Lake Dists., also 3,000 sq.yd. concrete tennis courts in Nicollet Field, to Simonson & Emstad, Builders Exch., $0.40 per ft. and $1.42 per sq.yd. respectively: 7,300 sq.yd. colored walks in Lake Dist., to J. R. Seirup, St. Louis Park, $1.23 per sq. yd. Noted May 1.

Minn., Minneapolis — Hennepin Co., grading and bitulithic paving about 40,000 sq.yd. "Country Club" Dist., south and west of here, to General Contg. Co., 1222 Plymouth Bldg., $150,000.

Kan., Coffeyville—Grading and surfacing various streets, 24,000 sq.yd. brick on concrete, 16,000 cu.yd. excav., 13,700 lin.ft. curb and gutter, to C. Stanton, Coffeyville, $99,578. Noted Apr. 17.

Kan., Olathe — Johnson Co. surfacing 2.866 mi. Federal Aid Project 238-A, brick on macadam, to Cook & Stucker, Ottawa, $101,350. Noted Apr. 4.

Kan., Oskaloosa—Jefferson Co. (**e. e. means engrs. est.**) grading and surfacing 0.97 mi. Federal Aid Project 227-B, 18 ft., brick, to Cook and Stucker, Ottawa, $45,450, **e. e.** $51,242, 0.528 mi. Federal Aid Project 222-D, 18 ft., concrete, to Ritchie & Ramsey, 809 West 8th St., Topeka, $35,427, **e. e.** $36,736, 7.708 mi. Federal Aid Project 220-A, 18 ft., bituminous macadam, to H. Tidd, Hutchinson, $219,243, **e. e.** $224,312, 6.53 mi. Federal Aid Project 220-B, 18 ft., bituminous macadam, to J. K. Shinn, Independence, $147,530, **e. e.** $149,351; grading 6.35 mi. Federal Aid Project 222-A, 28 ft., to Larmoreaux Bros., 416 Arthur Bldg., Omaha, Neb., $25,395, **e. e.** $29,549. Noted May 9.

Kan., Troy—Doniphan Co., to M. W. Watson, 1447 Fillmore St., Topeka, grading and concrete surfacing 1.004 mi. Federal Aid Project 169-E, 18 ft., $74,338, engrs. est. $76,094; to A. L. Cook, Ottawa, grading 8.012 mi. Federal Aid Project 169-A, 29.5 ft., $52,154, engrs. est. $61,964, 7.292 mi. Federal Aid Project 169-C, 28 ft., $60,848, engrs. est. $73,219. Noted Apr. 10.

Neb., Fairburg—For 18,865 yd. paving and 11,458 ft. curb and gutter in Paving Dist. 5, to Roberts Constr. Co., 415 1st Natl. Bank, Lincoln, approximately. $45,000. Engineers est. $48,000.

Neb., Hastings—Paving 10 blocks various streets, 13,000 sq.yd. sheet asphalt, to

Streets and Roads (Continued)

A. A. Dobson Constr. Co., 804 First Natl. Bank Bldg., Lincoln. $31,850.

Neb., Omaha—To Abel Constr. Co., 320 Terminal Bldg., paving in Dist. 402, $19,098, and Dist. 567 $4,457, both asphaltic concrete, Dist. 583, $13,564, and Dist. 585, $2,520, both sheet asphalt, to Cochrane Constr. Co., 822 1st Natl. Bank Bldg., paving in Dist. 495 $41,515, asphaltic concrete and sheet asphalt. Noted May 29.

South Dakota—State Hy. Comn., Pierre, to W. R. Larson Constr. Co., 519 Secy. Nat'l. Bank Bldg., Sioux Falls, improving 2.74 mi. F. A. P. 130 B, 4,977 yd. rock excav. at $1.75 per yd., 4,782 yd. loose rock excav., $9.75, 12,174 yd. common excav., $9.45, etc., total approximately $27,500. Noted May 8.

N. D., Cooperstown—Griggs Co., graveling, etc., 11.3 mi. Federal Aid Project 108, B and C, 15,478 cu.yd. load, unload and spread, screening, 42,852 cu.yd. mile haul, etc., to Stephens Bros., Piedmont Bldg., St. Paul, Minn., $14,706; 10 mi. F. A. P. 109, A and B, 13,920 cu.yd. load, unload and spread, screening, 22,635 cu.yd. mile gravel haul, to A. Ketzloff, Binford, $10,829. Noted Apr. 3.

N. D., Ellendale — Dickey Co. grading 6.25 mi. Federal Aid Project 211A, 51,152 cu.yd. excav. etc., also 7.889 mi. Federal Aid Project 212, 74,356 cu.yd. excav., etc., to N. Brolander, $20,000 and $26,000 respectively. Noted May 8.

N. D., Williston—Williams Co. grading about 10 mi. Federal Aid Project 250A, 43,424 cu.yd. excav., etc., and Federal Aid Project 250B, 24,392 cu.yd. excav., etc., to Schultz Bros., Bowbells. Noted May 1.

N. D., Grafton—Walsh Co. grading 9 mi. Federal Aid Project 166, 71,892 cu.yd. earth and 1,440 cu.yd. rock excav., etc., also 9 mi. Federal Aid Project 245, 50,358 cu.yd. earth and 955 cu.yd. rock excav., etc., to W. H. Noel, Jamestown, $28,841 and $21,382 respectively.

Montana—State Highway Comn., Helena, gravel surfacing 5.6 mi. Project 191, section Pablo-Polson Rd., Lake Co., to Pioneer Constr. Co., Bozeman, $36,877. Noted May 15.

Mont., Anaconda—Resurfacing 8 blocks Main St. and Park Ave., about 17,500 sq. yd. warrenite bitulithic, to F. M. Bingham, Anaconda, $1.85 per sq.yd.

Mo., St. Louis — Bd. Pub. Serv., to Central Paving & Constr. Co., 6161 Maple Ave., paving with willite on concrete, etc. 15,540 sq.yd. Botanical St., $70,981, 17,785 sq.yd. Castleman Ave., $91,408, 15,368 sq. yd. Cleveland Ave., $64,901, 15,380 sq.yd. Flad Ave., $66,465, 4,190 sq.yd. Loughborough Ave., $21,788, removing old granite blocks and sheet asphalt paving 21,455 sq. yd. Chouteau and Manchester Sts., $50,961, 2,435 sq.yd. Ohio Ave., $10,222, 2,650 sq. yd. Beacon Ave., $10,863; to Webb-Kunze Constr. Co., 5927 Fyler Ave., 3,125 sq.yd. Sulphur Ave., asphalt on concrete, $17,662; to Trinidad Asphalt Mfg. Co., 8,895 sq.yd. Bell Ave., asphalt on concrete, $37,086; to Granite Bituminous Paving Co., Railway Exch. Bldg., 1,785 sq.yd. Wyomoning St., $9,908, 2,210 sq.yd. West Florissant St., $15,325, 4,885 sq.yd. Margaretta St., $26,284, 4,330 sq.yd. San Francisco St., $28,889, all warrenite on concrete.

Ark., Little Rock—Paving with asphalt on concrete 9,500 sq.yd. Dist. 363, to M. D. L. Cook, Southern Trust Bldg. Engrs. est. $100,000. Noted Apr. 24.

Ark., Springdale—Paving 11 blocks Dist. 1, 13,000 sq.yd. asphaltic concrete on concrete, 5,300 lin.ft. concrete gutter, 3,000 lin.ft. concrete curbing, 4,000 cu.yd. grading, etc., to C. A. Moreno Constr. Co., Syndicate Trust Bldg., St. Louis, Mo. Engrs. est. $42,500. Note May 1.

Tex., Cisco—Paving 8 blocks Ave. D, 3 in. brick on concrete, to Jordan Paving Co., Plainview. $40,000.

Tex., Corpus Christi—Nueces Co. paving with bituminous macadam 5.23 mi. State Highway 12-Z, Federal Aid Project 424, 18 ft., to Smith Bros. Inc., Amer. Exch. Bank Bldg., Dallas, $104,809. Noted Apr. 24.

Tex., Jacksboro—Jack Co. grading, etc. 16.94 mi. Mineral Wells-Jacksboro Rd., to Womack Constr. Co., Sherman, $89,165. Noted May 1.

Tex., San Antonio—Rock asphalt surfacing Buluerde Rd., from North Loop to Nacogdoches Rds., to Chapin-Kemp Co., 911 Austin St., $0.49 per yd. (3 yr. maintenance).

Okla., Enid—Grading and paving West Market St., asphalt on concrete, to B. J. and L. Paving Co., Enid. Engrs. est. approximately $25,000.

Colorado — State Hy. Dept., Denver, gravel surfacing 3.03 mi. Federal Aid Project 266-A, La Plata Co., to Mishon Engler & Tessier, Durango, $22,233, engrs. est. $26,992; concrete paving 2.53 mi. Federal Aid Project 283-A, Larimer Co., to F. C. Dreher, 525 Cooper Bldg., Denver, $84,830, engrs. est. $87,930. Noted May 22.

Washington—State Hy. Comn., Olympia, grading and gravel surfacing 9 mi. State Rd. 14, Kitsap Co., to Holmberg & Norman, Port Orchard, 92,450 cu.yd. earth excav. $0.40 per cu. yd., 132,920 cu.yd. overhaul, $0.03, etc., total $80,975, 7 mi. State Rd. 12, Lewis Co., to Hendricks & Olson, Chehalis, 49,580 cu.yd. earth excav. $0.42, 10,120 cu.yd. loose rock excav. $0.65, 6,120 cu.yd. solid rock excav. $1.25, etc., total $66,055; grading and surfacing with crushed rock 3.7 mi. State Rd. 5, Lewis Co., to Graham Bros. & Medley, Chehalis, 45,300 cu.yd. earth excav. $0.50, 2,370 cu. yd. loose rock excav. $0.70, 1,340 cu.yd. solid rock excav. $1.75, 2,730 cu.yd. crushed rock $2, etc., total $50,300; crushed rock surfacing 32 mi. State Rd. 2, Kittitas and King Counties, to F. J. Redmon, Yakima, 20,100 cu.yd. crushed rock $2.11, 3,575 cu. yd. crushed rock in storage piles $2.11, total $50,165; clearing and grading 2.5 mi. State Rd. 3, Whitman Co., to J. E. Edwards, South 1423 Adams St., Spokane, 51,240 cu.yd. earth excav. $0.30, 1,500 cu. yd. solid rock excav. $1.40, etc., total $25,149; 2.7 mi. State Rd. 1, Snohomish Co., to Rumsey & Jordan, Builders, Exchange, Seattle, 219,440 cu.yd. borrow $0.54, etc., total $124,542. Noted May 8.

Ore., Portland—Paving Front St. through railroad yards, to S. Simonson, Portland, $303,381.

California—State Highway Comn., Sacramento, 9.4 mi. grading, between east boundary and San Juan Bridge, Orange Co., to Williams & Singletary, Colton, $26,034, engrs. est. $27,750; 8.3 mi. between Vacaville and Batavia, Solano Co., 0.4 mi. concrete, 7.9 mi. asphaltic concrete, to Force & Currigan, Sherlock Bldg., Portland, Ore., $218,346, engrs. est. $227,031. Noted May 15.

Calif., Compton—To G. H. Oswald,, 366 East 58th St., Los Angeles, improving Spring St., 22,000 sq.ft. grading $0.055, 22,000 sq.ft. concrete $0.20, 1,420 ft. curb $0.60, 8,150 sq.ft. walks $0.20, 929 ft. 8 in. cement sanitary sewer $1.30; Stockton Blvd., etc., 79,180 sq.ft. grading $0.025, 79,180 sq.ft. 5 in. concrete $0.20, 2,118 ft. 4 in. wood stave water pipe $1.40.

Calif., Fresno—Improving Rd. Impvt. Dist. 8, to Thompson Bros., G and Divisadero Sts., 118,400 sq.ft. 3½ in. concrete walks $0.155, 22,500 ft. concrete curb $0.40, grading $0.10, total $29,302. Noted May 29.

Calif., Fresno — Improving Fresno St., 237,405 sq.ft. grading, 221,142 sq.ft. asphalt, 4,258 ft. concrete, etc., to Federal Paving Co., Brix Bldg., $64,115. Noted May 29.

Calif., Los Angeles—Improving 23rd St., to O. U. Miracle, 1036 Lime Ave., Long Beach, grading $8,500, 135,847 sq.ft. concrete $0.225, 6,455 ft. curb $0.70, 21,125 sq.ft. walks $0.22, cement pipe sewer $2,900, etc.

Calif., Oakland—Improving portion East 12th St., etc., 285,411 sq.ft. grading, 7,831 ft concrete curb, 8,400 sq.ft. concrete gutter, 212,482 sq.ft. 2 in. warrenite on 6 in. concrete to Hutchinson Co., 1706 Bway., $106,211; 13th Ave., etc., 262,467 sq.ft. grading, 10,515 ft. concrete curb, 1,219 ft. concrete curb with steel guard, 13,623 sq. ft concrete gutter 247,882 sq.ft. 1½ in. warrenite on 5 in. concrete, to Warren Constr. Co., Bacon Bldg., $98,194. Noted May 22.

Calif., Pasadena — Paving Bway. between Green and Glenarm Sts., 7 in. concrete, to Ducey & Breitstein, Pasadena, $106,789.

Calif., Salinas — Improving portion San Luis St., 82,558 sq.ft. grading, 82,558 sq.ft. 5 in. concrete, 3,667 lin.ft. curb, to Downer & Mero, 2234 Macdonald Ave., Richmond, approximately $22,500. Noted May 15.

Calif., Santa Rosa—Sonoma Co., to R. P. Smith, c/o Co. Survs. Office, Santa Rosa, improving Western Ave. near Petaluma, 1,840 cu.yd. excav. $1.60 per cu.yd., 1,468 cu.yd. concrete $11.75; to A. Teichert & Sons, 1846 57th St., Sacramento, improving Pocket Canyon Rd. Project, $180,607.

Ont., London — Suburban Highways Comn., 2 mi. concrete pavement strips with gravel in center on Hyde Park Highway, 3 and 3½ ft. wide, to King Constr. Co., Oakville, $28,000. Engrs. est. $35,000.

Ont., Windsor — Concrete pavements, to Merlo, Merlo & Ray, Walkerville, $14,000, and to S. P. West, 11 Sandwich St., E., Sandwich, $19,000. Engrs. est. $35,000.

Industrial Works

PROPOSED WORK

N. H., Nashua—Factory—J. F. McElwain Shoe Co., plans new factory addition.

Mass., Gardner—Factory—Travers Mfg. Co., East Templeton, plans new factory. C. G. Brooks, chn. Chamber of Commerce Promotion Com. $125,000.

Mass., Marlboro—Factory—Marlboro Wire Goods Co., having plans prepared, 3 story, 70 x 150 ft., rein.-con., brick and steel. $150,000-$170,000. Private plans.

Mass., Springfield—Plant—Westinghouse Electric Co., Pittsburgh, Pa., having plans prepared by McClintock & Craig, engr., 33 Lyman St., 2 story, 80 x 90 ft. rein.-con. and brick heating plant and boiler house, Worthington St., East Springfield. $250,000.

Conn., New Haven — Factory — Electro Thermal Mchy. Co., 82 Church St., having plans prepared by Dwight Smith c/o owner, 1 story, 88 x 182 ft., rein.-con., brick and steel, $50,000. F. W. Thompson, 82 Church St., engr.

N. Y., Hudson—Plant—C. A. Van Deusen Co., having preliminary plans prepared by Monks & Johnson, 99 Chauncey St., Boston, Mass., 5 story, rein.-con. $250,000.

N. Y., Niagara Falls—Plant—International Cooperage Co., Erie Ave. and 9th St., plans rebuilding plant Erie Ave., recently destroyed by fire. $100,000.

N. Y., Utica—Plant—Scala Packing Co., 1930 Canal St., plans brick and steel packing plant, 417 Main St. $75,000.

Pa., Bowers—Repair Shops, etc.—Western Maryland Ry. Co., Standard Oil Bldg., St. Paul and Franklin Sts., Baltimore, Md., plans rebuilding locomotive repair shops and engine house, here, partly destroyed by fire. Estimated loss $250,000.

Tenn., Morristown — Light Plant — See "Waterworks."

O., Columbus—Factory—V-W Ventilator Co., 315 Weesley Blk., having plans prepared 2 story and basement, concrete and steel, West Rich St. $40,000. Private plans.

O., Columbus—Factory—Columbus Trunk Co., Dublin Rd. and Scioto River, having plans prepared by O. D. Howard, East Broad St., 2 story, 60 x 160 ft., rein.-con. and brick, Dublin Rd. and Scioto River. $60,000.

Ill., Chicago—Factory—Bates Valve Bag Co., 7310 South Chicago Ave., having plans prepared by J. L. McConnell, 111 West Jackson Blvd., 3 story, 120 x 240 ft., fireproof, 8240 South Chicago Ave. $150,000.

Ill., Granite City—Blast Furnace, etc.—St. Louis Coke & Iron Co., 117 North 4th St., St. Louis, Mo., soon takes bids blast furnace and power plant, here. $2,500,000. Private plans.

Wis., Milwaukee—Factory—Walsh Harness Co., 290 3rd St., plans 1 and 2 story, 100 x 150 ft., brick and timber, plain foundation, Richard St. To exceed $40,000. Engineer and architect not selected.

Minn., Winona—Plant, etc.—Wisconsin Light & Power Co., R. M. Howard, Mgr., rejected bids and will probably have revised plans prepared, brick, rein.-con. and steel addition to boiler plant. $50,000. Mead & Seastone, Journal Bldg., Madison, Wis., engrs. Noted Apr. 17.

Neb., Omaha — Sub-Station — Nebraska Power Co., c/o J. E. Davidson genl. mgr., Electric Bldg., having preliminary plans prepared by F. S. Stott, 206 Kennedy Bldg., 115 x 260 ft. sub-station, and transmission line. $175,000. Noted Apr. 10.

Tex., Dallas—Factory—H. A. Overbeck, archt., Melba Theatre Bldg., takes bids early in June, 2 story, 90 x 140 ft., brick, tile and steel, for Amer. Paper Stock Co., 1210 Marilla St. $100,000.

Okla., Hobert — Plant — Inland Utilities Co., plans new electric light plant, system and oil engine. $100,000. J. E. Wright, Hobert, engr.

Calif., Bakersfield — Refinery — Richfield Oil Co., plans rebuilding refinery, recently destroyed by fire. $200,000 or more.

Calif., Long Beach—Mill—Pacific Coast Steel Co., Rialto Bldg., San Francisco, making plans first unit of plant, incl. blast furnace and 4 by-products coke ovens, here. Ultimate cost $7,000,000. Private plans.

Calif., Los Angeles—Plant—Times-Mirror Printing & Binding Co., 118 South Bway., plans 3 story, 75 x 75 ft., steel and brick printing plant addition, South Spring St.

Calif., Oakland—Factory—Knapp Metal Barrell Co. of Pacific Coast, Balboa Bldg., San Francisco, plans factory, Parr Terminal, here.

Calif., Pasadena—Plant—Star-News Publishing Co., 94 North Raymond Ave., plans fireproof. $100,000 or more.

Industrial Works (Continued)

Calif., Pleasanton—Factory—Griffin Envelope Co. of California, 25 Fremont St., San Francisco, plans factory, here. To exceed $40,000. Engineer and architect not selected.

Calif., Upland—Plant—J. J. Ford, Claremont, plans rock crushing plant, here. $175,000, incl. equipment.

Ont., Deseronto—Factory—E. B. Eddy Co. Ltd., Hull, Que., plans brick and concrete, here. $250,000.

Ont., Sarnia — Factory — Doherty Stove Co., Sarnia, plans 150 x 400 ft. factory. $150,000.

Ont., Toronto—Factory—Canadian Natl. Carbon Co., Hillcrest Park, plans 3 story and basement, rein.-con., brick and steel factory addition, plain foundation. $150,000. Engineer and architect not selected.

B. C., Burnaby — Sub-Station — British Columbia Electric Ry. Co., 425 Carroll St., Vancouver, having plans prepared addition to Horne Payne substation here. $250,000.

BIDS DESIRED

Mass., Boston—Factory and Boiler House—J. C. Pushee & Sons, Randolph St., taking bids, 5 story and basement 65 x 133 ft. factory and 30 x 50 ft. boiler house, rein.-con., Randolph St. Monks & Johnson, 99 Chauncy St., archts. $200,000.

Pa., Pittsburgh—Power House—D. L. Clark Co. will build 2 story, brick and concrete, Merchant and Martindale Sts., by separate contracts. P. Dietz, Lyceum Bldg., archt.

O., Columbus—Plant—Lockwood, Greene & Co., archts. and engrs., Hanna Bldg., Cleveland, taking bids 3 story, 100 x 240 ft. manufacturing building, rein.-con., also 50 x 360 ft. forge shop, 50 x 167 ft. storage, and 50 x 117 ft. hot bolt shop, all steel, here, for Columbus Bolt Wks., Water and Chestnut Sts. Noted May 15.

Mich., Iron Mountain—Mill—Ford Motor Co., Highland Park (Detroit, P. O.) taking bids 1 story, 79 x 260 ft., brick and steel, plain foundation, here. A. Kahn, Marquette Bldg., Detroit, archt.

Calif., Los Angeles—Bakery—C. C. Ruppenthal, archt., 2075 West Washington Blvd., taking bids, 3 story and basement, 150 x 200 ft., brick and concrete, Mignonette St., for Davis Standard Baking Co., 124 North Beaudry St. $100,000.

CONTRACTS AWARDED

Mass., Boston — Factory — Union Realty Co., c/o H. F. Livermore, 100 Cummington St., 2 story and basement, 75 x 240 ft., rein.-con. and brick, Linden St., Ward 25, Allston Dist., to Clark & Lee Co., 77 Summer St., $100,000. Noted May 29.

Mass., Boston—Plant—Green Shoe Mfg. Co., 75 Northampton St., 5 story and basement, 42 x 170 ft., brick and timber, Harrison Ave., to Canter Constr. Co., 6 Beacon St. Archts. est. $100,000. Noted May 15.

Mass., West Lynn—Plant—General Electric Co., 1 story, 80 x 120 ft., concrete and steel maintenance plant, to M. C. Tuttle Co., 862 Park Sq. Bldg., Boston. Archt. est. over $50,000.

N. J., Camden—Factory—Campbell Soup Co., 32 North Front St., 2 story, 20 x 140 ft., rein.-con. and brick addition, plain foundation, Arch St. near 2nd St., to W. Steele & Sons Co., 219 North Broad St., Phila., $50,000. Noted Jan. 17.

N. J., Morris Plains—Power Plant—A. B. Mills, state archt., State Office Bldg., Trenton, power plant, conveyor, etc., for State Hospital for Insane, here, to G. K. Kemp, Rutherford, $199,731.

Pa., Meadville — Factory — Hookless Fastener Co., general contract 5 story, 70 x 70 ft., brick on hollow tile, to E. E. Austin & Son, Commerce Bldg., Erie. Archts. est. $60,000.

Pa., Phila.—Plant—General Electric Co., Witherspoon Bldg., 6 story and basement, 105 x 604 ft., rein.-con., plain foundation, Elmwood Ave. between 68th and 70th Sts., to Turner Constr. Co., 1713 Sansom St. Archts. est. $1,000,000.

Pa., Phila.—Factory—Heintz Mfg. Co., Front and Olney Sts., 1 story, 50 x 70 ft. corrugated iron and steel addition, to Robinson Iron & Steel Co., Parker and Ambria Sts., Manayunk, (Phila., P. O.)

Pa., Phila.—Plant—O'Brien Machine Co., E and Tioga Sts., will build 1 story, 61 x 155 ft., steel addition, by day labor. $55,000. F. H. Buchanon, E and Tioga Sts., engr.

Pa., Phila.—Manufacturing—C. P. Codivane Co., Kensington and Butler Sts., 2 and 3 story, 79 x 155 ft. and 42 x 155 ft., brick and steel addition, plain foundation, to W. Steele & Sons, 219 North Broad St. Engrs. est. $60,000.

Va., Richmond — Factory — Wortendyke Mfg. Co., Foot 13th St., 4 story, rein.-con. and steel addition, 68,000 sq.ft. floor space, to Harrison Constr. Co., Virginia Railway & Power Co. Bldg. Archts. est. $200,000.

Tenn., Nashville — Plant — Methodist Episcopal Publishing Co., 810 Broad St., remodeling and constructing 3 story, brick and concrete addition, 9th and Broad Sts., to H. P. Jacobs & Co., Independence Life Bldg., $40,000.

Ky., Louisville—Foundry—Standard Sanitary Mfg. Co., 6th and A Sts., 1 story, 140 x 180 ft., to L. W. Hancock Constr. Co., Louisville Trust Bldg., about $90,000. Noted May 22.

Ill., Galesburg — Substation — See "Unclassified" under Illinois.

Wis., Evansville—Mill—Evansville Grain & Feed Co., will rebuild 2 story, 50 x 75 ft., brick and concrete, plain foundation, recently destroyed by fire, by day labor. Private plans. Noted Jan. 31.

Wis., Marshfield—Cold Storage Plant—Brookshire Cheese Co., Plymouth, 1 story and basement 50 x 100 ft., concrete and brick, plain foundation, here, to Krasin Bros., Central Ave. Archts. est. $50,000.

Wis., Oconto—Mill, etc.—Holt Hardwood Co., will build 1 story, 72 x 302 ft. mill, dry kilns and 100 x 100 ft. shed, brick and timber, plain foundation, by day labor. To exceed $40,000. Private plans. Noted May 15.

Wis., West Bend—Factory—Amity Leather Products Co. 2 story, 50 x 90 ft., rein.-con., brick and steel, plain foundation, to The Hutter Constr. Co., Western Ave., Fond du Lac. Engineers est. $45,000. Noted May 8.

Tex., Dallas—Factory—Ford Motor Co., Highland Park, Detroit, Mich., 1 story, 301 x 840 ft. assembly plant, 63 x 114 ft. oil house, 63 x 69 ft. power plant, concrete, brick and steel, to Inge Constr. Co., Swiss and Hawkins Sts., approximately $1,000,000. Noted Apr. 10.

Tex., Dallas — Factory — Sanger Bros., Main & Lamar Sts., 4 story and basement, concrete and brick, Jackson St., to Trinity Constr. Co., Southwestern Life Bldg., $110,000.

Ore., Portland—Repair Shop—See "Buildings."

Calif., Emeryville—Factory—Letts Oliver Investment Co., 1 story, brick, Park Ave., to N. J. Christensen, 505 17th St., Oakland, $42,000. Western Electric Co., 680 Folsom St., San Francisco, lessee.

Calif., Los Angeles—Service Plant—Albertson Motor Co., 1540 South Figueroa St., 1 story, 100 x 125 ft., brick, Pasadena Ave. and Ave. 50, to Macdonald & Driver, Douglas Bldg.

Calif., Oakland—Factory—Illinois Wire & Cable Co., Sycamore, Ill., first unit, incl. 6 concrete and brick factory buildings, 80th Ave., here, to Davison & Nicolson, 31 South Sutter St., Stockton, $40,600. Noted Apr. 10.

Calif., Pomona—Laundry—Consolidated Laudries, Inc., 600 Merritt Bldg., Los Angeles, 1 story and part basement, 100 x 115 ft., brick, Monterey and Eleanor Sts., here, to E. Cerciat, 316 South New Hampshire St., $45,000. Noted Jan. 17.

Calif., Sacramento—Plant—J. P. Hynes Packing Co., 507 F St., packing plant, to E. D. Brier, 813 J St., approximately $42,000.

Ont., Island Falls via Cochrane—Power Plant, etc.—Hollinger Consolidated Gold Mines Ltd., Timmins, transferred contract for 110 x 180 ft., concrete power plant, 175 ft. high, concrete dams, sluices, sluice gates, tailrace excav., etc., from W. Arrol Co., Ltd., St. Catharines, to Fraser, Brace & Co., 83 Craig St., Montreal, Que. Engrs. est. $3,000,000.

Buildings

PROPOSED WORK

Mass., Boston — Hospital — City plans hospital for consumptives, Harrison Ave. and Concord St. $225,000. French & Hubbard, 210 South St., archts. and engrs.

Mass., Boston—Hotel—I. Shapira, 60 State St., having plans prepared by G. N. Jacobs, 4 Park St., 15 story and basement, 65 x 130 ft., rein.-con., brick and steel, Clarendon and Stanhope Sts. To exceed $1,000,000.

Mass., Boston—Hotel—Statler Hotel Co., 7th Ave., and 33rd St., New York City, rejected bids, 12 story, brick, stone and steel, Arlington St., here. $4,000,000. G. B. Post & Sons, engrs., 101 Park Ave., New York City. Project postponed until fall. Noted Apr. 3.

Mass., Brighton (Boston P. O.)—Apartment—York Apartment, Inc., c/o W. L. Minor, archt., 60 Pemberton Sq., Boston, having plans prepared, (1st of 8 units), 3 story, 53 x 90 ft., brick and stone, Allston St., here. $350,000.

Mass., Methuen (Lawrence P. O.)—School—School Comn. plans Central Grammar School, rein.-con., brick and stone. $225,000. Ashton, Huntress and Alter, 477 Essex St., Lawrence.

Mass., Somerville (branch of Boston)—Memorial—City having preliminary plans prepared by Ritchie, Parsons and Taylor, 15 Ashburton Pl., Boston, 2 and 3 story, 54 x 108 ft., brick and stone, Highland Ave. to adjoin City Hall. $200,000. J. M. Webster, Mayor.

Mass., Waltham—City Hall—Having preliminary plans prepared by Killam, Hopkins & Greeley, 9 Park St., Boston, rein.-con. and brick, Common St. About $200,000. H. T. Beal, mayor.

Mass., West Springfield (Springfield P. O.)—School—Town taking sketches for school 16 rooms each 24 x 30 ft. with enclosed wardrobes and assembly space in basement. $150,000.

Conn., Bridgeport—Store—D. M. Read Co., 1102 Main St., having preliminary plans prepared by Monks & Johnson, archts., 99 Chauncy St., Boston, Mass., and J. W. Northrop, associated archt., Court Exchange Bldg., 6 story and basement, rein.-con. and steel, Broad and John Sts. $1,000,000. Noted Oct. 4, 1923.

Conn., Middletown—School—Middletown Trade School, having plans prepared by R. B. Sellew, Central Natl. Bank Bldg., 2 story, 80 x 104 ft., brick and stone, Church St., $170,000 to $200,000. E. B. Sellew, supt.

N. Y., Akron—High School—Voted $150,000 bonds for high school.

N. Y., Brooklyn—Theatre and Stores—Henrick Realty Co., c/o H. J. Nurick, archt. and engr., 44 Court St., having plans prepared 2 story, brick, steel and stone, plain foundation, East 34th St. and Flatbush Ave. $500,000.

N. Y., Johnson City — Lodge — Johnson City Lodge 970 F. & A. M., plans 3 story and basement, Main St. $150,000. C. Watson, chn. building com.

N. Y., Mt. Kisco—Plans 1¾ mi. rein.-con. road, curbs and gutters, etc. $121,000. Westchester Co. to pay one half the cost.

N. Y., New York—Apartment—I. Crausman, archt. and engr., 370 East 149th St., preparing plans 6 story, brick, steel and stone, plain foundation, Bedford Park Blvd. $225,000. Owner's name withheld.

N. Y., New York — Apartment — One Hundred Eleven West 16th St. Corp., J. I. Walsh, pres., c/o Gronenberg & Leurchtag, archts. and engrs., 450 4th Ave., soon takes bids 6 story, brick, steel and stone, plain foundation, 107 West 16th St. $200,000.

N. Y., New York—Apartment—Springsteen & Goldhammer, archts. and engrs., 32 Union Sq., preparing plans 5 story, 80 x 100 ft. brick, steel and stone, plain foundation, Seaman Ave. $175,000. Owners name withheld.

N. Y., New York — Clubhouse — Amer. Womens Assn., Inc., 220 Madison Ave., having plans prepared by Benjamin W. Morris, archt. and engr., 101 Park Ave., 18 story, 200 x 200 ft., brick and stone, plain foundation, West 23rd St. $4,000,000.

N. Y., New York—Hospital—Bronx Hospitl, 169th St. and Fulton Ave., having plans prepared by L. A. Abramson, engr. and archt., 46 East 46th St., 5 story, brick, steel and stone addition, plain foundation. $750,000.

N. Y., New York—Office—Brown Pl. Realty Co., c/o C. B. Meyer, archt. and engrs., 36 Union Sq., soon takes bids 3 story, brick, steel and stone, plain foundation, Brown Pl. and 132nd St. $150,000.

N. Y., New York — Office — John David, 33rd St., and Bway., plans 20 story, brick, steel and stone, plain foundation, Bway. $1,500,000. Starrett & Van Vleck, 8 West 40th St., archts. and engrs.

N. Y., New York—Office—Subway Central Building Corp., J. E. Harrington, pres., c/o H. I. Cobb, archt. and engr., 1465 Bway., having plans prepared 22 story, brick, steel and stone, plain foundation, 42nd St. between Bway and 7th Ave. $3,000,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., having plans prepared by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, P. S. 65, 5 story, brick, steel and stone, plain foundation, Johnson Ave.

N. Y., Syracuse—Office—Syndicate purchased site on Seneca and Salina Sts., and plans modern office. To exceed $250,000. Address J. B. Hine, pres. Onondaga Bank.

N. J., Hoboken—Theatre—Strand Theater, c/o C. N. Whintson & Bro., archts. and engrs., 2 Columbus Circle, New York

Buildings (Continued)

City, having plans prepared altering brick, steel and stone, plain foundation, here. $150,000.

N. J., Newark—Store—S. S. Kresge, 526 Fulton St., Brooklyn, soon takes bids 9 story, 160 x 165 ft., brick, steel and stone, plain foundation, Cedar and Halsey Sts., here. $5,000,000. Starrett & Van Vleck, 8 West 40th St., New York City, archts. and engrs.

N. J., Perth Amboy—Bank—First Natl. Bank, having preliminary plans prepared by Dennison & Hirons, 288 Lexington Ave., New York City, bank, Smith and Maple Sts. $400,000.

N. J., Princeton—Chemistry—Princeton University plans brick, steel and stone, plain foundation, on campus. $2,000,000. Private plans.

N. J., Moorestown—Community—Moorestown Community Assn., having plans prepared by Karcher & Smith, 34 South 17th St., Phila., Pa., 2 story and basement, 30 x 80 ft. and 30 x 60 ft., 16 East Main St. $200,000.

Pa., Etna—High School—School Dist., c/o G. A. Spear, having sketches made by P. C. Dowler, Magee Bldg., Pittsburgh, 2 story and basement, brick and hollow tile, Hickory St. Election June 15, $250,000 bonds for project.

Pa., New Kensington—High School—Bd. Educ., having plans prepared by C. J. Rieger & Co., Citizens Bank Bldg., Pittsburgh, 2 story and basement, brick on hollow tile addition, Ridge Ave. $160,000.

Pa., Phila.—Stores—Middle City Realty Co., L. Cahan, pres., 1324 Walnut St., having revised plans prepared by H. E. Kennedy, 1324 Walnut St., 2 story and basement, 85 x 118 ft., Broad and Locust Sts.

Pa., Woodville—Hospital—Bd. Dirs. of Poor, Alleghany Co. Court House, Pittsburgh, having plans prepared by F. M. Crooks, 541 3rd Ave., Pittsburgh, 2 and 3 story and basement, brick on hollow tile here. $850,000.

Pa., York—Hospital—York Hospital, c/o G. H. Whiteley, having plans prepared by E. Leber, Hay Bldg., hospital. $1,000,000.

D. C., Wash.—Bank and Office—Natl. Savings & Trust Co., 15th and New York Aves., having plans prepared by A. P. Clark, Jr., 816 14th St., bank and office building. $300,000.

W. Va., Martinsburg—Hotel—Martinsburg Community Hotel Co. engaged J. G. White Eng. Corp., 43 Exchange Place, New York City, to prepare plans for 104 room hotel, Martin and Queen Sts. Approximately $300,000.

N. C., Durham—Theatre—City had plans prepared by Milburn-Heister Co., archts., Durham, theatre in connection with new municipal building. $250,000. R. A. Rigsbee, city mgr.

N. C., Gastonia—Theatre—J. A. Estridge, J. E. Simpson and J. White Ware, all Gastonia, plan 2 story and basement, 50 x 140 ft. $150,000. Engineer and architect not announced.

Ala., Birmingham—Hotel—H. G. Woodward, 1306 South 19th St., plans 12 story, 100 x 125 ft., 20th St. $2,000,000. Engineer and architect not selected.

Tenn., Nashville—Apartment and Theatre—Amer. Building Co. having plans prepared by Tesdale & Stone, Independent Life Bldg., 100 x 180 ft., rein.-con., brick and stone, 25th St. and West End Ave. $1,500,000.

O., Canton—Hospital—City having plans plans prepared by Crow, Lewis & Wick, archts., 200 5th Ave., New York City, and C. Firestone, associated archts., Renkert Bldg., hospital unit, Clarendon Ave., S. W. $375,000. Noted Nov. 1.

O., Cincinnati—Apartment—Woodburn Impvt. Co., having plans prepared by H. Hake, Telephone Bldg., 4 story and basement, terra cotta, rein.-con. and brick, plain foundation, Woodburn Ave. $250,000.

O., Cleveland—Apartment—M. Margolin, 548 East 118th St., had plans prepared by M. Weis, 617 Union Bldg., 3 story and basement, 30 x 117 ft., brick, 10202 Wilbur Ave. $150,000.

O., Cleveland—Commercial and Office—Union Mortgage Co., c/o E. C. Daonst, secy., Natl. City Bldg., having preliminary plans prepared by G. M. Hopkinson, 523 Euclid Ave., 2 story, 96 x 369 ft., concrete, brick and steel top addition, East 6th St. and St. Clair Ave. $350,000.

O., Cleveland Heights (Warrensville P. O.)—Apartments—L. Mason and M. Margolin, 548 East 118th St., Cleveland, had plans prepared by A. W. Harris, Discount Bldg., Cleveland, two 3 story and basement, 38 x 162 ft., brick and timber, Hampton Rd., here. $350,000.

O., Grandview (Columbus P. O.)—Church, etc.—Bd. Trustees Grandview. Upper Arlington and Marble Cliff, plans 2 story and basement, rein.-con. and brick church and social center. $200,000. H. D. Smith, 70 East Town St., Columbus, chn. Miller & Reeves, 20 South 3rd St., Columbus, archct.

O., Sylvania—High School—Bd. Educ. having plans prepared by T. D. McLaughlin, 610 Savings Bldg., Lima, 2 story, brick and concrete. $200,000.

Ind., Anderson—Hospital—Hospital Bd. having plans prepared (1st unit), 2 story, brick wing, plain foundation, 8th St., $120,000. Total cost $250,000. E. F. Miller, Farmers Trust Bldg., archt.

Mich., Detroit—School—St. Cecilias Parish, P. J. Dwan, pastor, 6389 Webb Ave., had plans prepared by Van Leyen, Schilling, Keough & Reynolds, 3440 Cass Ave., 2 story and basement, 16 room, rein.-con., brick and steel, plain foundation, Livernois Ave. $200,000.

Mich., Wakefield—High School—Bd. Educ. plans 3 story, brick and tile, plain foundation. $200,000 to $300,000. V. Lepisto, secy. Engineer and architect not selected.

Wis., Janesville—Hotel—Rowe, Dillard & Rowe, archts., 127 North Dearborn St., Chicago, Ill., soon take bids 6 story and basement, brick and concrete, plain foundation, Milwaukee St., here, for E. W. Sparling, c/o Colonial Club. $500,000. Noted Mar. 20.

Wis., Madison—Hospital—Methodist Hospital Assn., Pioneer Bldg., having plans prepared by F. H. Ellerbe, Endicott Bldg., St. Paul, Minn., 3 story and basement, 60 x 100 ft., rein.-con., brick and steel, plain foundation. $150,000.

Wis., Milwaukee—Apartment—Deuster, Schwartz & Keuper, 530 Grand Ave., plans 3 story and basement, brick and tile, plain foundation, Grand Ave. and 17th St. $150.-000. Engineer and architect not selected.

Mo., St. Joseph—Hotel Apartment—C. G. Geiger, having plans prepared, 10 story and basement, 48 x 165 ft. main building and 46 x 138 ft. wings, rein.-con., brick, stone and steel, 7th and Robidoux Sts. $800,000. Private plans.

Mo., St. Louis—Church, School, etc.—St. Cecelias Parish, c/o B. J. Benton, pastor, 5404 Louisiana Ave., having preliminary sketches made by H. P. Hess, 1237 North Taylor Ave., 2 story and basement, rein.-con., brick, stone and terra cotta, Louisiana Ave.

Mo., St. Louis—School—Bd. Educ., 911 Locust St., soon takes bids 2 story, rein.-con., brick and stone. $200,000. R. M. Milligan, c/o Bd. Educ., engr. and archt.

Mo., Webster Groves—High School—Bd. Educ., c/o E. H. Tenny, pres., soon takes bids 2 story and basement, 175 x 300 ft., rein.-con., brick and stone. $150,000. W. B. Ittner, 911 Locust St., St. Louis, archt. Noted May 29.

Tex., Austin—Dormitory—University of Texas having plans prepared by H. M. Greene & Co., North Texeas Bldg., Dallas, 3 story and basement, brick and concrete, 26th St. and Whitis Ave. $250,000.

Tex., Brownsville—Hotel—Stock Co. plans 8 story, rein.-con. brick and stone, plain foundation, $250,000. S. C. Tucker, Brownsville, chn. Finance Com. Engineer and architect will be selected soon.

Tex., Ft. Worth—Garage and Stores—Fain Bender Motor Co., 907 Commerce St., plans 2 story, 100 x 100 ft., concrete, brick and tile, 3rd and Commerce Sts. $150,000.

Tex., San Antonio—High School—Having plans prepared by W. E. Simpson Co., engrs., N. B. C. Bldg., and Phelps & Dewees, archts., Gunter Bldg., 1 or 2 story, rein.-con. brick and stone, plain foundation, Shook Ave. between Yorkshire and Berkshire Aves. $165,000.

Colo., Ft. Collins—Gymnasium—Colorado State Agricultural College had plans prepared by E. Groves, Foster Bldg., Denver, and takes bids in about 2 months, 1 story, 336 x 400 ft., rein.-con., brick and steel, plain foundation. $280,000.

Calif., Berkeley—Schools—Plans election to vote on $2,000,000 bonds for schools.

Calif., Berkeley—Theatre—A. E. Atkins, c/o W. N. Ratcliff, archt., 1st Natl. Bank Bldg., having sketches made Class A, fireproof, Bancroft Way. $300,000.

Calif., Downey—Theatre and Store—J. F. Baker plans fireproof, on 106 x 140 ft. site, Crawford Ave. $150,000.

Calif., Long Beach—Bank and Office—Bank of Italy, Powell and Market Sts., San Francisco, having plans prepared by H. A. Minton, Bank of Italy Bldg., San Francisco, rein.-con., here. $150,000. Noted Jan. 3.

Calif., Long Beach—Church, etc.—Grace Methodist Church plans group, incl. church, Sunday school and recreation quarters, etc., approximately $250,000.

Calif., Long Beach—Hotel and Store—Campbell & Byrd Investment Co., c/o Siebert & Hedden, engrs. and archts., 548 Amer. Ave., had plans prepared 5 story and basement, 60 x 75 ft., steel and brick.

Calif., Los Angeles—Club—Y. M. C. A., 106 East Bway., plans fireproof. $250,000 to $275,000.

Calif., Los Angeles—Hotel—Central & Pacific Impvt. Co., 104 East Washington St., having plans prepared by Milwaukee Bldg. Co., Wright-Callendar Bldg., approximately 12 story, to contain from 650 to 700 rooms, Class A, fireproof, Bway.

Calif., Los Angeles—Store and Office—Pan-Amer. Petroleum Co., Security Bldg., having plans prepared by Milwaukee Building Co., Wright-Callendar Bldg., 5 to 8 story (ultimately 12 story), fireproof Class A, 10th St. To exceed $150,000.

Calif., Los Angeles—Theatre, Office and Store—West Coast Theatres, Inc., Knickerbocker Bldg., had plans prepared by L. A. Smith, 301 South Western Ave., 2 story, 100 x 150 ft., concrete and brick, Ave. 56 and Pasadena Ave. $155,000. Noted Mar. 20.

Calif., Los Angeles—Warehouse—E. T. Johnson, Pacific Mutual Bldg., having plans prepared by Stanton, Reed & Hibbard, Metropolitan Bldg., 6 story and basement, 150 x 200 ft., rein.-con., 5th St.

Calif., Napa—Hotel—J. Cochrane, pres. Chamber of Commerce, (representing owners), plans 4 story, probably rein.-con., 2nd and Coombs Sts. $250,000 or more. Engineer and architect not selected.

Calif., Oakland—Hotel—Coit Investment Co., c/o L. L. Ford, archt., 306 14th St., having plans prepared, 5 story and basement, rein.-con. and steel, to contain 200 rooms, Harrison and 15th Sts. $1,250,000.

Calif., Quincy—Hotel—C. O. Clausen, archt., Hearst Bldg., San Francisco, making plans, 2 story, brick, here. $150,000. Owner's name withheld.

Calif., Santa Ana—Hospital—Santa Ana Valley Hospital Assn., J. M. Burlew, Santa Ana, interested, soon takes bids fireproof, Grand Ave. $175,000. F. Landsdawn, Santa Ana, archt. Noted June 1, 1923.

Calif., San Francisco—Apartment—C. A. Munroe, c/o A. G. Headman, archt., Call Bldg., had plans prepared 6 story and basement, rein.-con., Geary St. near Hyde St. $150,000.

Calif., South Pasadena (Branch of Pasadena)—High School—South Pasadena High School Dist. voted $185,000 bonds for high school.

Calif., Yreka—Hotel—Weaver Bros., Umpqua Hotel, Roseburg, Ore., plans fireproof, Main St., here. $150,000 to $200,000.

Ont., Toronto—Offices—Federal Building Corp., Federal Bldg., plans 10 story and besement, rein.-con., brick and steel, plain foundation, vicinity of Richmond and Bay Sts. $500.000. Private plans.

BIDS DESIRED

Mass., Brighton (Boston P. O.)—Hospital—Florence Crittendon League, 506 Tremont Temple, Boston, taking bids, 3 story and basement, 32 x 106 ft., brick and stone, Oak Sq., Perthshire Rd. and Dunboy St., here. $250,000. H. F. Kellog, 110 Summer St., Boston, archt.

Mass., Pittsfield—Church—Trinity Methodist Church taking bids, 2 story, 40 x 85 ft., rein.-con., brick and stone, Dalton St. and Woodlawn Ave. Cost not to exceed $150,000. Woodbury & Stuart, 591 Boylston St., Boston, archts.

Mass., Somerville (branch of Boston)—Court House—June 10, by A. L. Cutting, comr. Middlesex Co., Court House, East Cambridge, 1 and 2 story and basement, 48 x 70 ft. with 35 x 45 ft. ell, brick and stone, Walnut St., here. $150,000. C. R. Greco, 11 Beacon St., Boston, archt.

Conn., Norwalk—High School—School Comn., taking bids, Junior High School, 2 story and basement, 94 x 121 ft., pressed brick. $200,000. J. Jackson, 185 Church St., New Haven, archt.

N. Y., New York—School—June 20, by Bd. Educ. at office W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, general and tunnel construction for P. S. 173, Ft. Washington Ave. from W. 173rd to 174th Sts., Manhattan Boro, here.

N. J., Bridgeton—Hospital—June 10, by Stearns & Woodnutt, archt., St. Girard Bldg., Phila., Pa., 3 story and basement, 40 x 140 ft. brick and steel, plain foundation, Irving and Magnolia Sts., here, for Bridgeton Hospital Assn. $150,000. Noted May 1.

N. J., Delanco—School—June 23, by Beverly Twp. Bd. Educ., Town Hall, 3

Buildings (Continued)

story, 12 room, Walnut, Burlington and Chestnut Sts. $150,000. H. O. Ziegler, 17 Washington St., Riverside, archt.

N. J., Trenton—High School—June 20, by Bd. Educ., Administration Bldg., 2 story, Junior High School. $1,000,000. W. A. Klemann, 1st Natl. Bank Bldg., archt. E. Sibley, Palisade, engr.

Pa., Phila.—Hospital—June 12, by N. Hulme, archt., 1524 Chestnut St., 3 story and basement, 37 x 108 ft. and 22 x 32 ft., rein.-con. and brick, plain foundation, for Womens Homeopathic Hospital, 20th and Susquehanna Sts. $150,000.

Pa., Pittsburgh—Store and Apartment—Builders Service Co., Magee Bldg., will build 7 story and basement, 46 x 58 ft., brick on hollow tile, 5th Ave. and Chesterfield St., by separate contracts. $200,000. Noted May 22.

Pa., Wilson—High School—June 11, by School Bd., 2 story and basement, 136 x 202 ft., brick, plain foundation. $300,000. Rasmussan & Wayland, 252 West 46th St., New York City, archts.

Md., Baltimore—Warehouse—June 6, by Canton Co., South and Water Sts., 3 story, 80 x 200 ft., concrete and steel, plain foundation, 12th Ave. $150,000. Private plans.

Md., Cumberland—June 10, by Y.M.C.A., 3 story, 104 x 191 ft., concrete and brick, plain foundation. $225,000. Shattuck & Layer, 19 South La Salle St., Chicago, archts. Noted Feb. 28.

Md., Towson—Home—June 9, by O. E. Adams, archt., Equitable Bldg., Baltimore, 2 story and attic, 45 x 122 ft., brick, plain foundation, Chesapeake Ave., here, for Kelso Home, Charles St. and Mt. Vernon Pl. $150,000. Noted Mar. 13.

O., Kent—Physical Education—June 28, by W. Cluff, secy. Bd. Educ., 3 story and basement, 144 x 165 ft., rein.-con. and brick, $160,000. Roman & Ingleson, 1614 North High St., Columbus, archts. Noted May 15.

O., Portsmouth—Bank and Office—June 9, by Carmichael & Millspaugh, archts., 67 East Long St., Columbus, 8 story and basement, 30 x 175 ft., brick and concrete addition, here, for First Natl. Bank. $200,000. Noted Mar. 27.

Mich., Detroit — Garage — June 14, by Brown & Derrick, archts., 120 Madison Ave., 5 story, 125 x 145 ft., rein.-con., plain foundation, Beaubien and Congress Sts., for Detroit Garges, Inc., 320 Ford Bldg. $250,000.

Mich., Flint—Apartment—June 13, by Stahl, Kinsey & Hartwick, 628 McKerchey Bldg., Detroit, 5 story and basement, 124 x 140 ft., brick and steel, plain foundation, for Leinbach-Humphrey Co. $350.000.

Ill., Chicago—Apartment—S. H. Minchin, archt., 53 West Jackson St., taking bids 3 story and basement, 50 x 195 ft., fireproof, North Clark and Barry Sts. $225,000. Owner's name withheld.

Ill., Chicago—School—L. Streiche, archt., 660 Rush St., taking bids 2 story, 60 x 125 ft., fireproof, 43rd and Richmond Sts., for Five Holy Masters Catholic Church, 4327 South Richmond St. $150,000.

Ill., Decatur — Church — First Baptist Church, 124 East Prairie St., taking bids 2 story and basement, 90 x 125 ft., brick, stone and concrete, Prairie St. $150,000. S. A. Clausen, 701 Milliken Bldg., archt. Noted Feb. 7.

Ill., Evanston—Store and Apartment—R. F. France, archt., 155 North Clark St., Chicago, taking bids 3 story, 76 x 190 ft., fireproof, Chicago and Lee Sts., here, for E. Norman, c/o architect. $150,000.

Ill., Oak Park—Apartment—S. H. Minchin, archt., 53 West Jackson St., Chicago, taking bids 3 story and basement, 82 x 150 ft., fireproof, 142-144 Harrison St., here, for H. Lahnde, c/o architect. $150,000.

Wis., Kenosha—Clubhouse—June 9, by F. O. E. No. 1055, c/o C. Ryan, Public Service Bldg., 2 story and basement, 72 x 100 ft., concrete and brick addition, plain foundation. $150,000. C. O. Augustine, 1063 Howland Ave., archt. Noted May 22.

Wis., Kenosha—School—June 23 (extended date), by Bd. Educ., senior High School, 3 story and basement, 250 x 250 ft. brick, concrete and tile, plain foundation. $1,000,000. J. D. Chubb, 109 North Dearborn St., Chicago, Ill., archt. Noted May 29.

Minn., Hibbing—Recreation—July 15, by J. Gorman, pres. Village Council, 2 story, 200 x 280 ft., rein.-con., brick and steel memorial recreation building. concrete pile foundation. $400,000. Holstead & Sullivan, 407 Palladio Bldg., Duluth, archts. and engrs.

Minn., Minneapolis—School—June 9, by Bd. Educ., 3 story and basement addition, 5th Ave. N. and 4th St., $200,000; 2 story and basement, 41st St. and Chowne Ave., $150,000, both rein.-con., brick and tile. Bureau of Buildings, Bd. Educ., 245 9th Ave. N., archts. Noted Feb. 28.

Neb., Omaha—Hospital—June 15, by St. Catharines Roman Catholic Hospital, 4 story and basement, 42 x 187 ft. addition, 811 Forrest Ave. $200,000. L. A. Daly, 622 Peters Trust Bldg., archt. Noted May 15.

Tex., Dallas—Apartment—C. A. Davis, 4605 Ash Lane, taking bids 2 story, 86 x 92 ft., brick and tile, North Lancaster St. $150,000. C. A. Westbrook, 407 North Bishop St., archts.

Tex., Dallas — Office — J. A. Pitzinger, archt., Southwestern Life Bldg., taking bids 3 story, 50 x 100 ft., brick and concrete, Young St., for C. I. Connor, Republic Natl. Bank. $150,000.

Tex., Plainview—Church—First Baptist Church taking bids, brick and concrete church. $150,000. L. A. Kerr, Amarillo, archt.

Ore., Portland—Bank—A. E. Doyle, archt., Worcester Bldg., taking bids 3 story, 50 x 100 ft., rein.-con., marble, bronze and terra cotta, plain foundation, 6th and Stark Sts., for Citizens State Bank. $300,000.

Calif., Los Angeles—Club—Schultze & Weaver, archts., Pacific Mutual Bldg., taking bids 12 story and basement, approximately 100 x 150 ft., rein.-con. and brick, 6th and Figueroa Sts., for Jonathan Club, c/o architects. Noted Jan. 24.

Calif., Los Angeles—Warehouse—W. J. Saunders, archt., Laughlin Bldg., taking bids 3 story (ultimately 6 story) and basement, approximately 120 x 130 ft., rein.-con., 3rd and Alameda Sts., for Neptune Meter Co., 701 East 3rd St. Noted May 15.

Calif., Palo Alto—School—Trustees Palo Alto Grammer School Dist., taking bids 2 story, to contain 13 classrooms, rein.-con. $150,000. B. M. Clarke, 600 Embarcadero Rd., Palo Alto, archt., and Allison & Allison, Hibernian Bldg., Los Angeles, associated archts.

Calif., Woodland—High School—June 21, by Trustees Woodland High School Dist., 2 story, rein.-con. $250,000 bonds voted. W. H. Weeks, 369 Pine St., San Francisco, archt. Noted May 8.

BIDS RECEIVED

Md., Baltimore—High School—Mayor and City Council, City Hall, Gwynns Falls Junior High School, 3 story, rein.-con., and brick, plain foundation, Hilton St., from J. H. Miller, Inc., Eutaw and Franklin Sts., $917.000. Noted May 15.

D. C., Wash.—School—Dist. Comrs., constructing 8 room addition to Bernard J. Janney School No. 187, from G. E. Wyne, Home Life Bldg., (1) $172,300, Alt. 1 deduct $200,, Alt. 4 add $2,700, Alt. 7 deduct $2,800. Noted May 22.

Calif., Long Beach—School—Long Beach City School Dist., general contract, 16 classroom, fireproof Whittier school unit, form W. G. Reed, Pacific Southwest Bldg., $119,400. Noted May 7.

Calif., Marysville — Hotel — Marysville Hotel Co., 5 story, rein.-con., 5th and E Sts., from I. C. Evans, 802 E St., $309,480. Noted May 1.

CONTRACTS AWARDED

Mass., Arlington—School—St. Agnes Roman Catholic Church, Bedford and Chestnut Sts., 2 story and basement, 143 x 192 ft., rein.-con., and brick, to J. F. Griffin Co., 15 Exchange St., Boston. Archts. est. $175,000.

Mass., Boston—Club—Harvard Club of Boston, 374 Commonwealth Ave., 4 story and basement, 50 x 90 ft., rein.-con., and brick addition to Squash Courts Clubhouse, 374 Commonwealth Ave., to W. A. Wentworth Co., 107 Pacific St., Cambridge. Archts. est. $200,000.

Mass., Boston — School — School House Dept., City Hall, rein.-con., brick and stone addition to Julia Ward Howe School, to C. & R. Constr. Co., 3 Tremont Row, $136,004. Noted Feb. 1, 1923.

Mass., Boston — School — School House Dept., City Hall, Charles Sumner Dist. School, to A. Piotti Co., 708 Dudley St., Dorchester, $233,980.

Mass., Charlestown—Garage—Merchants Terminal Co., Medford St., 1 story, 107 x 155 ft., Medford St., to J. Gascoigne & Co., 43 Tremont St., Boston, $150,000.

Mass., New Bedford—Bank and Office—First Natl. Bank, 6 story, 58 x 125 ft., rein.-con., brick and stone, Union and Pleasant Sts., to W. Coleson Co., 1 Hayward St., Cambridge. Archts. est. $500,000.

Mass., South Boston (Boston P. O.)—Warehouse—Standard Sanitary Mfg. Co., Ressemer Bldg., Pittsburgh, Pa., 6 story, 80 x 200 ft., brick, 365 C St., here, to Pultz Inc., 173 Milk St., Boston. Archts. est. $160,000. Noted May 15 under "Industrial Works."

Mass., Springfield—Apartment—L. & M. Kosofsky, 318 Main St., 4 story and basement, 172 x 182 ft., brick, to Meyer Constr. Co., 318 Main St., $400,000.

Mass., Wakefield — Apartment — Crystal Apartments, c/o Hutchins & French, archts., 11 Beacon S., Boston, 6 story, 80 x 120 ft., rein.-con., brick and stone, here, to Brennan & Henry Constr. Co., 77 Summer St., Boston. Archts. est. $150,000. Noted May 29.

Mass., West Springfield (Springfield P. O.) — Exhibition — Eastern States Exposition, Inc., 292 Washington St., Springfield, 1 story, 300 x 300 ft., brick and steel, here, to E. F. Carlson, 244 Main St., Springfield. $200,000.

R. I., Providence—Dormitory—La Salle Academy, 3 story, rein.-con., brick and steel, Smith S. and Academy Ave., to E. Turgeon, 86 Weybosset St. $400,000.

N. Y., Buffalo—Apartment—Uwing Corp., E. B. Dunigan, treas., 715 Main St., 10 story, rein.-con., brick and steel, Gates Circle, to H. L. Stevens Co., 30 North Michigan Ave., Chicago, Ill., $2,000,000.

N. Y., Brooklyn—Apartment—Lincoln Parkway Constr. Co., Brooklyn, c/o Shampan & Shampan, archts. and engrs., 189 Montague St., will build 6 story, 100 x 192 ft., brick and stone, plain foundation, Eastern Parkway, by day labor, $750,000.

N. Y., New York—College—College of St. Francis Xavier, 30 West 16th St., 3 story, 80 x 80 ft., brick and stone, 15th St. between 5th and 6th Aves., to W. L. Crow Constr. Co., 103 Park Ave., $200,000.

N. Y., New York—Garage—Five Hundred Seven West 166th St. Co., Inc., W. F. Cunningham, pres., 131 East 91st St., 5 story, brick, steel and stone, plain foundation, 503 West 166th St., to J. T. Brady Inc., 103 Park Ave. Archts. est. $175,000.

N. Y., New York—Market—E. J. O'Malley, comr. Pub. Market, Municipal Bldg., wholesale market and storage building, Exterior and East 152nd Sts., for Bronx Terminal Market, too Niewenhouse Co., Inc., 316 East 161st St., $2,841,986. Noted May 22.

N. Y., New York—Office—Frederick T. Ley & Co., 19 West 44th St., (owners and contractors), will build 20 story, 75 x 100 ft. brick, steel and stone, plain foundation, 30 East 40th St., by day labor. Ewing & Allen, 101 Park Ave., archts. and engrs.

N. Y., Ogdensburg—Bank—Bd. Directors Ogdensburg Bank, 42 x 100 ft., brick, 32 ft. high, Ford St., to E. K. Senno, Syracuse. Archts. est. $200,000. Noted Mar. 27.

Pa., Butler — Bank and Office — Butler Savings & Trust Co., 8 story, 60 x 120 ft., brick, steel and stone, to H. L. Weimer, Butler. Engrs. est. $350,000.

Pa., Mapletown—High School—Monongahela Twp. Bd. Educ., c/o L. M. Watson, Dunkard, general contract, 2 story and basement, to include auditorium and gymnasium, to J. Perrico, Greensburg. Archts. est. $150,000.

Pa., Mecersburg — Chapel — Mecersburg Academy, rein.-con. and brick chapel, to Jacobs & Young, Inc., 120 West 32nd St., New York City. Archts. est. $400,000.

Pa., Pittsburgh — Apartment — Milwood Realty Co., 233 Oliver Ave., general contract, 10 story and basement, 44 x 160 ft., Milwood St., to S. M. Siesel Co., 1st Natl. Bank. Archts. est. $500,000. Noted May 15.

Pa., Phila. — Office and Lodge — Great Council of Penna., 1523 Girard Ave., 3 story and basement, 40 x 150 ft., brick and steel, plain foundation, to F. G. Stewart, 1520 Locust St. Archts. est. $150,000.

Md., Baltimore—Exchange—Chesapeak & Potomac Telephone Co., 5 Light St., 4 story, 50 x 75 ft., brick and steel, plain foundation, 31st and Guilford Ave., to Frainie Bros. & Haigley, 19 West Franklin St., $150,000.

Md., Baltimore—Garage and Stable—Fairfield Farms Dairy, Inc., 539 North Exeter St., 3 story, 186 x 159 ft., rein.-con. and brick, Exeter and Front Sts., to C. L. Stockhausen Co., Gay and Water Sts., $165,000. Noted May 8.

Md., Baltimore—School—All Saints Catholic Church, c/o T. B. Kenny, pastor, 4408 Liberty Heights Ave., 2 story, 143 x 150 ft., brick, plain foundation, Liberty Heights and Clarendon Aves., to M. A. Long Co., 17 Guilford Ave., $150,000. Noted May 8.

Md., Baltimore—Store—Smith & May, archts., Calvert Bldg., 9 story and basement, 122 x 156 ft., brick and steel, plain foundation, Lexington and Howard Sts., to M. A. Long Co., N. Guilford Ave., for Bernheimer-Leader Stores, Lexington and Howard Sts. $1,000,000. Noted Apr. 10.

D. C., Wash.—Embassy—Italian Embassy, 1400 N. H. Ave., 3 story, brick and stone, plain foundation, to J. Stewart

Buildings (Continued)

& Co., 30 Church St., New York City. Archts. est. $500,000. Noted Jan. 31.

N. C., Canton — Mill — Champion Fibre Co., paper mill additions, to Aberthaw Constr. Co., 27 School St., Boston, Mass. Archts. est. $200,000.

Fla., Bellair—Hotel—F. Jonesburg, St. Petersburg, 150 room addition to Belleview Hotel, here, to F. J. Mason Constr. Co., St. Petersburg, cost plus. Noted May 8.

Tenn., Nashville — Demonstration — Peabody College for Teachers general contract 3 story, rein.-con., brick and stone addition, on campus, to Hageman-Harris & Co., Nashville, $150,000. Noted May 15.

O., Cleveland — Apartment — Ninetieth-Euclid Co., c/o W. S. Ferguson Co., archts., 1900 Euclid Ave., 4 story, 85 x 112 ft., brick, Euclid Ave. near East 90th St., to M. B. Parker Constr. Co., 1836 Euclid Ave. Archts. est. $250,000. Noted May 1.

O., Cleveland—Recreation—Calvary Evangelical Church, C. A. Hirschman, pastor, 2763 Woodhill Rd., 2 story and basement, 101 x 110 ft., brick, 9725 Shaker Blvd., to L. Dantel & Son, 5710 Hough Ave. Engrs. est. $150,000.

O., Columbus — Apartment — Broadwyn Apartment Co., 8 story and basement, 68 x 120 ft., and 1 story, 35 x 40 ft., concrete and brick, East Broad St., to Ferro Concrete Constr. Co., 3rd and Elm Sts., Cincinnati. Archts. est. $400,000. Noted Apr. 3.

O., Columbus—Office—Dispatch Printing Co., Gay and High Sts., 4 story and basement, 62 x 187 ft., rein.-con., brick, stone and steel, South 3rd St., general contract, to R. H. Evans Co., 8 East Long St., $238,000. Noted May 1.

O., East Youngstown—High School—Bd. Educ., general contract for East Youngstown High School, to Heller Bros. Co., Thurman St. and Rayen Ave., Youngstown, $269,132. Noted Feb. 29.

Mich., Northville — Dormitories — Bd. Supervs. Wayne Co., County Bldg., Detroit, (1st unit) sixteen 2 story, 47 x 86 ft., rein.-con., steel and brick, plain foundations, Northville-Plymouth Rd., to W. E. Wood Co., 1805 Ford Bldg., Detroit, $853,856.

Ill., Chicago — Apartment — Mansfield Building Corp., 6 North Clark St., 4 story, 100 x 123 ft., fireproof, 6428-36 Cottage Grove St., to Anderson & Nelson, 2432 Irving Park Blvd. Archts. est. $325,000.

Ill., Chicago — Apartment — E. Putishauser, c/o J. J. Jensen, archt., 4815 North Lawndale St., 1 story, 30 x 170 ft., fireproof, 613-15 West Madison St., to McHugh Constr. Co., 139 North Clark St. Archts. est. $150,000.

Ill., Chicago—Apartment—B. D. Ritholz, c/o Loewenberg & Loewenberg, archts., 111 West Monroe St., 3 story, 110 x 184 ft., fireproof, 520-28 Surf St., to E. Borg, 1330 Eddy St. Archts. est. $275,000.

Ill., Chicago — Apartment — H. Zizook, 6139 Eberhart Ave., 3 story, 100 x 177 ft., fireproof, 5124-32 Kimbark Ave., to Rune & Son, 6744 Ridgeland St. Archts. est. $200,000.

Ill., Chicago—School—Bd. Educ., 650 South Clark St., 3 story, 109 x 109 ft., fireproof, 2725-27 Shields Ave., to J. S. Connelly, 133 West Washington St. Archts. est. $200,000.

Ill., Fairmount — Clubhouse — See "Nnclassified."

Ill., Rockford—Bank and Office—Rockford Bank & Trust Co., general contract, 11 story and basement, 24 x 87 ft. side addition, and 4 story, 87 x 125 ft. top addition, Main St., to Security Building Co., Haskell Ave.

Wis., Sheboygan—Store and Office—H. C. Prange Co., 731 North 8th St., 2 story, 85 x 100 ft., rein.-con., brick and steel, 8th St., to L. F. Meier, 1202 North 16th St. Archts. est. $150,000. Noted Apr. 17.

Minn., Plainview—School—Bd. Educ., 2 story and basement, rein.-con., brick and tile, general contract to J. B. Nelson, Mankato, $115,847. Noted May 8.

Neb., Plattsmouth—Infirmary—Nebraska Masonic Home, c/o J. R. Webster, 1540 Natl. Bank Bldg., Omaha, general contract, 4 story and basement, 43 x 110 ft. brick and stone, to Wind & Hyde, 450 Brand Bldg., Omaha, $92,000. Noted May 15.

Mo., St. Louis—Art Gallery—Local Syndicate, c/o J. Darst Realty Co., Wainwright Bldg., 2 story and basement, rein.-con., brick, stone and terra cotta, to J. G. Hercules, Jr., 5751 Chamberlain Ave. Archts. est. $160,000.

Mo., St. Louis—Loft and Stores—Local Syndicate, c/o I. T. Cook & Co., Arcade Bldg., 4 story and basement, 109 x 120 ft., brick, concrete and steel, Pine and 22nd Sts., to G. Sokol, 7069 Pershing Ave. Archts. est. $250,000.

Ore., Portland—Warehouse, etc.—Meier & Frank, Meier & Frank Bldg., 4 story, 113 x 200 ft., warehouse, automobile terminal and repair shop, rein.-con., plain foundation, to Stebinger Bros., Worcester Bldg., $165,000.

Calif., Berkeley—Church—Bd. Missions of Methodist Episcopal Church, Lambuth Bldg., Nashville, Tenn., 3 story, Class A rein.-con., here, to Lawton & Vezey, 357 12th St., Oakland, approximately $200,000. Noted May 8.

Calif., Glendale — Office, Store and Theatre—Glendale Theatre Co., Brand Blvd. and Wilson St., Class A rein.-con., Brand Blvd., to Kinne & Westerhouse, H. W. Hellman Bldg., Los Angeles, $215,000.

Calif., Los Angeles — Cafeteria — Boos Bros., 440 South Hill St., will build 3 story and basement, approximately 60 x 120 ft., brick, by day labor.

Calif., Los Angeles—Store and Office—C. E. Grosse, 1133 Buena Vista St., South Pasadena (branch of Pasadena), 2 story and basement, 115 x 150 ft., brick and steel, 7th St., here, to Stanton, Reed & Hibbard, Metropolitan Bldg., $155,000.

Calif., Los Angeles—Store and Office—Sun Realty Co., 1116 South Los Angeles St., concrete and brick work for 12 story and basement, Flower and 7th Sts., to C. J. Kubach Co., Merchants Natl. Bank Bldg., $263,300. Noted Apr. 10.

Calif., San Bernardino—Hotel—Antlers Hotel Co., c/o contractors, 6 story and basement, approximately 150 x 150 ft., rein.-con. and hollow tile, here, to Williams Constr. Co., Marsh-Strong Bldg., Los Angeles, $285,500.

Federal Government Work

PROPOSED WORK

Mass., Boston—Dredging—U. S. Government, plans dredging in Nantucket Harbor channel from head of harbor to ocean; Edgetown Harbor dredging bar and shoal on west side of Chappaquiddick Point, Dorchester Bay and Neponset River, channel 30 ft. deep to Squantum, Boston Harbor, to eliminate bend east of Tunis Ledge at entrance of Broad Sound Channel.

Md., Annapolis—Swimming Pool—Spec. 4972—Bureau Yards & Docks, Navy Dept., Wash., D. C., rejected bids swimming pool, scum gutter at Naval Academy here. Noted May 29.

D. C., Bellevue—Pier—Spec. 4983—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans repairs to timber pier, here.

D. C., Wash. — Towers — Spec. 4988 — Bureau Yards & Docks, Navy Dept., plans modifying radio towers.

Ky., Owensboro—Dwellings—U. S. Engineer, P. O. Box 72, Louisville, takes bids about July 1, constructing 2 lockkeepers dwellings at Dam 46, Ohio River.

Ill., Great Lakes—Boilers—Spec. 4982—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans resetting boilers in Naval Hospital, here.

Ill., Olmstead—Lock — U. S. Engineer, P. O. Box 72, Louisville, Ky., plans constructing lock 53 in Ohio River near here.

Calif., San Francisco—Supply Depot—Spec. 5000—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans marine corps supply depot, here.

Calif., San Francisco — Grading — Spec. 4999—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans grading site, etc., for marine corps supply depot, here.

Calif., Tiberson — Coaling Plant — Spec. 4989—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans coaling plant, repairs, etc., here.

P. I., Cavite—Coaling Plant, etc.—Spec. 4990—Bureau Yards & Docks, Navy Dept., Wash., D. C., plans coaling plant, repairs, etc., here.

BIDS DESIRED

Me., Bar Harbor—Compass Station—Spec. 4966—June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., compass station, here.

N. Y., Cohoes—Post Office—June 30, by Treas. Dept. at office Supervising Archt., Wash., D. C., approximately 66 x 72 ft. post office, here; adv. E. N.-R. June 5.

N. Y., New York—Dredging—June 16, by U. S. Engineer Office, War Dept., Wash., D. C., dredging 12,000 cu.yd. trap rock and 10,000 cu.yd. soft material in New York and New Jersey Channels near Shooters Island.

Pa., Altoona—Retaining Wall—June 17, by Treas. Dept. at officee Superv. Architect, Wash., D. C., retaining wall, 42 ft. long, at U. S. Post Office, here.

Pa., Hog Island—Compass Station—Spec. 4976—June 11, by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to compass station quarters and wharf, here. Noted May 22.

Pa., Phila.—Dredging June 23, by U. S Engineer Office, War Dept., Wash., D. C., dredging 1,500,000 cu.yd. in Delaware River at Horseshoe Bend near here.

Pa., Scranton—Post Office—June [illegible], by Treas. Dept. at office Superv. Architect, Wash., D. C., 1 story, 23 x 30 ft. addition to parcel post annex at U. S. Post Office, here.

D. C., Wash.—Road and Gutters—Spec. 4986—June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to roads and gutters.

Va., Quantico—Bridge—Spec. 4987—June 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., resurfacing bridge at Marine Flying Field, here.

W. Va., Huntington—Steel Boats—June 20, by U. S. Engineer Office, War Dept., Wash., D. C., furnishing two 60 x 20 x 3½ ft. steel maneuver boats.

Tenn., Nashville—Steamboat Hull—July 7, by U. S. Engineer Office, Nashville, furnishing one steel steamboat hull; adv. E. N.-R. June 5.

Mo., Lexington—Current Retards—June 26, by U. S. Engineer Office, War Dept., Wash., D. C., 600 lin.ft. current retards in Missouri River, near here.

Tex., Galveston—Compass Station—Spec. 4974—June 18, by Bureau Yards & Docks, Navy Dept., Wash., D. C., radio compass station, quarters and radio compass building, here. Noted May 8.

Wash., Destruction Island—Compass Station—Spec. 3954—July 9, by Bureau Yards & Docks, Navy Dept., Wash., D. C., radio compass station masts, and services, etc., here.

Calif., Point St. George—Radio Building—Spec. 4952—July 9, by Bureau Yards & Docks, Navy Dept., Wash., D. C., radio building and accessories, here.

H. T., Pearl Harbor—Storehouse, Depot, etc.—Spec. 4975—July 30, by Bureau Yards & Docks, Navy Dept., Wash., D. C., storehouse, ammunition depot and filling house, etc., here. Noted May 22.

BIDS RECEIVED

Mass., Chelsea—Porches and Walks—Spec. 4965—Bureau Yards & Docks, Navy Dept., Wash., D. C., inclosed porches and concrete walks at Naval Hospital, here, from F. J. Lowe & Co., 80 Boylston St., Boston, (1) $8,500 (2) $8,300.

D. C., Wash.—Boiler House, etc.—Constructing Quarters, Wash., D. C., remodeling boiler house and boiler installation at barracks from Potomac Eng. Co., Wash., D. C., $19,813.

Minn., Mille Lacs—School, etc.—Comrs. Indian Affairs, Wash., D. C., frame schoolhouse, here, from Bock Building Co., Milaka, $4,330 (90 days). Noted May 15.

Nevada—Roads—C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds. 9, Main St., San Francisco, Calif., grading 11.32 mi. Meadow Creek Sect. in Humboldt Natl. Forest, (a) contractor furnishes explosives, (b) Government furnishes explosives, from H. E. Cornell, 1403 Warm Springs Ave., Boise, Idaho, (a) $87,501 (b) $84,375, engrs. est. (a) $79,720 (b) $77,220. Noted Apr. 17.

CONTRACTS AWARDED

N. J., Woodbury — Post Office — Treas. Dept. at office Superv. Architect Wash., D. C., post office building, here to E. Zimberli, State College, $46,400. Noted May 22.

Md., Annapolis — Tube Building — Spec. 4973—Bureau Yards & Docks, Navy Dept., Wash., D. C., tube transmitter building, to W. L. Morrison Constr. Co., 613 15th St., N. W., Wash., D. C., $12,840 (60 days). Noted May 22.

Ky., Louisville—Coffer Rods—U. S. Engineer, P. O. Box 72, furnishing 6,000 ft. ⅜ in. steel coffer rods 22 ft. long, for Dams 50 and 52, Ohio River, to Pidgeon Thomas Iron Co., 94 North 2nd St., Memphis, Tenn., $2.63 per cwt. Noted May 29.

Ky., Owensboro—Buckets—U. S. Engineer, P. O. Box 72, Louisville, furnishing one ⅜ and one 1 yd. clamshell buckets for Dam 46, Ohio River, to Blaw Knox Co., P. O. Box 915, Pittsburgh, Pa., $1,194. Noted May 22.

Ill., Brookport—Lock—U. S. Engineer, P. O. Box 72, Louisville, Ky., will build lock at Dam 52, Ohio River, near here, by day labor. $1,500,000.

Ill., Chicago — Cement — U. S. Engineer Office, Chicago, furnishing 8,000 sacks cement, to Universal Portland Cement Co., 210 South Lasalle St., Chicago, $5,000.

Kan., Kansas City—Revetment—U. S. Engineer, Kansas City, Mo., 1,500 lin.ft. revetment work between Goose Island and Jersey Creek on Missouri River, near here, to Woods Bros. Constr. Co., Lincoln, Neb., mattress anchor plates $0.60 per lin.ft., willow brush $10.50 per cord, cribbing poles

Federal Government Work (Continued)

$11.50 per cord, stone on mattress $3.40 per cu.yd., grading bank $0.30 per cu.yd., stone in paving $4.75 per cu.yd., spalls on mattress and paving $4.25 per cu.yd. Noted Apr. 24.

Mo., St. Louis—Steel Pipe Line—U. S. Engineer, 428 Custom House 28 sections (504 ft.) steel pipe line, to Hamler Boiler & Tank Co., 66th Pl. and 60th Ave., Chicago, Ill., $4,928.

Unclassified

PROPOSED WORK

Playground—Mattapan (Boston P. O.), Mass.—City of Boston plans playground, Collins Field, Almont St., here. $32,500. Engineer, c/o Park Dept.

Playground—South Boston (Boston P. O.), **Mass.**—Park Dept., 33 Beacon St., Boston, plans public playground, section bounded by Bolton, D and West Third Sts., here. $65,250. J. B. Shea, chn.

Transmission Lines, Substations, etc.—New York—Northern New York Utilities Co Inc., 58 Public Sq., Watertown, plans 35 mi. transmission line from Altmar, Oswego Co. to Black River near Watertown, and substations on Black River. $1,400,000.

Power Development—Watertown, N. Y.—Northern New York Utilities Inc., 58 Public Sq., plans hydro-electric development at Sewalls Island on Black River, here, 2,000 to 2,500 hp. To exceed $250,000.

Stadium — Macon, Ga. — Mercer College having plans prepared by Freeland, Roberts Co., consult. and designing engr., Independent Life Bldg., Nashville, Tenn., concrete stadium, 15,000 seating capacity, for athletic field. $100,000. Noted Nov. 29.

Transmission Line — Wisconsin — Wood Co. Electric Light and Power Co., Wisconsin Rapids, plans transmission line and distribution system from Wisconsin Rapids to Vesper. Engineer not selected.

Ornamental Street Lighting—Merrill, Wis.—H. R. Allen, city clk. soon takes bids for concrete posts, etc., on 8 down town streets. $25,000.

Gas Mains—Omaha, Neb.—See "Waterworks."

Fish Hatchery—Tahlequah, Okla.—State plans new fish hatchery on Illinois River, near here, 16,000 cu.yd. earth and 1,500 cu.yd. rock excav., 100 cu.yd. rein.-con., 250 cu.yd. mass concrete, 2,000 lin.ft. 12 in. wood pipe. $40,000. J. M. Page, highway engr.

Power Development — Portland, Ore. — Portland Electric Power Co., Electric Bldg., issued $50,000,000 bonds for extensions and additions during next 6 years.

Open Air Theatre, etc.—Alhambra, Calif.—City plans open air theatre and art center, incl. 30 x 50 ft. stage, 50 x 250 ft. proscenium with 30 ft. lagoon, stadium to seat from 4,000 to 5,000.

Park Improvements—Los Angeles, Calif.—Los Angeles Co. plans election to vote on $460,000 bonds, park improvements in Municipal Impvt. Dist. 25.

Street Lighting System—Los Angeles, Calif.—Had plans prepared street lighting system, 157 pressed steel standards, Whittier Blvd.; 158 c.i. standards, Santa Monica Blvd.; 205 concrete standards, Central Ave. To exceed $25,000.

Rock and Sand Bunkers—Sacramento, Calif.—Pratt Rock & Gravel Co., Hearst Bldg., San Francisco, has plans prepared rock and sand bunkers, capacity 1,500 ton, concrete pits 21 ft. deep under railroad tracks, etc., here. $35,000.

Street Lighting System—San Francisco, Calif.—City and San Francisco Co. making plans street lighting system in Mission St. between 4th and 16th Sts., ornamental oriental system in Chinatown, Grant Ave. between Bush St. and Columbus Ave.; extending Path cf Gold, Mason St. between Market and Geary Sts.; Sutter St. from Market St. to Van Ness Ave., and in Van Ness Ave. to Market and thence out Market to Valencia Sts. Each to exceed $25,000. M. M. O'Shaughnessy, city engr.

Electrification of Railways — British Columbia—Canadian Pacific Ry., Windsor St., Montreal, Que., plans electrification of main line from Vancouver to Calgary. S. E. Jenkins & Co. Ltd., 837 Hastings St. W., Vancouver, consult. engrs.

Grain Elevator—Vancouver, B. C.—Vancouver Harbor Comrs., 525 Seymour St., calling for competitive designs for addition to Elevator No. 1, and storage annex to Elevator No. 3. 1,600,000 bu. capacity. $600,000. W. G. Swan, c/o owner, engr.

Stadium—Toronto, Ont.—University of Toronto, Queens Park, having plans prepared rein.-con. and steel stadium. $200,000. Harkness, Landon & Hertzberg, Confederation Life Bldg., engrs.

BIDS DESIRED

Plumbing System, etc.—New York, N. Y.—June 10, by Bd. Educ. at office W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, plumbing and drainage system in James Monroe High School, Boynton Ave. from East 172nd to 173rd Sts., Bronx Boro, here.

Ball Park — Phila., Pa. — Amer. League Baseball Club of Phila., 21st and Lehigh Sts., will double deck right and left pavilions and north bleachers, steel, Shibe Park. Work will be done by separate contracts under supervision of P. M. Sax, archt. and engr., Penfield Bldg. $350,000. Noted May 22.

Town Site—Norfolk, Va.—W. B. Shafer, Jr., c/o Pennsytown Corp., 215 Arcade Bldg., taking bids 5 mi. concrete streets, aeroplane field, movie studio, fifty $5,000 homes, etc., near here; adv. E. N.-R. June 5.

Street Lighting System—Redondo Beach, Calif.—June 16, by W. J. Baalen, city clk., 343 c.i. ornamental standards in Esplanade, Catalina, Pacific Aves., etc. To exceed $25,000.

Removing Headblock, etc.—Ottawa, Ont.—June 13, by N. Desjardins, Acting Secy., Dept. Pub. Wks., removing headblock and repairs to the lake end of the north pier at Burlington Channel, Wentworth Co.

BIDS RECEIVED

Drip Pans — Brooklyn, N. Y. — Dept. Plants and Structures, Municipal Bldg., New York City, drip pans under Williamsburgh Bridge, from Vulcan Rail & Constr. Co., 35 Meserole Ave., Brooklyn, $42,995.

Heating and Plumbing—Brooklyn, N. Y.—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., heating in P. S. 80, from N. P. Lorenzo, 430 Pearl St., $46,200, plumbing from J. H. D. Goldblatt, 345 Madison Ave., New York, $90,000. Noted May 15.

Heating and Ventilating Apparatus — Brooklyn, N. Y. — W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., heating and ventilating apparatus in addition to Erasmus High School, Bedford Ave., from Austin Eng. Co., 121 West 42nd St., New York, $152,475. Noted May 22.

Waterproofing Track Floors—Brooklyn, N. Y.—Transit Comn., 49 Lafayette St., New York, reconstructing waterproofing track floors at stations of Route 39, Sect. 2, Agreement "CZ," from Charles Meads & Co., 217 West 14th St., New York, $33,210. Noted May 22.

Ferryboats — New York, N. Y. — Dept. Plants & Structures Municipal Bldg., 6 steel screw ferryboats, from New York Shipbuilding Corp., 50 Broad St., $1,323,500.

Heating and Ventilating Apparatus, etc. —New York, N. Y.—W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in P. S. 36 from W. J. Olvaney, Inc., 100 Charles St., $48,913; in P. S. 201, P. S. 33 and P. S. 197, from D. J. Rice, 405 Lexington Ave., $97,832, $97,733 and $97,694 respectively. Noted May 15.

Heating and Ventilating—Baltimore, Md.—Mayor and City Council, City Hall, heating and ventilating in Gwynns Falls Park Junior High School, Hilton St., from Enterprise Steam and Hot Water Heating Co., 619 West Franklin St., $128,870. Noted May 22.

CONTRACTS AWARDED

Transmission Line — Illinois — Illinois Power & Light Corp., Illinois Merchants Bank Bldg., Chicago, will construct 66,000 volt high tension transmission line from Keokuk, Ia., to Galesburg and from Galesburg to Galva; also 33,000 volt transmission line and substation in Galesburg, by day labor. R. W. Carley, dist. supt.

Grand Stand, etc. — Fairmount, Ill. — Fairmount Jockey Club, c/o P. Cohn, East St. Louis, general contract and engineering for 72 x 1,008 ft. grand stand, 75 ft. high, stables for 1,000 horses, 2 story, 75 x 150 ft. stucco and timber club house, to W. H. Smith Co., Pontiac Bldg., St. Louis, Mo. Engrs. est. $375,000. Noted May 29 under "Race Track."

Transmission Line—Wisconsin—Wisconsin Pub. Serv. Corp., 559 Marshall St., Milwaukee, will build 58 mi. high voltage transmission line from Green Bay to Oshkosh. by day labor. $300,000. Mead & Seastone, Journal Bldg., Madison, engrs.

Lighting System — Platteville, Wis. Ornamental street lighting system in main sections of business district, to Donovan Constr. Co., 417 Commerce Bldg., St. Paul, Minn. Engrs. est. $25,000. Noted Apr. 17

Coal Dock—Superior, Wis.—Reeves Coal & Dock Co., 100 North 7th St., Minneapolis, 476 x 1,800 ft., coal dock, steel and concrete, to Fegles Constr. Co., 706 1st Ave., N., Minneapolis, Minn., about $750,000.

Transmission Line—Oklahoma—Southwest Light & Power Co., Continental Bldg., Oklahoma City, will build 66,000 volt transmission line from Frederick to Manitau, incl. step down transformer station, by day labor. $35,000. E. R. Ernsberger, Continental Bldg., Oklahoma City, engr.

Wharf and Sheds—Corpus Christi, Tex.—City and Nueces Co. Navigation Dist. 1; large wharf and sheds, to Sumner Sollit Co., Natl. Bank Commerce Bldg., San Antonio, $745,070. Noted May 29.

Street Lighting System—Alhambra, Calif.—To W. A. McNally, 517 South Bway., Pasadena, street lighting system Main St., approximately $107,350; Garfield St., approximately $12,600. Noted Feb. 7.

Street Lighting System—Corona, Calif.—Street lighting system, to H. M. Rouse, San Bernardino, approximately $37,450. Noted May 15.

Street Lighting System—Los Angeles, Calif.—Ornamental street lighting system, North Bway. between Pasadena and Lincoln Park Aves., to Newbery Electric Co., 724 South Olive St., $53,817.

Gas Mains — Montreal, Que. — Montreal Light, Heat & Power Co., Craig St. W., will build 29,043 ft. 4 in. c.i. gas mains in 33 streets and avenues $66,039, 12,237 ft. 6 in. c.i. gas mains in 10 streets and avenues $35,573, and 4,955 ft. 8 in. c.i. gas mains in 3 streets $16,803, by day labor. E. S. Stanton, supt. gas distribution. Noted May 29.

Grain Elevators, etc.—Vernon, Calif.—Globe Grain & Milling Co., 907 East 3rd St., Los Angeles, 21 elevators, 21 ft. high and warehouse, all rein.-con., here, to R. Hess, 51st and Alameda Sts., Vernon, $100,000.

Power Development — Island Falls via Cochrane, Ont.—See "Industrial Works."

Car Barns—Ottawa, Ont.—Ottawa Electric Ry. Co., Bank St., 1 story, 200 x 300 ft., brick and steel car barn, plain foundation, Elm St., to J. Sutherland, 510 Rideau St., about $200,000.

Material and Equipment

PROPOSED WORK

Cable—Minneapolis, Minn.—F. S. Gram, city purch. agt., rejected bids for 42,292 lin.ft. cable for electric signal system for Fire Dept. Will readvertise. Noted May 1 under "Unclassified."

BIDS DESIRED

Steel Castings, Cement etc.—New York, N. Y.—June 12, by J. Miller, pres. Manhattan Boro, Municipal Bldg., steel castings to Corporation Yards, 500,000 gal. asphaltic cement, and 8,000 cu.yd. ¾ in. binder stone.

Crane—Pittsburgh, Pa.—Amer. Sheet & Tin Plate Co., Frick Bldg., taking bids 50 ton crane, 10 ton auxiliary, 80 ft. span. M. S. Dennis, purch. agt.

Locomotive Cranes, etc.—Pittsburgh, Pa.—Koppers Co., Union Trust Bldg., taking bids locomotive cranes, shovels and buckets.

Road Oil—Louisville, Ky.—June 7, by Fiscal Court Jefferson Co., 350,000 gal. more or less medium coal tar road oil and 40,000 gal. cold patch oil. To exceed $25,000. M. Drane, Louisville Trust Bldg., co. surv.

Concrete Mixer—Milwaukee, Wis.—Wenzel & Henoch Co., 498 27th St., taking bids 1 bag concrete mixer.

Posts and Brackets—Milwaukee, Wis.—June 11, by Central Bd. Purchases, City Hall, 628 concrete posts and brackets for street lighting system.

Concrete sand, etc.—Minneapolis, Minn.—June 10, by F. S. Gram, city purch. agt., 3,600 cu.yd. concrete sand, 6,500 cu.yd. crushed rock or gravel.

Street Flushers and Sprinklers — New Ulm, Minn.—June 12, 1 to 2 motor street flushers and sprinklers with 1,000 gal. tank; 1 to 6 horse-drawn type sprinklers with 600 gal. steel tank. W. P. Backer, city clk.

Sand—Modesto, Calif.—Modesto Irrigation Dist., C. S. Abbott, secy., in market for 1,000 cu.yd. river sand.

Street Sweeper — Whittier, Calif. — City, P. Gilmore, clk., in market for motor street sweeper.

Cement—Montreal, Que.—L. O. Pion, De-Fleurient St., city purch. agt., in market for 4,600 tons cement for asphalt paving.

Road Oil—Montreal, Que.—June 10 by L. O. Pion, Purchasing Agent, 190,000 gal. road oil.

BIDS RECEIVED

Broken Stone — Brooklyn, N. Y. — E. Riegelmann, boro. pres., Boro. Hall, 4,000 cu.yd. broken stone, etc., from B. Turecamo Contg. Co., 8706 Bay 12th St., $15,618. Noted May 22.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: June 19.

Proposal for Building an Additional Water Supply

Lewisburg, Tenn.

Sealed proposals for furnishing material and constructing an additional water supply for the Town of Lewisburg, Tennessee, will be received by the City Commissioners at the City Hall until 3 o'clock P. M. Thursday, June 19th, 1924.

The work will consist of an impounding dam and pump house, a ten inch force main, a coagulating basin, two 500,000 gallons gravity filters and 150,000 gallons concrete clear well.

Each proposal must be accompanied by a certified check payable to the Town of Lewisburg, Tennessee, to an amount equal to five per cent (5%) of the bid, as a guarantee that the contract will be entered into if awarded. A bond of one hundred per cent (100%) of the contract price will be required. In addition to this bond, the statutory bond providing for the protection of laborers and materialmen, who deal direct with the contractor, will be required.

This bond will be for one-half of the contract price on all contracts of $2,000.00 or under; one half of the first $2,000.00 and thirty-five per cent (35%) for all over the amount on all contracts between $2,000.00 and $5,000.00; and one-half of the first $2,000.00, thirty-five per cent (35%) on the next three thousand ($3,000.00) and twenty-five per cent (25%) on the balance of all contract over $5,000.00. The condition of this bond being to pay for all the material and labor used in the fulfillment of the contract.

Contracts will be awarded to the lowest bidder. Payments will be made on monthly estimates.

Plans and specifications are on file in the office of the City Clerk at Lewisburg, Tennessee, and with Paul H. Norcross, Consulting Engineer, 1404 Candler Building, Atlanta, Ga.

Bidders may obtain copies from the Engineer by enclosing a certified check for Twenty-five ($25.00) Dollars, payable to the Town of Lewisburg, Tennessee. If blue prints are desired, they may be had at the cost of printing. If specifications and blue prints are returned within thirty days after opening bids, the check for $25.00 will be returned.

J. N. McCORD,
J. C. ADAMS,
S. K. WALKER,
City Commissioners.

PAUL H. NORCROSS,
Consulting Engineer,
1404 Candler Building,
Atlanta, Georgia.

Bids: June 17.

Street Paving

Shenandoah, Pa.

Bids will be received by the Borough of Shenandoah for repairing, sheet asphalt streets, with 1 inch binder and 2 inch wearing surface, approximately 800 square yards, bids to be per square yard to include all labor and material necessary.

All bids to be in the hands of the Chairman of Street Committee at 12 o'clock noon June 17, 1924.

The right is reserved to reject any or al bids.

T. R. EDWARDS,
Chairman of Street Committee,
111 N. Jardin St., Shenandoah, Pa.

OFFICIAL PROPOSALS

Bids: June 18.

Completion of Anchorages

DELAWARE RIVER BRIDGE
CONTRACT 15

Philadelphia, Pa.

Sealed proposals will be received by the Delaware River Bridge Joint Commission at Room 806 Widener Building, Philadelphia, Pa., until 1:30 o'clock p.m. Eastern Standard Time, June 18, 1924 when they will be publicly opened and read, for the completion of the anchorages of the bridge over the Delaware River between the City of Philadelphia, Pa., and the City of Camden, New Jersey.

The work will include the construction to solid rock foundation of eight cylindrical piers to support the masonry towers of the anchorages, the construction of concrete masonry, granite facing, steel roadway supports and interior finish and equipment in both anchorages. Concrete masonry forming the first section or core of each anchorage has been constructed under previous contracts. The contract time for the entire work is twenty three months.

A lump sum bid is asked for the entire work together with unit prices to cover additions or deductions in certain items from the quantities shown on the drawings.

Copies of the Contract and Contract drawings may be obtained at the office of the Joint Commission upon deposit of twenty-five dollars, which deposit will be returned upon receipt of bid or the return in good condition of the contract books.

Each proposal must be accompanied by a certified check for the sum of One Hundred Thousand Dollars ($100,000.) payable to the Delaware River Bridge Joint Commission and the Surety's consent must be shown. The bidder or bidders to whom the contracts are awarded will be required to give bond, in the sum of 50 per cent of the amount of the contract.

The right is reserved to reject any or all bids.

GIFFORD PINCHOT,
Chairman.
JOSEPH K. COSTELLO,
Secretary.
DELAWARE RIVER BRIDGE JOINT COMMISSION

Bids: June 16 and 17.

State Highway Work

Harrisburg, Pa.

Pennsylvania Department of Highways, Harrisburg, Pa. Bids will be received June 16, 1924, for the construction of sixteen projects, totaling forty-four miles; also June 17, 1924, for the construction of fifteen projects totaling fifty-four miles, construction to be either bituminous surface on a concrete base or reinforced concrete. Projects situated in the following counties:

Allegheny, Beaver, Berks, Bradford, Bucks, Carbon, Chester, Clarion, Clearfield, Columbia, Elk, Fayette, Forest, Jefferson, Lebanon, Lehigh, Luzerne, Lycoming, Monroe, Montgomery, Schuylkill, Somerset, Tioga, Warren, Washington.

Also for the construction of reinforced concrete bridge situated in Adams County. Full particulars upon application to Paul D. Wright, Secretary of Highways, Harrisburg, Pennsylvania.

OFFICIAL PROPOSALS

Bids: June 11.

Excavating Channel

Albany, N. Y.

Sealed proposals for excavating a channel in the Shinnecock-Peconic Canal and Peconic Bay, County of Suffolk, Long Island, N. Y., will be received by the Salt Water Bays Commission, at the office of the State Engineer, Telephone Building, Albany, N. Y., until 12 o'clock noon, Wednesday, June 11, 1924, when they will be publicly opened and read. Proposals shall be endorsed on the envelope "Proposals for excavating channel in Long Island Bays," and addressed to the Salt Water Bays Commission, care of State Engineer, Telephone Building, Albany, N. Y., and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable at sight to the Salt Water Bays Commission, or money, equal to five per cent (5%) of the amount of the proposal. The contractors to whom the award is made will be required to furnish, for the faithful performance of the contract, a surety company bond in the sum of fifty per cent (50%) and an additional bond, known as the labor bond, in the sum of ten per cent (10%) of the amount of the contract, within ten (10) days after official notice of award of contract. The right is reserved to reject any and all bids. Specifications and estimates may be obtained, and plans may be examined at the office of the State Engineer, Albany, N. Y., and Pier 6, East River, New York City. Blueprint of plans, which consist of one sheet, will be furnished by the State Engineer upon payment of fifteen cents (15c.). Refund will not be made for any blueprints which may be returned.

SALT WATER BAYS COMMISSION
By DWIGHT B. LA DU,
Chairman.

Dated May 22, 1924.

Bids: June 17.

Gate-Valves and Hydrants

CONTRACT 217

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, twenty-second floor, Municipal Building, Park Row, Centre and Chambers streets, New York City, until 10 a.m., Eastern Standard time, on Tuesday, June 17, 1924, for Contract 217, for furnishing and delivering gate-valves and hydrants for the Williamsburg conduit of the Catskill aqueduct, all as set forth in the specifications. All deliveries shall be made, with all transportation charges prepaid, at the designated storage yard within the limits of the City of New York.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, forms of bid and contract, specifications, contract drawings, etc., can be obtained at the office of the Secretary at the above address, by depositing the sum of ten dollars ($10) in cash or its equivalent for each pamphlet. For further particulars apply to the office of the Chief Engineer at the above address.

GEORGE J. GILLESPIE,
President.
JAMES P. SINNOTT,
PHILIP F. DONOHUE,
Commissioners, Board of Water Supply.
BENJ. F. EINBIGLER, Secretary.

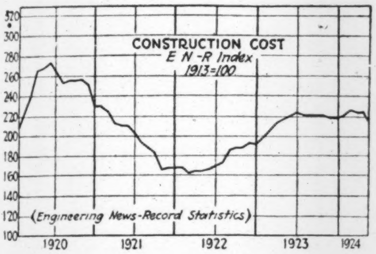
CONSTRUCTION NEWS

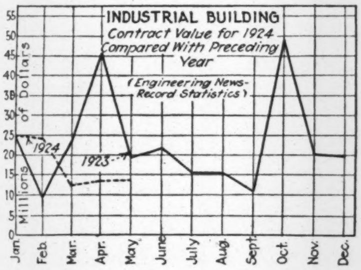
Engineering News-Record, June 12, 1924

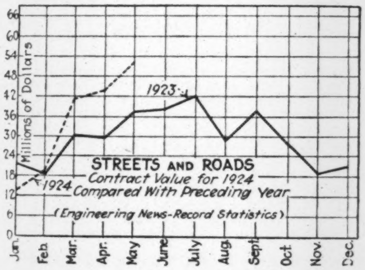
The Construction Barometer

Upward Trend in Construction Still Evident Both as to Money Value of Contracts Let and Number of Jobs Now Out for Bids—Production Slowing Down in Most Other Industries

WITH reports of recessions in trade and industry coming in from every direction, it is interesting to note that during the past week the total value of large contracts awarded showed a substantial increase over the week preceding. The number of large jobs now out for bids, on all classes of work, is also greater. The industries most affected by the depression, are: iron, steel, automotive, coal and textiles. The trend is upward, however, in contract letting on water-works, sewers, streets and roads, Federal Government work and both private and public buildings. Bridge contracts and lettings for excavations, drainage and irrigation projects have been on the wane during the past month.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
May 22	$35,046,000	$13,689,000	$48,735,000
May 29	24,429,000	19,422,000	43,851,000
June 5	27,725,000	19,189,000	46,914,000
3 weeks	$87,200,000	$52,300,000	$139,500,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

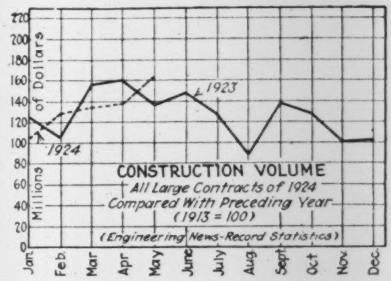
Week Ended	No.	Public Work	No.	Private Work
May 22	19	$12,021,000	24	$8,348,000
May 29	11	4,377,000	19	12,425,000
June 5	8	4,801,000	47	13,899,000
3 weeks	38	$21,199,000	90	$34,672,000

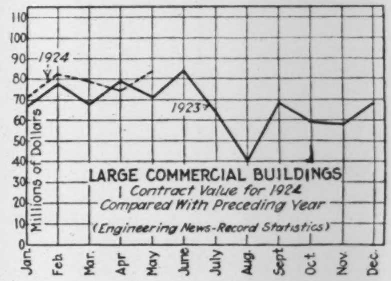
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

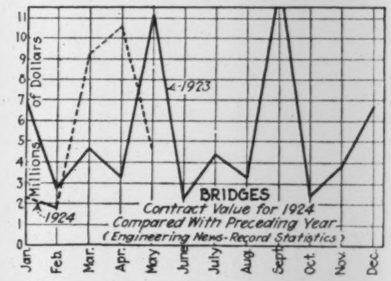
		Public			
Week Ended	Private	All Buildings	Streets and Roads	Water-works and Sewers	All Public
May 22	30	41	111	41	248
May 29	24	45	84	35	213
June 5	35	53	95	55	250

RANGE OF STEEL AND LUMBER PRICES SLIGHTLY BELOW LEVEL OF MAY 29

	Quoted on June 12 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.10 @2.25	$2.10 @2.30	June 5
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	59.00	60.00	May 29
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.56	.55	Apr. 24







Waterworks

PROPOSED WORK

N. Y., Barneveld—Village Bd. plans new water supply system. $35,000.

N. Y., Victor—Will sell $50,000 bonds June 27, for reservoir, mains, pumps, motors, etc. M. Keating, village clk.; adv. E. N.-R. June 12.

N. Y., Saratoga Springs—Making plans gravity water supply, incl. earthen dam 150,000 cu.yd. excav., embankment, concrete corewall, filtration plant and 10 mi. c.i. pipe. J. P. Wells, Cutler Bldg., Rochester, engr. Noted May 8.

N. J., Pennington—Soon takes bids replacing 8 in. main in South Franklin and Eglantine Sts. $18,000. H. L.. Laning, town engr.

N. C., Edenton—Having plans prepared and soon lets contract extensions to water distribution and sewerage systems. $40,000. Drane & Smith, Charlotte, engrs.

La., Oak Grove—Voted $45,000 bonds for water works and electric light plant.

Tenn., Bristol—Voted $30,000 bonds for waterworks. T. J. Bunnon, city clk.

Ky., Clifton — Sold $15,000 bonds for waterworks extensions.

Ill., Sullivan—Making surveys additional water supply, wells, etc. Holbrook, Warren and Van Praag, Decatur, engrs.

Neb., Beatrice—Election soon to vote on $70,000 bonds for waterworks. Prince & Nixon Eng. Co., 501 Peters Trust Bldg., Omaha, engrs.

Mo., St. Louis—Soon takes bids approximately 12 mi. and 48 and 60 in. steel pressure conduit pipe and $200,000 for maintenance of hurdle dikes at new waterworks Howards Bend, Missouri River. $2,350,000. E. E. Wall, City Hall, city comr.

Tex., Claude—Voted $45,000 bonds complete waterworks. Noted May 15.

Tex., Collinsville—Election soon $20,000 bonds, complete waterworks. Engineer not announced.

Tex., Dallas—Making plans 9 projects for 12- to 16-in. main extensions and 1 artesian well in Oak Cliff. $250,000. E. A. Kingsley, city engr.

Tex., El Paso—Plans enclosed aqueduct to bring water from Elephant Butte dam, to here. E. D. Park, El Paso will submit plant before El Paso Real Estate Bd. about June 15. L. M. Lawson, mgr. of Rio Grande Irrigation Project in southern New Mexico, etc., is also assisting in formulating plans for same. $6,000,000.

Tex., Galveston—Election July 15, $100,000 bonds, storage reservoir. L. McCarthy, comr. finance and revenue.

Tex., Jayton — Making plans complete waterworks. $20,000. Montgomery & Ward, City Natl. Bank Bldg., Wichita Falls, engrs.

Tex., Midland—See "Sewers."

Waterworks (Continued)

Tex., Port Arthur—Attorney General approved $91,500 bonds new waterworks pumping system, etc., $119,500 bonds for main extension, larger mains, laterals both on old streets and new extensions, $69,500 bonds Shreveport Canal conduit. J. P. Logan, mayor.

Tex., Slaton — Voted $60,000 bonds waterworks improvements. H. C. McGee, city secy.

Tex., Whitney—Making plans complete waterworks. $15,000-$20,000. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs.

Wash., Kelso—Voted $250,000 bonds improving water system, incl. filtration system, cost $28,000, 2 m.g. reservoir, installing distribution and other mains. Noted May 1.

Wash., Port Angeles—Election July 12, $625,000 bonds purchase, additions and improvements of plant owned by Northern Pacific Pub. Serv. Corp. $280,000 will be expended on purchasing plant, balance installing of water diverting system at Morse Creek, etc. Noted Nov. 8.

Calif., St. Helena — Plans to purchase one deep well 100 g.p.m. pump to operate against 300 ft.; 15 hp. electric motor; chlorinator plant; 800 ft. 4 in. O. D. casing and fittings. J. Mitchell, city engr.

Que., Shawinigan Falls—Takes bids in June, 1,600 ft. 16 ft. c.i. mains 6- to 12-in. diam. $31,000. J. H. Valiquet, city engr.

Que., Three Rivers—Takes bids in June, rein.-con., brick and steel filtration plant $213,000, water intake $30,000, new pumps $34,000, street connections $11,000, contingent $57,000, also laying 869 ft. 10 in., 6,050 ft. 8 in., and 2,470 ft. 6 in. c.i. mains $33,000, 3,100 ft. 24 in., 3,700 ft. 20 in., 1,610 ft. 18 in. and 220 ft. 12 in. c.i. mains in St. Maurice, St. Julie, Thomas, St. Honore, St. Marie and Niverville Sts. $118,000. C. Gelinas, city engr.

Ont., Saulte Ste. Marie—Plans 3,000 ft. 1.6 in. c.i. mains, etc. $25,000. W. M. Cornell, Water & Light Dept., engr.

BIDS DESIRED

N. Y., Long Island City—June 17, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Varian Pl., Bway., Elmhurst, Lewis, Skillman, Van Gelder, Foster, Continental, Herrick, Roman and Stafford Aves., Manley, Harrow, Ivy, 9th, Carolin, Fleet, Exeter, Ingram, Juno, Jessel and Loubet Sts., here.

N. Y., New York—June 17, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Bronx River Parkway, Gun Hill Rd., Cannon, Hennessy, Carroll and Loring Places, Bway., and grounds of Bellevue Hospital, Barnes, Kingsland, Monticello, Pitman, Paulding, Thierot, Andres, Liebig, Netherlands, Chittenden, 5th, 10th, Delafield, Newton and Sedgwick Aves., East 210th, East 213th, East 223rd, East 208th, West 261st, Murray, East 57th, West 143rd, Allen, Hudson, Reade, Wooster, East 8th, East 42nd, West 40th, Tiffany, East 166th, West 256th, West 260th and West 262nd Sts.

N. Y., St. George—June 17, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Gansvoort Blvd., Cunard Pl., Amelia Court, Arthur, Austin, Cedar, Carlton, Castleton, Hamilton, McFarland, Myrtle, Oakwood, Robinson, Scribner, South, Wilson and Winant Aves., Bishop, Clawson, Delmont, Elmer, Larkin, Nugent and 10th Sts., here.

Md., Baltimore—June 18, by Bd. Awards, trench excavation in eastern, western and southern districts, also 100,000 lead substitute for Water Dept. V. B. Siems, City Hall, water engr.

W. Va., Wheeling — See "Streets and Roads."

Minn., St. Paul — See "Materials and Equipment."

Ariz., Williams—June 24, by city, earth dam and improvements to waterworks. Burns & McDonnell Eng. Co., 415 Marsh-Strong Bldg., Los Angeles, Calif., consult. engrs. Noted May 8.

Tex., Ft. Worth — R. L. Rogers, 112½ West 9th St., taking bids c.i. pipe for main extensions in Berkley Pl. D. L. Lewis, city engr.

Tex., Kaufman—See "Excavation, Drainage, Irrigation."

BIDS RECEIVED

Mass., Waltham (Boston P. O.)—Metropolitan Dist. Comn., Water Div., 1 Ashburton Pl., Boston, about 15,400 ft. 60 in. steel pipe, 200 ft. 16 to 60-in. cast iron pipe and 200 yds. rock excav., from C. and R. Constr. Co., 3 Tremont Row, Boston. $563,230. Noted Apr. 24.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., from Norton Eng. & Contrg. Co., 510 West 149th St., mains in Gildersleeve, Hudson, Ludlow, Olmstead, Pugsley and Waterbury Aves., Barrette, Bolton , Purdy, and East 172nd Sts., $11,300; White Plains Rd., Bryant, Fowler, Gleason, Leland, Noble and Wallace Aves., $8,300; from Melrose Constr. Co., 230 East 162nd St., Morris Lane, Balcom, Brinsmade, Butterick, Calhoun, Emerson, Graff, Harding, Hosmer, Huntington, Lawton, McDowell, Miles, Quincy and Robinson Aves., $12,828. Noted May 29.

Ill., Villa Park—Village, May 26, wells (a) 12 in. cased hold (b) 12 in. uncased (c) 10 in. cased (d) 10 in. uncased, from W .L. Thorne, Desplaines, (a) $11.50 (b) $8 (c) $11 (d) $5; steel tower and tank from Chicago Bridge & Iron Co., 608 South Dearborn St., Chicago, $10,640. Noted May 29.

Md., Baltimore—Trench excav. for Water Dept., from M. L. Quinn, 5308 York Rd., $23,570.

Wis., Kimberly—From Pastoret Constr. Co., Sellwood Bldg., Duluth, Minn., 4,368 ft. 12 in. c.i. pipe $1 per ft., 5,065 ft. 8 in. c.i. pipe $0.68 per ft., 10,799 ft. 6 in. c.i. pipe $0.59 per ft., manholes $65, valves $9, hydrants $10; Blake Constr. Co., 627 South River St., Appleton, $8,343; Wicks Eng. & Constr. Co., 418 Polk Bldg., Des Moines, Ia., water tank and tower, $8,900; Albert & Sons, Neenah, manhole covers, $6.25 each. Noted May 29.

Wis., Racine—F. McElroy, supt. Water Comn., June 2, coagulating basin, from Bondgard & Christensen, 1135 Mound Ave., $79,367; 2,000 ft. 24 in. and 2,100 ft. 30 in. pipe, from A. C. Jensen, 1311 West Blvd., $14,968; venturi meter, from Iron Fdry., 9 Codding St., Providence, R. I., $1400. Noted May 1.

Okla., Oklahoma City—Raising embankment around 2 sides of reservoir and riprapping slopes, from Maney Bros., Empire Bldg., $72,940. Engrs. est. $90,000. Noted May 8.

CONTRACTS AWARDED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Hegeman, Prospect, Flatland, Lott, Bedford, Riverdale and Sheffield Aves., etc., to G. V. Cornell, Rosebank, S. I., $11,634. Noted June 5.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply Gas & Electricity, Municipal Bldg., New York, mains in Skillman Ave., Buckley and Packard Sts., to S. Gallucci, 38 Railroad Ave., Corona; in Chauncey, Calamus, Clermont Sts., etc., to Kennedy & Smith Inc., 93 Amity St., Flushing, $6,999. Noted June 5.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Arnow, Adee, Barnes and Paulding Sts., to Melrose Constr. Co., 230 East 162nd St., $5,600; in Longfellow, Sheridan and Teller Aves., to Beaver Eng. & Contg. Co., 51 Chambers St., $9,910. Noted June 5.

La., New Iberia—L. F. Villermin, city clk., 400 hp. Diesel oil engine, to McIntosh & Seymour, New Iberia, $56,050; electrical equipment, to Westinghouse Electric Mfg. Co., Maison Blanche Bldg., New Orleans, $16,426, pumps, to L. S. Vallely & Co., Whitney Annex, New Orleans, $7,275, general construction, to J. B. McCrary & Co., New Iberia, $56,000. Noted May 15.

Ky., Owensboro—Laying about 6,000 ft. mains, to E. M. Kerlin, Vincennes, Ind., about $20,000. Noted Mar. 31.

Minn., Minneapolis—For 152 tons castings for filtration plant, to Minneapolis Steel & Mchy. Co., 2854 Minnehaha Ave., $117.50 per ton. Noted May 29.

Minn., Rochester — For 2 motor driven pumps, to R. B. Whitacre & Co., 205 South Robert St., St. Paul, $5,000; 1 pump, to Commonwealth Electric Co., 417 Bway., St. Paul, $9,000. Noted Apr. 17.

Minn., Red Wing—Waterworks improvements, 1 m.g. rein.-con. reservoir, to H. E. Rhodes Constr. Co., Guthrie Center, Ia., $19,638; excav., to C. W. Johnson, Red Wing, $5,000; city will build pump house by day labor. Noted May 8.

Minn., St. Paul—See "Material and equipment."

Ark., Little Rock — National Guard of Arkansas, 50,000 gal. steel water tank on 75 ft. tower at Camp Pike, to Pittsburgh-Des Moines Co., Curry Bldg., Pittsburgh, Pa., $32,000; constructing rifle range, to G. E. Wycoff, Little Rock, $8,500. Noted Feb. 21.

Ont., Grimsby — T. Allan, clk. North Grimsby Twp., extending mains, 8,000 ft. 6 in. c.i. pipe, to Gartshore-Thompson Pipe & Fdry. Co., Hamilton, trenching, laying and jointing pipe, to Elmira Plumbing & Constr. Co., Elmira, specials, to Crane Ltd., Teraulay St., Toronto. Engrs. est. $30,000. Noted Mar. 27.

Ont., Toronto—To Grant Contg. Co., 30 Front St. E., laying 36 in. c.i. mains in Spadina Rd. $25,188, 16 in. c.i. mains in King St. W., $2,430; to Ruscica Bros., 256 Ontario St., mains in Melcourt Rd. $430, St. Hildas Ave. $277, Gresham Rd. $430, and Thurston Rd. $430; to W. E. Taylor, 22 Falcon St., mains in Belsize Dr. $1,132, Cheston Rd. $421 and Manor Rd. $643.

Ont., Toronto—York Twp., 40 Jarvis St., furnishing c.i. pipe to Natl. Iron Corp., foot of Cherry St., $33,000; special castings to Worr Fdry. Co., 163 Sterling Rd., $2,000; hydrants to J. I. Hepburn, 18 Van Horne St., $7,000; lead pipe and pig lead, to Canada Metal Co. Ltd., 39 Fraser Ave., $23,000; brass fittings, etc., to Empire Brass Co., 110 Adelaide St. W., $9,800.

Peru—Water and sewerage systems in 32 cities, here, to Foundation Co., 120 Liberty St., New York City, $50,000,000.

Sewers

PROPOSED WORK

N. Y., Endicott—Plans sanitary sewers in Union Dist. and North Adams Ave. $35,000; storm sewers in Tracy St., $3,500; in North Side, $6,500; in Union Dist. $10,000. C. E. Bennett, village pres.

W. Va., Beckley — See "Streets and Roads."

W. Va., Morgantown—Election June 26, $600,000 bonds for sewers. P. C. White, city clk.

N. C., Edenton—See "Waterworks."

Fla., Kissimmee—Election June 28, $26,500 bonds storm sewers; $70,000 bonds extending sanitary sewers. E. B. Doughton, city mgr.

Miss., Natchez—Plans sewer extensions. $30,000.

Ky., Mayfield—Soon takes bids sewerage system. To exceed $50,000. Black & Veatch Co., 701 Mutual Bldg., Kansas City, Mo., engrs. Noted Apr. 24.

Ky., Paducah—Plans lateral sewers in various streets. $500,000 to $600,000. A. Bradshaw, city engr.

Mich., Detroit — Dept. Pub. Wks. had plans prepared vitr. crock sewers 2,336 ft. Storm Sewer 4147 12 in. pipe; 2,243 ft. Storm Sewer 4148, 12- to 18-in. pipe; 2,040 ft. Storm Sewer 4149, 12- to 18-in. pipe; 1,272 ft. Lateral 4085, 12- to 24-in. pipe; 919 ft. Lateral 4134, 12- to 24-in. pipe; 625 ft. Lateral 4142, 12 and 15 in. pipe; 1,230 ft. Lateral 4144, 12- to 18-in. pipe; 479 ft. Lateral 4145, 12 and 15 in. pipe; 1,124 ft. Lateral 4146, 12 -to 20-in. pipe. G. Jerome, City Hall, engr.

Mich., Detroit — Dept. Pub. Wks., had plans prepared 1,380 ft. Tireman Ave. Arm of East Wyoming Ave. Sewer, 670 ft. 4 ft. 6 in. cylinder, 680 ft. 4 ft. cylinder, and 30 ft. 24 in. crock. G. Jerome, city engr.

Mich., Port Huron—Had plans prepared approximately 3 mi. vitr. clay lateral sewers in various alleys, 6 to 10 ft. average depth. E. R. Whitmore, City Hall, engr.

Ill., Decatur—Making plans north side sewerage system. $350,000. Holbrook, Warren & Van Praag, Decatur, engrs.

Ia., Ireton—Plans sewerage system. $40,000. W. E. Buell & Co., 205 Davidson Bldg., Sioux City, engrs.

Tex., Fort Arthur—Attorney General approved $132,500 bonds sewer extensions, mains and laterals to newly populated additions, etc. J. P. Logan, mayor.

Tex., Midland—Voted $76,000 bonds sewer and water extensions. Municipal Eng. Co., Praetorian Bldg., Dallas, engrs. Noted May 1.

Tex., Slaton—Voted $40,000 bonds, complete sewer system. Ganatt-Baker Co., 1116 West Main St., Oklahoma City, Okla., engrs.

Calif., Huntington Park (branch of Los Angeles)—Making plans sewerage system. To exceed $25,000. P. E. Kressly, H. W. Hellman Bldg., Los Angeles, engr.

Calif., Los Angeles — Los Angeles Co. Flood Control Dist., making plans 2 mi. Altadena Storm Drain, 1,000 lin.ft. tunnel and drain from 4 to 7 ft. wide at bottom, from 5 to 9 ft. wide at top, from 3 to 4 ft. deep. $750,000. J. W. Reagan, Hall of Records Bldg., engr.

Calif., Los Angeles—Had plans prepared Arroyo de Sacatella Storm Drain, to drain swamp running from 3rd Ave. to Vineyard, between Pico St. and Country Club Dr. $2,570,000. J. A. Griffin, city engr.

Calif., Mill Valley—Making plans improving sewerage system. From $25,000 to $30,000. J. C. Oglesby, Courthouse, San Rafael, engr.

Ont., Chippewa—Having plans prepared about 8 mi. vitr. tile sewerage system. $65,000. A. W. Connor Co., Royal Bank Bldg., Toronto, engrs.

Sewers (Continued)

Ont., Islington—Etobicoke Twp., having plans prepared rein.-con. disposal plant, probably activated sludge type, in Long Branch Sect. $40.000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

BIDS DESIRED

Mass., Medford (Boston, P. O.)—June 19, by Metropolitan Dist. Comn., Sewer Div., 1 Ashburton Pl., Boston, 3,100 ft. sewers and excavations in High St. from Warren St. across tracks of Boston & Maine R.R. to Massachusetts Ave., here. $40,000 bonds. G. L. Rogers, secy.

N. Y., Brooklyn—June 18, by E. Riegelmann, boro pres., Boro Hall, repairing sewer culverts in various locations, constructing sewers in 55th, West 9th, East 34th, East 27th, Minna, East 43rd, 77th, and East 13th Sts.

Pa., Butler—June 17, by C. G. Chase, clk. City Council, sewers, Projects 2 and 3. F. M. Harper, city engr.; adv. E. N.-R. June 12.

Md., Baltimore—June 18, by Bd. Awards, sewers and drains in Sewer Dist. P-8, Storm Water Contr. 69. S. Purcell, ch. engr.; adv. E. N.-R. June 12.

Md., Baltimore—June 18, by Bd. Awards, motor-operated pump and c.i. pipe in Sludge Pumping Station 2, at Back River Sewage Treatment Wks. B. L. Crozier, City Hall, highways engr.

D. C., Wash.—June 30, at office Washington Suburban Sanitary Comn., Evans Bldg., New York Ave. ,16,500 ft. 6- to 18-in. sewers, etc. R. B. Morse, Hyattsville, Md., engr.; adv. E. N.-R. June 12.

W. Va., Wheeling — See "Streets and Roads."

La., Shreveport—June 19, at office B. W. Marston, pres., 601 Ardis Bldg., sanitary sewer, disposal plant, curb, pavement and storm sewer in Shreveport Country Home Assn. Subdivision, near here. C. D. Evans, 308-309 Levy Bldg., consult. engr.; adv. E. N.-R. June 12.

O., Massillon—See "Streets and Roads."

Mich., Grand Rapids—June 30, at office Director Pub. Serv., City Hall, First St. Relief Sewer Project Contr. R-1. F. H. Locke, city mgr.; adv. E. N.-R. June 12.

Ark., El Dorado — See "Streets and Roads."

Tex., Dallas—J. P. Stephenson, c/o Koch & Fowler, engrs., Central Bank Bldg., taking bids 18- to 24-in. tile sewer in Midway Rd. $75,000.

Calif., Fresno—City Council taking bids, 10,155 lin.ft. 6 in. vitr. sewer, 30 manholes, 42 lampholes, in various sections. W. Stranahan, city engr.

Calif., Burbank — June 24, by City Trustees, 37,921 ft. 8- to 24-in. vitr. pipe, one rein.-con. Imhoff tank, 13,150 ft. 8- to 14-in. c.i. pipe, 3 pumping stations, pumps, motors. Olmsted & Gillelen, Hollingsworth Bldg., Los Angeles, engrs. Noted Mar. 27.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelman, boro. pres., Boro. Hall, **(e.e. means engineers estimate)** from Booth & Flinn Ltd., Green and Tompkins Aves., repairing relief sewers in Green, Lewis and Marcy Aves., etc., $198,180; from Manmill Constr. Co., 2035 Douglas St., sewers in 65th St. 83.5% (e.e. $13,876) 68th St. 85.8% ($5,394) 7th Ave. 92.5% ($1,328) 12th Ave., 95% ($1,264); from S. Coenzo, 678 Glenmore Ave., East 32nd St. 84.75% ($11,779); from Tomasetti & Co., Inc., 1133 60th St., Colonial Rd. 83% ($7,038); from C. F. Vacharas, 645 40th St., 9th Ave., 111% ($1,852); from R. Iovino, 678 Glenmore Ave., Mansfield Pl. 75% ($1,400). Noted May 29.

N. J., Sayreville—Boro. Council, completing sewerage system from L. Gilbert, Bound Brook, $99,145. Noted May 22.

Pa., Phila. — Delaware River Bridge Joint Comn., Widener Bldg., sewers for bridge over Delaware River between here and Camden, N. J., Contr. 16, from Lombardi Co., Inc., Lincoln Bldg., $173,464. Noted May 22.

O., Euclid—Sewers in Bliss Rd., from C. W. Jackson, 1318 East 84th St., Cleveland, concrete pipe $193,781, brick $218,828, segment $215,178.

Mich., Detroit—Dept. Pub. Wks., Eaton Ave. Arm West of Livernois Ave. Sewer, from A. Rossi, 1337 Brady St., $36,668; Eaton Ave. Arm East of Wyoming Ave. Sewer and Mack Ave. Arm East of Ashland Ave. Sewer, from J. Rossi, Detroit, $38,651 and $27,324 respectively; Harper Ave. Arm West of Bedford Ave. Sewer from J. A. Mercier, 616 Hammond Bldg., $17,640; Lateral 4126, from Michigan Constr. Co., Detroit, $6,320, Lateral 4128, from Detroit Drainage Constr. Co., 400 Penobscot Bldg., $19,227; Lateral 4139, from Central Constr. & Eng. Co., Detroit, $4,841; Lateral 4141, from Western Constr. Co., 1208 Ford Bldg., $2,290. Noted May 22.

Ark., Pine Bluff — Jefferson Co. Sewer Dist. 1, 63,962 ft. 6- to 15-in. clay sewer 204 manholes, 8 flush tanks, etc., from Rowan & Rickard, Oklahoma City, Okla., $67,425, with disposal plant, $85,225. Noted May 5.

Mo., St. Louis—For Sect. A, Ohio-Montrose Public Relief Sewer, from United Constr. Co., Pontiac Bldg., $301,861, engrs. est. $305,000; Sect. B, North Baden Public Sewer, from G. G. Prendergast & Co., 6157 Wagner Ave., $174,769, engrs. est. $208,000. Noted May 8.

Calif. Irvington — Irvington Sanitary Sewer Dist., 7½ mi. 6- to 12-in. sanitary sewer, from Oakland Sewer Constr. Co., 1003 85th Ave., Oakland, $33,109. Noted May 15.

Calif., Niles—Niles Sanitary Dist., disposal system, from Deuble & Garden, 386 15th St., Oakland, $39,975.

Calif., San Diego—Sewerage system, Mission Beach St., 27,945 lin.ft. 6 in., 5,470 lin.ft. 10 in., 6,781 lin.ft. 12 in. concrete pipe, 127 manholes, 6 flush tanks, one settling tank, 3 pumping stations, 1,200 lin.ft. c.i. outfall pipe, from Downer & Mero, 401 16th St., Richmond, $159,016. Noted May 22.

CONTRACTS AWARDED

Conn., Hartford—Trunk sewers in Wells and East Sts., to N. C. Casciano & Co., 132 Temple St., $30,412. Engrs. est. $35,000.

N. Y., Long Island City—M. E. Connolly pres. Queens Boro, Queens Subway Bldg., to Kennedy & Smith, Inc., 93 Amity St., Flushing, sewer in National Ave., etc., $4,011; to Green Contg. Co., 737 Vernon Ave., Astoria, sewer in Lake St., Way and Roosevelt Aves., $3,115; to Johnson & McHugh, 37 Britton Ave., Elmhurst, sewer in 146th St. (Brewster Ave.), $9,185; to J. Gallo, 203 Division St., Brooklyn, sewer in 95th St., $30,732, and sewer in Sandol St., $60,136; to D. A. Gross, 8515 Fulton St., Woodhaven, sewer in 92nd St., $10,372. Noted June 5.

Ala., Birmingham—Sanitary and storm sewers, to McIntosh Co., Oklahoma City, Okla., $251,609. Noted Jan. 24.

Miss., Hollandale—Sanitary sewers, incl. manholes, tanks, etc., to M. H. Ellis, Clarksdale, $14,039; furnishing clay sewer products, to F. R. Thomas & Co., Central Bank Bldg., Memphis, Tenn. Noted May 15.

Ill., Astoria—For 27,550 ft. 8 and 10 in. sewers, 74 manholes, etc., in general streets, to V. E. Taylor & Co., Webster Groves, Mo., $33,574. Engrs. est. $41,235. Noted June 5.

Wyo., Casper—See "Streets and Roads."

Tex., Lubbock—For 16- to 36-in. tile and 36- to 78-in. monolithic storm sewers in various streets, to Panhandle Constr. Co., Lubbock, $208,354.

Okla., Oklahoma City—For 9,600 lin.ft. 8 in. vitr. clay lateral sanitary sewers in Parkview, Shaw Heights, Hillcrest and Isle View Dists., to Municipal Excavator Co., 200 East Main St., $28,064. Engrs. est. $30,000.

Wash., Seattle — Bd. Pub. Wks., clay sewers in Oregon St., et al., to H. Pederson, Alaska Bldg., $352,552. Engrs. est. $316,936. Noted May 29.

Ont., Toronto—Dept. Pub. Wks. will build 1½ mi. 6 ft. brick and rein.-con. trunk interceptor sewer, by day labor. $130,442. R. C. Harris, city engr.

Bridges

PROPOSED WORK

Mass., Dorchester (Boston P. O.)—City of Boston plans rearranging and rebuilding bridge between Lincoln and Dickens Sts., (carrying Old Colony R.R. tracks), to 70 ft. width for street, here. $75,000. F. H. Fay, chn. City Planning Bd., Boston.

Pa., Bridgewater—Bucks Co. (Doylestown), plans 3 span concrete bridge over Neshaminy Creek, near here. $75,000. J. S. Roberts, Jr., 205 Jefferson St. Bristol, engr.

Pa., Turtle Creek—Alleghany Co. (Pittsburgh) making plans 700 ft. steel bridge with aproaches. 24 ft. roadway, 6 ft. sidewalk, over Turtle Creek from Turtle Creek Boro to North Versailles Twp., here. $264,000. W. F. Brown, City-County Bldg., Pittsburgh, engr.

North Carolina — See "Streets and Roads."

Tenn., Maryville—City and Blount Co. making plans rein.-con. viaduct and 2 bridges. $150,000. Blount Co. appropriates $50,000 toward cost. Freeland, Roberts & Co., Independent Life Bldg., Nashville, engrs.

Mich., Belleville — See "Streets and Roads."

Tex., Palestine—See "Streets and Roads."

Calif., Sacramento — See "Streets and Roads."

Ont., Bridgeburg—Toronto, Hamilton & Buffal Ry., Hamilton, plans bridge, probably steel, here. $100,000. H. Malcolmson, supt. Private plans.

Ont., Owen Sound—Grey Co. plans two 10 ft., one 26 ft., one 18 ft., one 20 ft., one 25 ft., two 30 ft. and one 84 ft. rein.-con. bridges, 16-20 ft. roadway. $45,000. R. C. McKnight, engr.

BIDS DESIRED

Pennsylvania—July 1, at office W. C. Irvin, controller Montgomery Co., rein.-con. bridge over Schuylkill River, on De-Kalb St. between Norristown and Bridgeport. J. B. Long, 59-61 Beyer Arcade, consult. engr.; adv. E. N.-R. June 12.

Virginia—See "Streets and Roads."

Louisiana—July 2, by State Hy. Comn., Reymond Bldg., Baton Rouge, 53 creosoted pile trestle bridges, Federal Aid Project 127-D, Tangipahon and St. John the Baptist Parishes. J. M. Fourmy, state engr.; adv. E. N.-R. June 12.

Indiana—June 17, by J. D. Williams, dir. Indiana State Highway Comn., Capitol Bldg., Indianapolis, **(r.c.s. means rein.-con. slab, r.c.b: rein.-con. box, s.t. steel truss, r.c.g. rein.-con. girder, r.c.a. rein.-con. arch, p.g. plate girder, and s.t.a.r. steel truss and abutment repairs)**, one 20 ft. and one 16 ft. r.c.s., two 50 ft. r.c.a., in Fountain Co.; one 14 ft. r.c.s., one 4 x 4, and one 8 x 6 ft. r.c.b., one 84 ft. s.t. in Wells Co.; two 28 ft. and one 18 ft. r.c.g., one 18 ft. r.c.s., one 31 x 6 ft. s.t. in Noble Co.; one 84 ft. s.t. in Blackford Co.; one 84 ft. s.t., one 20 ft. and one 14 ft. r.c.s. in Jay Co.; one 20 ft., one 16 ft. and two 12 ft. r.c.s., one 77 x 8 ft. s.t. in Boone Co.; one 30 ft. and one 20 ft. r.c.a. in Monroe Co.; two 18 ft. and one 12 ft. r.c.s. in Jefferson Co.; one 198 ft. s.t. in Gibson Co.; two 40 ft. and one 75 ft. p.g. in Wayne Co.; one 48 ft. s.t.a.r. in Jackson Co.; two 50 ft. r.c.a. in Orange Co.; three 32 ft. r.c.g. in Harrison Co.

Ia., Logan—June 17, by Auditor Logan Co., 3 I-beams, 3 pony trusses, 1 high truss and 10 culverts. To exceed $25,000. T. A. Cherry, co. engr.

Minnesota—See "Streets and Roads."

Minnesota—June 24, by State Hy. Dept., St. Paul, Bridge 4285, 140 ft., and Bridge 4286, 100 ft., both concrete, also raising Bridge 4287, all on State Project 3-45, Sect. 1, Federal Aid Project 363, between Sauk Center and Freeport. $28,000. State Hy. Dept., engrs.

Arkansas—June 16, by State Hy. Comn., Little Rock, steel truss bridge with one 120 ft. and two 25 ft. concrete approaches, over Patarm Creek, Faulkner and Pulaski Counties, 115,950 lb. structural steel, etc. R. C. Limerick, highway engr.

California—June 30, by State Highway Comn., Sacramento, 398 ft. rein.-con. bridge over Truckee River, 21 ft., Nevada Co. R. M. Morton, state highway engr. Noted Apr. 10.

Calif., Bonsall—July 3, by Bd. Supervs. San Diego Co., San Diego, 650 ft. concrete bridge with five 106 ft. arches, over San Luis Rey River, near here. $100,000 to $125,000. E. R. Childs, co. surv. Noted Mar. 20.

BIDS RECEIVED

Mass., Quincy—See "Streets and Roads."

New Jersey—State Hy. Comn., Trenton, June 2, 3 concrete bridges with 14 ft. spans, 30 ft. roadway, and removing 2 existing bridges, on Route 5 Sect. 11 between Belvidere and Delaware, Warren Co., from J. Stem, 88 North 2n dSt., Stroudsburg, Pa., $25,800. Noted May 22.

Pennsylvania—State Dept. Hys., Harrisburg, 11 spans, 1,362 ft. concrete arch bridge over West Branch Susquehanna River, Route 25, Northumberland, Snyder and Union Counties, from Whittaker & Diehl Co., Union Trust Bldg., Harrisburg, $409,580.

O., Milford—Hamilton Co. (Cincinnati), June 6, substructure for 260 ft. steel truss bridge from E. M. Scully, 1431 Eastwood Ave., Columbus, $64,860, engrs. est. $70,500; superstructure incl. 800 cu.yd. 1:2:4 concrete and 1,000 ft. concrete piling, from D. P. Foley, 3209 Boudinot St., Cincinnati, $25,470, engrs. est. $28,300. Noted May 15.

Tex., Alice—See "Streets and Roads."

Wash., Tacoma — Pierce Co., May 23, 103 ft. girder span bridge on concrete piers, etc., over main line of Northern Pacific Railway, from S. C. Erickson, Provident Bldg., $25,675. Engrs. est. $25,000.

Bridges (Continued)

California—State Highway Comn., Sacramento, bridge over Dry Creek near Galt, Sacramento and San Joaquin Counties, new floor, paving, etc. (1) type A wearing surface (2) type B wearing surface, from Davison & Nicolson, 31 South Sutter St., Stockton, (1) $16,436; from M. B. White, Stockton, (2) $15,252; engrs. ests. (1) $24,438 (2) $24,438; bridge over Klamath River, Del Norte Co., from H. E. Doering, 568 Maple St., Portland, Ore., $354,685. Noted May 8.

CONTRACTS AWARDED

Maine—State Hy. Comn., Augusta, Emerson Bridge, 1 concrete clear span, 60 ft., over Miassalonsku Stream, in Waterville, to Greene & Wilson, Waterville, $24,545; Thomas Pond Bridge, **one 15 ft. 3 in. con**crete slab and concrete abutment over outlet of Thomas Pond in Casco and Raymond, also one 14 ft. concrete span bridge over Jordan River in Raymond, to E. A. Dekin, Howland, $1,965 and $11,109 respectively. Noted May 28.

Vermont — T. W. Dix, ch. engr. State Hy. Dept., Montpelier, bridge known as Gassetts Overpass, nine 25 ft. and two 75 ft. spans, steel and concrete, Federal Aid Project 54A, in Chester, to Earl & Merry, Rutland, $60,585; one 163 ft. and one 73 ft steel span bridge on Main St., in Waterbury, Federal Aid Project 61A, to Pittsburg-Des Moines Steel Co., 50 Church St., New York City, $33,711. Noted May 22.

North Carolina — State Hy. Comn., Raleigh, **(S. P. means State Project)** rein.-con. bridge over Deep River at Randleman, S. P. 580-B, Randolph Co., to Dameron & Sparkling, Smithfield; rein.-con. bridges and culverts on S. P. 134, Gates Co., to Gwathmey-Saddler Co., Norfolk, Va., $32,173, S. P. 888, Yancey Co., to Booze, Boyd & Co., R. F. D. 1. Raleigh, $28,707, on S. P. 212, Craven Co., to Pittsburgh-Des Moines Steel Co., Richmond, Va., $45,902, S. P. 422, Franklin Co., to Kuehn, Englehardt & Thorn, Kinston, $34,725. Noted June 5.

North Carolina—See "Streets and Roads."

Ohio—See "Streets and Roads."

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, one 100 ft. steel and nineteen 26 ft. concrete span bridge, 20 ft., over Harpeth River, Federal Aid Project 205, Cheatham Co., to Montgomery & Parker Contg. Co., Rockport, Ind., $62,050. Noted May 1.

Tenn., Nashville—Will repair, etc., bridge over Cumberland River, at Sparkman and Jefferson Sts., by day labor, under supervision of Freeland, Roberts & Co., engrs., Independent Life Bldg. To Nashville Building & Supply Co., Ft. Fatherland, furnishing cement for same $3.02 bbl. incl. cost of testing; to W. T. Hardison & Co., Shelby Ave., sand at $2.30 per ton, gravel at $1.60 per ton; to Wilson Wesner & Co., 177 2nd Ave. N, reinforcing bars at $2.585 lb., to Ryan Sales Co., Stahlman Bldg., expanded metal at $2.55 per 100 sq.ft. Total cost $300,000. Noted May 15.

Michigan — State Hy. Dept., Lansing, Bridge 500404, one 90 ft. through concrete girder, 558 cu.yd. concrete and 94,040 lb steel, to Pittsburgh-Des Moines Steel Co., 659 Book Bldg., Detroit, $27,292.

Michigan — State Hy. Dept. at office Comrs. Chippewa Co., Saulte St. Marie, Bridge 171601, one 60 ft. concrete girder and Bridge 171602, one 28 ft. I beam, 548 cu.yd. concrete, 43,689 lb. steel, etc., to Hill & Belknap, East Tawas, $24,141. Noted May 15.

Minnesota — State Hy. Dept., St. Paul, bridge on State Project 14-23, Federal Aid Project 355, also Bridge 4181, 23 ft., and Bridge 4182, 30 ft., concrete, together with culverts, on State Project 15-30, Div. C, Federal Aid Project 341, to Independent Bridge Co., Metropolitan Life Bldg., Minneapolis, $4,990 and $8,157 respectively; 5 bridges on State Project 64-22, Federal Aid Project 353, 30- to 46-ft. long, to J. H. Atkins, Barnesville, $16,819; 1 bridge on same Project to Crookston Cement Products Co., Crookston, $3,099. Noted May 15.

Minn., Duluth — H. W. Tischer, city comr., 280 ft. concrete bridge 16 ft. over Lester River, to C. R. McLean, 515 South 21st Ave. E., $52,644.

Kan., Minneapolis -- See "Streets and Roads."

Tex., Austin—See "Streets and Roads."

Tex., Clarendon—Donley Co., 312 ft. steel truss bridge with 9 spans, I-beam approaches, two 18 ft. concrete piers, bents, etc., over Salt Fork of Red River, to Austin Bridge Co., 1813 Clarence St., Dallas, $17,958. Engrs. est. $25,000. Noted June 5.

Oklahoma—State Hy. Dept., Oklahoma City, bridges on Wister-Talihina Rd., Federal Aid Project 116-E and F, LeFlore Co., 40,000 lb. fabricated steel, 105,348 lb. reinforcing, 950 cu.yd. 1:2:3 concrete, 1,148 cu.yd. rubble masonry, to Green Beekman Co., 1200 West 11th St., Oklahoma City, $49,509. Engrs. est. $50,000. Noted May 5, under "Streets and Roads."

Calif., Merced—See "Excavation, Drainage, Irrigation."

Calif., Santa Cruz — City, 3 rein.-con. bridges, to W. L. Proctor, Santa Rosa, $29,681.

Dams

PROPOSED WORK

Calif., Los Angeles — Los Angeles Co. Flood Control Dist. making plans Santa Anita Canyon Dam, 225 ft. high, to impound 1,500 acre ft. $585,000. J. W. Reagan, Hall of Records Bldg., engr.

BIDS DESIRED

R. I., Providence — June 25, at office Water Supply Bd. City Hall, concrete dam at Pawtuxet, in Cranston and Warwick. B. T. Potter, chn.; adv. E. N.-R. June 12.

Ariz., Williams—See "Waterworks."

BIDS RECEIVED

Calif., Merced—Merced Irrigation Dist., Exchequer Dam and power-house (1) district to pay contractor for cement supplied by him (2) district to furnish cement to contractor (3) district to furnish cement and aggregates to contractor **(a)** includes estimates of cost of work necessary to complete dam and power house, such as power equipment, valves and machinery, contracts for which are to be awarded later, from L. S. and G. F. Atkinson, Chapman Bldg., Los Angeles (2) $2,755,003 **(2a)** $5,451,063 (3) $1,883,557 **(3a)** $5,428,617; from F. Rolandi, 550 Montgomery St., San Francisco (1) $3,630,408 **(1a)** $5,341,968 (2) $2,603,408 **(2a)** $5,286,968 (3) $1,757,128 **(3a)** $5,302,188; from Utah Constr. Co., Phelan Bldg., San Francisco (3) $1,854,541 **(3a)** $5,399,609; from Bent Bros., 1714 Eagle St., Los Angeles (1) $3,448,079 **(1a)** $5,172,139 (2) $2,452,079 **(2a)** $5,148,139 (3) $1,733,671 **(3a)** $5,278,731. For 760,000 tons concrete aggregate for dam and power house, 25,000 tons aggregate for railroad and 50,000 tons aggregate for railroad, etc., from Chatham & Wolfsen, Turlock, $0.475 per ton plus freight; from C. R. Adam, Merced, $1.08 per ton f.o.b. Detwiler. Noted May 22.

CONTRACTS AWARDED

Vt., Quechee—A. G. Dewey Co., Dewey Mills, constructing dam, to H. P. Cummings Constr. Co., Ware, Mass., $50,000.

Railways

PROPOSED WORK

Oklahoma—Kansas City Southern Ry. Co., 11th and Wyandotte Sts., Kansas City, Mo., making surveys new line from Watts northwest toward Grove, here. $100,000 or more. A. N. Reece, ch. engr.

Ontario — York Twp., 40 Jarvis St. Toronto, takes bids about June 13, for about 5 mi. electric street railways in Rogers Rd., Dundas St., Oakwood and Eglington Aves. $1,250,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs.

Quebec—Canadian Natl. R.R., Ottawa, Ont., plans about 20 mi. branch line from St Prosper to Three Rivers. $320,000. A. E. Doucet, Quebec, engr.

BIDS RECEIVED

California—See "Dams" under Merced.

California—Merced Irrigation Dist., Merced, relocating 16.79 mi. Yosemite Valley R.R. from Merced Falls to Detwiler **(A)** for work under Schedules 1, roadbed, 2, tunnels, 3, trestles, 4, tracklaying, **(B)** total incl. estimates of costs for remaining work, bridges, etc., from F. Rolandi, 550 Montgomery St., San Francisco, **(A)** $1,447,681 **(B)** $3,415,362. Noted May 22.

Excavation, Drainage, Irrigation

PROPOSED WORK

Calif., Richvale — D. D. 100, making plans raising west levee Cherokee canal, 60,000 cu.yd. earthwork. F. F. Robinson, Chico, consult. engr.

BIDS DESIRED

Massachusetts—June 19, by Dept. Pub. Wks., Div Waterways. State House, Boston, dredging about 21,500 cu.yd. in Manchester Harbor. W. F. Williams, comr.

Mo., St. Louis—Stadelin Bros. Co., 823 North 4th St., taking bids 150,000 cu.yd. grading. Bids later on 100,000 cu.yd. additional grading Arsenal St. and Watson Rd. Private plans.

Ark., Texarkana—June 20, by Bd. Comrs, McKinney Bayou D.D. Miller Co., rein.-con. sluiceway containing four 6 x 6 openings. Morgan Eng. Co., Goodwin Institute, Memphis, Tenn., engrs.

Tex., Kaufman—June 28, by J. L. Scales, aud. Kaufman Co. Levee Dist. 4, 1,000,000 cu.yd. excav. in 12 mi. ditch, 80,000 cu.yd. levee repairs, 1,600 ft. timber trestle, two 24 in. centrifugal pumps, oil engines, etc. B. F. Williams, Rosser, engr. $30,000 plus.

BIDS RECEIVED

Mass., Orleans—Dept. Pub. Wks. Div. of Waterbury & Public Lands, State House, Boston, dredging about 44,000 cu.yd. in Nanset Harbor, Town Cove, Namequoit River and Pleasant Bay, here, from W. E. Burke, 28 School St., Boston, $20,252.

New York—R. K. Fuller, comr. Canals & Waterways, 55 Lancaster St., Albany, excavating in canal channel at various locations between Oriskany and Oneida Lake, and constructing settling basin, Nine Mile Creek, Contr. M-2, from Empire State Dredging Co., 233 Bway., New York, $11,080.

New Jersey—State Bd. Commerce & Navigation, Trenton, June 3, dredging beach channel in Little Egg Harbor Bay, Ocean Co., from Delaware Dredging Co., Real Estate Title Bldg., Phila., Pa., $0.248 per cu.yd. Noted May 22.

Wis., Jefferson—J. W. Puerner, secy., Jefferson Co. Farm Drainage Bd. No. 3, May 29, 154,347 cu.yd. earth and 1,395 cu.yd. rock excav., 3,000 lin.ft. 20 in. tile, from C. B. McNamara Constr. Co., 670 Central Ave., Dubuque, Iowa, $51,000. Noted May 22.

CONTRACTS AWARDED

New York—R. K. Fuller, comr. Canals & Waterways, 55 Lancaster St., Albany, to Amer. Pipe & Constr. Co., Amsterdam, furnishing and placing bank protection along Erie Canal, from 1 mile east of Schenectady to Canajoharie, Contr. 221, $106,945, between Canajoharie and Lock 19, Contr. 222, $103,165; to Dunbar & Sullivan Dredging Co., 2212 Dime Bank Bldg., Detroit, Mich., excavating in canal channel at Medina, Lockport and Tonawanda, Contr. M-3, $85,750, excavating tail race for Crescent Power House, etc., Crescent, Contr. A-4, $27,244.

Missouri—Missouri Pacific Ry., Ry. Exch. Bldg., St. Louis, trestle work, filling, etc., on White River division between Crane, Mo., and Yellville, Ark., incl. 200,000 cu.yd. steam shovel work, 1,200 cu.yd. concrete, etc., to List & Gifford, Merchants-Laclede Bldg., St. Louis. Engrs. est. $150,000.

Wash., Olympia—Port Comn., dredging 3,500 ft. channel, 30 ft. deep and 250 ft. wide, turning basin at inner end of channel and filling tidelands, to Tacoma Dredging Co., Tacoma, $144,500.

Calif., Merced—Merced Irrigation Dist., to Merced Concrete Pipe Co., 16th and H Sts., 20 in. concrete pipe $1.14, 30 in. $2.75, 36 in. $3.25, 42 in. $6.50, 48 in. $7, 24 in. concrete culvert $2.75; to J. J. Peters and J. M. Ennis, Merced, about 140,000 ft. lumber in 26 bridges, 12 drops, 15 checks, 38 sidegates, $28. Noted May 22.

Streets and Roads

PROPOSED WORK

Massachusetts — Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, plans highway known as Northern Traffic Route from Boston to Wellington Bridge in Somerville, via Cambridge. $2,400,000. J. R. Rablin, engr.

Mass., Boston—City Planning Bd., plans widening Kneeland St., from Washington St. to Atlantic Ave. $1,200,000. F. H. Fay, chn.

Mass., Boston—City plans widening Tremont St., from Arlington Sq. to Stuart St., 80 ft. $1,200,000. F. H. Fay, City Hall, chn. Planning Bd.

Mass., Brighton (Boston P. O.)—City of Boston plans widening and improving Faneuil St., here. J. F. Sullivan, secy. Street Laying Out Dept. $300,000.

Mass., Brighton (Boston P. O.)—City of Boston plans constructing of various streets, here. To exceed $25,000. J. F. Sullivan, secy. Street Laying Out Dept., City Hall, Bcston.

Mass., Dorchester (Boston P. O.)—City Planning Bd., Boston, plans widening Adams St. between Park St. and Dorchester Ave., here. $100,000. F. H. Fay, chn.

N. Y., Mohawk—Voted $26,000 bonds for paving work.

Streets and Roads (Continued)

N. Y., Utica—Common Council, plans to pave Fairview Heights, Hawthorne Ave., Bacon and Oswego Sts. To exceed $25,000. A. Sisti, Jr., city clk.

N. J., Sayreville—Middlesex Co. (New Brunswick), plans asphalt paving 1.6 mi. Main St., here. M. F. Larson, Perth Amboy, engr.

W. Va., Beckley — Election June 24, $100,000 bonds for paving, sewers and fire equipment. B. H. Ashworth, city recorder.

W. Va., Clarksburg—Harrison Co. voted $47,000 bonds for brick paving 2.5 mi. Guards Residence to Gregorys Run Rd.; $47,500 for 2 mi. Twin Bridges to M. A. Dennisons Farm Rd.; $100,000 for 4 mi. Eagle Dist. line up Ten Mile line Rd.; $95,000 for 4 mi. Coal Dist. line to Catfish Run Rd., all in Sardis Dist. G. L. Coyle, Clarksburg, engr.

North Carolina—State Hy. Comn., Raleigh, rejected bids, grading, etc., 7.265 mi. State Project 891, Yancey Co., $120,000, 11.83 mi. State Projects 111 and 117, Camden and Currituck Counties, $66,800; grading and concrete or asphaltic paving 13.392 mi. State Project 791-B, Yadkin Co., $448,600. Will readvertise. C. M. Upham, Raleigh, highway engr. Noted June 5.

North Carolina—State Hy. Comn., Raleigh **(S. P. means State Project)**, making plans soon takes bids concrete or asphaltic paving 9 mi. S. P. 147-B, Hertfort and Bertie Counties, $260,000, 16.5 mi. S. P. 763-B, Surry Co., $295,000; grading and waterbound macadam paving 9.9 mi. S. P. 646-B, $150,000, and 5 mi. S. P. 648-B, $75,000, both Lincoln Co.; 8.7 mi. waterbound macadam on old Project 963, S. P. 967, Macon Co., $90,000; grading and rein.-con. bridging 9 mi. S. P. 900, Buncombe Co., $60,000, 10.8 mi. S. P. 265, $75,000, and 7.2 mi. S. P. 266, $50,000, both Pamlico Co., 13.7 mi. S. P. 433, Granville Co., $95,000, 9.2 mi. S. P. 474, Vance Co., $60,000. C. M. Upham, highway engr.

N. C., Edenton—Had plans prepared asphaltic paving on concrete various streets. $35,000. Drane & Smith, Charlotte, engrs.

Fla., Hillcrest Heights (Babson Park P. O.)—Making plans paving 2 mi. Poinella, Palm, Catherine and Oak Sts., 24 ft., bituminous wearing surfacing on 6 in. clay or limestone rock. $31,000. J. W. Turner, Lakeland, engr.

Fla., Kissimmee—Election June 28, $75,500 bonds improving various streets. Total cost $226,500. Probably Ramsey & Herndon, Kissimmee, engrs.

Fla., Tampa—Hillsborough Co. making plans paving about 5 mi. streets in Virginia Park, 24 ft., sheet asphalt on 6 in. compressed rock. A. B. Primm, Courthouse, engr.

Miss., Quitman—Plans election to vote on $100,000 bonds graveling 30 mi. roads, 18 ft. F. C. Dietzer, Jackson, engr.

La., Shreveport — See "Floating Equipment, etc.," under "Unclassified."

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, takes bids about July 2, grading approximately 12 mi. Huntingdon-Jackson-McLemoresville Rd., 18 ft., Carroll Co. incl. several rein.-con. bridges. J. G. Creveling, highway comr.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, making surveys grading, etc., approximately 10 mi. Milan-Weakley Co. line Rd., Gibson Co. J. G. Creveling, highway comr.

Tenn., Milan — Plans paving various streets. $150,000 to $200,000. Engineer not selected.

Tenn., Nashville—June 20, by Bd. Pub. Wks., surfacing Maxwell House Alley and Belcourt Ave., granite block, Villa St., 28th and Shelby Aves., asphaltic concrete, Villa and Bate Sts., Capers, 25th and 28th Aves., cement concrete, sidewalks on Vanderbilt Pl., Belcourt, 12th and 18th Sts.; grading and asphalt paving Bates, Capers, 16th and Shelby Aves. W. W. Southgate, city engr. Noted Feb. 21.

Kentucky—State Hy. Dept., Frankfort, plans reconstructing and surfacing Owensboro-Dixon Rd., Smith Panther Creek-Pleasant Ridge Rd., Owensboro-Browns Valley Rd., Daviess Co.; reconstructing 7 mi. Bardstown-Lawrenceburg Rd., State Project 18, and 6 mi. Bardstown-New Haven Rd., both 18 ft., State Project 3, Nelson Co.; grading 4 mi. Greensburg-Columbia Rd., 24 and 28 ft., Green Co., 5.5 mi. Danville-Stamford Rd., 24 and 28 ft., State Project 22, Lincoln Co., 18 mi. Tomkinsville-Allen Co. line Rd., 24 and 28 ft., State Project 37, Monroe Co., Jeff-Knott Co. line Rd., Perry Co.; paving 5.6 mi. Greensburg-Summerville Rd., 18 ft., Green Co. J. S. Boggs, highway engr.

Ky., Henderson—Plans paving and oiling various streets. $50,000. C. F. Hall, mayor.

O., Zanesville — Muskingum Co. soon takes bids improving 4 mi. East Fultonham-Philo Rd., 20 ft., macadam. $80,000.

O., Zanesville—Comrs. Muskingum Co. take bids in July, improving 3.92 mi. Philo Rd., 20 ft., probably concrete. $120,000. Federal Aid to appropriate $55,000 and State $45,000 towards cost.

Ind., Bluffton—Wells Co. plans grading and graveling 2.7 mi. Bowman Rd., 20 ft. $28,751. C. Davenport, engr.

Ind., Brownstown—Plans concrete paving 6,714 sq.yd. Walnut St. $28,849. Address city engineer.

Ind., Crown Point—Lake Co., plans concrete paving 62,154 sq.yd. Gleason Rd., $162,000, 108,190 sq.yd. Simpson Rd., $280,500; grading and graveling 2 mi. Bothwell Rd., 20 ft., $26,700. C. K. Wallace, Crown Point, engr.

Ind., Elkhart — Plans hard surfacing 0.75 mi. Kilbourn St., 30 ft. $27,500.

Michigan — State Hy. Dept., at office Comrs. Washtenaw Co., Ann Arbor, takes new bids about June 23, grading and surfacing 0.52 mi. State Trunk Line Rd. 92-2, 3,763 cu.yd. excav., 6,882 sq.yd. concrete, bituminous concrete or sheet asphalt. G. C. Dillman, Lansing, ch. engr. Former bids rejected. Noted June 5.

Michigan — State Hy. Dept., Lansing, plans grading and surfacing 0.498 mi. State Trunk Line Rd. 71-1, Shiawassee Co., 5,196 cu.yd. excav., 5,860 sq.yd. concrete. G. C. Dillman, ch. engr.

Mich., Belleville—Made plans 25,000 cu. yd. embankment, highway fill and concrete abutments for bridge, incl. about 265 cu. yd. rein.-con., 75 piles 15 to 25 ft. long, and road for Detroit Edison Co. No. 1. $25,000. G. S. Williams, Cornwell Bldg., East Huron St., Ann Arbor, engr.

Mich., Detroit—Making plans paving with 3½ in. sheet asphalt on 8 in. concrete 2,900 sq.yd. Livernois Ave. $17,530, 3,800 sq.yd. Renville Ave. $22,460, 6,200 sq.yd. Main St. Sect. 1, $36,770, 4,100 sq.yd. Devereaux Ave. $24,440, 2,050 sq.yd. Beechton Ave. $12,260, 1,980 sq.yd. Carrie Ave. $11,880, 6,900 sq.yd. Cloverlawn Ave. $47,350, 6,900 sq.yd. Roselawn Ave. $47,350, 6,900 sq.yd. Northlawn Ave., $47,350, 11,200 sq.yd. Schoolcraft Ave. $67,160, 3,800 sq.yd. Marion Ave. $22,360, 5,700 sq.yd. Lakepointe Ave. $34,130, 3,400 sq.yd. Lawton Ave. $20,510, paving with one course 6 in. concrete 3,750 sq.yd. in 3 alleys $11,010. G. Jerome, city engr.

Mich., River Rouge—Making plans paving approximately 29,000 sq.yd. Polk, Stoner and Alexander Aves., one course 7 in. concrete. $120,000. M. L. Brown & Son, 403 Capitol Bldg., Detroit, engr.

Ill., Chicago — Voted $10,000,000 bonds improving South Water St., $1,000,000 Roosevelt Rd., and $1,000,000 South Park Ave.

Ill., Morton—Making plans street paving which will widen Route 9 from Bloomington to Peoria, to width 32 ft. to 53 ft., in town. State will pay for 18 ft. of pavement. $100,000. Holbrook, Warren & Van Praag, Decatur, engrs.

Wis., Hudson—Plans paving about 12,000 sq.yd. Vine St. between 2nd and 9th Sts., during 1925. $30,000. L. P. Wolff, 90-3 Globe Bldg., St. Paul, Minn., engr.

Kan., Arkansas City—Soon takes bids grading and surfacing with 3 in. vertical fibre brick on 4 in. concrete and 1.5 in. sand cushion 12 blocks Washington, Adams, Van Buren, Jefferson, Monroe and Quincy streets.

Kan., Holton—Jackson Co. plans grading 6.25 mi. Federal Aid Project 251-A, 28 ft. $25,000. Western Eng. Co., Topeka, engrs.

Kan., Lawrence—Plans grading and concrete surfacing 3,900 ft. 19th and Massachusetts Sts., etc., 16 to 30 ft., and 600 ft. alley, 16 ft.

Kan., Minneapolis — Ottawa Co. soon takes bids grading, etc., 3.5 mi. Meridian Highway south of Bennington, 18 ft. L. B. Miller, Minneapolis, engr.

Kan., Olathe—Johnson Co. plans grading and surfacing 2.755 mi. Federal Aid Project 238-B, 18 ft.; with concrete or brick 6.267 mi. Federal Aid Project 238-D, 18 ft. E. C. L. Wagner, 608 Kemper Bldg., Kansas City, Mo., engr.

Kan., Osborne—Osborne Co. plans grading and surfacing with feather edge gravel, 4.273 mi. Federal Aid Project 170-E, 18 ft. E. E. Clark, co. engr.

Kan., Wichita—Plans curbing, guttering and paving Litchfield, Shirk, Wichita, Volustia, Morris, Roosevelt, Chautauqua and Lincoln Sts., concrete; Willow, Mentor, East and Pine Sts., asphaltic concrete; 3rd St., vitr. brick, Victor and Vassar Sts., sheet asphalt. P. L. Brockway, city engr.

Neb., Omaha—Plans to widen Lake St. to Cuming St. $94,000. H. Beal, City Hall, engr.

Neb., Wisner—Plans paving 12 blocks various streets. $40,000. Engineer not selected.

Missouri—State Hy. Dept., Jefferson City, plans grading 40.185 mi. roads, 34 ft., in Bates, Audrain, Bartow and Jefferson Counties, 59.474 mi. roads 30 ft. in Dade, Pettis, Worth, Douglas, Reynolds, Cape Girardeau, St. Francois and De Kalb Counties; gravel surfacing 9 mi. roads 12 ft. in Gasconade and Douglas Counties. B. H. Piepmeier, ch. engr.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, had preliminary plans prepared readjusting and replacing granite curbing where necessary and paving with asphalt, willite or warrenite on concrete Lindell Blvd., $200,600-$216,000, Kingshighway $94,700-$100,400, Eastgate St. $6,900-$7,200, Denvonshire St. $12,900-$13,600, Rosedale St. $18,800-$19,500, 9th St. $13,900-$19,400, 10th St. $12,200-$16,900, 11th St. $12,500-$17,500, Goodfellow St. $59,300-$72,800; grading and paving with concrete, vitr. brick, Kentucky rock asphalt, asphaltic concrete, warrenite, asphalt or willite on concrete, Montana St. $13,253-$17,550, Elmbank St. $18,800-$21,550. W. W. Horner, city engr.

Ark., Conway—Making preliminary plans grading and concrete surfacing 3 mi. College, Donaghy, Locust, East Main and Oak Sts., 18 to 30 ft.

Ark., Lake Village—Chicot Co. making preliminary plans grading and gravel surfacing 4 mi. Lake Route Rd. $40,000. Federal, State, etc., to appropriate toward cost. H. E. Cook, co. judge.

Tex., Amarillo—Potter Co. making plans grading and rein.-con. paving 1.04 mi. State Highway 33, 18 ft. $36,000. O. A. Seward, co. engr.

Tex., Anson—Jones Co. voted $100,000 bonds hard surfacing roads in Dist. 18-B, to supplement $200,000 bonds voted March 1. Address J. F. Lindsey, co. judge. Noted Mar. 13.

Tex., Boston—Bowie Co. voted $490,000 bonds hard type pavement on all highways in Precinct 1. J. B. Pirkey, co. judge.

Tex., Bryan — Plans standard paving various streets. $45,000. E. E. McAdams, Bryan, engr.

Tex., Centerville—Leon Co. election June 16, $140,000 bonds highway improvements in Rd. Dist. 6. W. D. Lacey, co. judge.

Tex., Chillicothe—Making plans permanent paving 4 blocks business streets, about 60 ft. $28,000. J. B. Nabors, Vernon, engr.

Tex., Coleman—Coleman Co. Precinct 1, defeated $100,000 bonds, graveling 12 mi. State Highway 7-A, 16 ft. W. E. Dickerson, co. engr. Noted Apr. 24.

Tex., Galveston—Election soon $350,000 bonds street paving and repairs. C. A. Holt, Jr., city engr.

Tex., Jourdanton—Atascosa Co. election June 21, $300,000 bonds highway construction. E. D. Scott, co. judge.

Tex., Marlin—Falls Co. voted $115,000 bonds grading and gravel surfacing 9 mi. Road Dist. 6, 16 ft. J. P. Wehrung, co. engr. Noted May 8

Tex., Munday—Knox Co. making plans paving 6 blocks Ernest St., 3 in. vertical fibre brick on 7 in. concrete. $25,000. Montgomery & Ward, 1016 City Natl. Bank Bldg., engrs.

Tex., Olney—Making plans standard paving 6 blocks various streets. $25,000. Montgomery & Ward, City Natl. Bank Bldg., Wichita Falls, engrs.

Tex., Palestine — Anderson Co. making plans grading, rein.-con., surfacing and bridging 10.7 mi. State Highway 43, east from here, 18 ft. $384,000. E. W. Davis, co. engr.

Tex., Port Arthur—Attorney General approved $170,000 bonds gravel and shell paving streets, $289.600 bonds asphalt paving streets. J. P. Logan, mayor.

Tex., Sweetwater—Nolan Co. takes bids after June 23, improving 15.5 mi. road between here and Mitchell Co. line, 18 ft., bituminous on macadam. $300,000. J. A. Focht, co. engr. Noted June 5.

Tex., Temple—Election June 28, $50,000 bonds permanent paving various streets. Total $200,000. M. Ramsay, Marshall, engr.

Okla., Kenton—Cimarron Co. plans grading 17 mi. Kenton-Mexhoma Rd., 18 ft.

Oka., McAlester—Plans grading and paving 6 blocks Jackson and Monroe Aves., 24 ft., 7,100 sq.yd. concrete. $28,000. F. Frazier, McAlester, engr.

Okla., Oklahoma City — Plans grading and paving 11 blocks 6th, Stonewall, Everst and Foushell Sts., 6,100 sq.yd. asphalt, 2,700 sq.yd. concrete, 6,100 lin.ft. curbing, 3.000 cu.yd. excav. $41,000. B. M. Hart, City Hall, engr.

Streets and Roads (Continued)

Okla., Sapulpa—Plans grading, curbing and paving 7 blocks Impvt. Dists. 70 and 71, 8,000 sq.yd. concrete. $35,000. F. E. Lawrence, Sapulpa, engr.

Calif., Berkeley — Plans paving Spruce St., Euclid and Arlington Aves., etc., concrete. To exceed $25,000. J. N. Eddy, city mgr.

Calif., Fresno—Fresno Co. plans highway from Sierras to Sea Highway. $100,000. C. P. Jensen, Cory Bldg., co. surv.

Calif., Los Angeles—Had plans prepared improving Division St. between Wollam St. and San Fernando Rd., 18,375 sq.ft. concrete, 138,897 sq.ft. 1½ in. on 3½ in. warrenite-bituminous, 8,267 ft. curb, 38,444 sq. ft. walks, 8,599 sq.ft. gutter, etc.; Sale Ave. between Ventura St. and San Luis Ave., 47,250 cu.yd. cut, 8,670 cu.yd. fill, 3,932 ft. heavy curb, 23,145 ft. light curb, 69,859 sq.ft. walks, ornamental lighting system, etc.; Soto St. between Medford and Griffin Sts., 9,581 sq.ft. 5 in. bituminous, 31,513 sq.ft. 6 in. concrete, 14,766 sq.ft. oil and roll, 6,755 ft. curb, 20,119 sq.ft. walks, 6,401 sq.ft. gutter, etc. J. A. Griffin, city engr.

Calif., Los Angeles — Los Angeles Co. had plans prepared improving Hawthorne Ave. between Inglewood and Hawthorne city limits, 8,790 cu.yd. excav., shaping 21,565 sq.yd., 21,565 sq.yd. concrete, shaping 7,991 ft. shoulders; Hardy St. between Hawthorne and Prairie Aves., 4,289 cu.yd. excav., 11,964 sq.ft. gutter, 3,258 ft. curb, 13,126 sq.ft. walks, 9,116 sq.yd. Natl. pavement, 9,118 sq.yd. asphaltic concrete base; 2.45 mi. Washington Blvd. between Culber and Venice, 33,080 cu.yd. excav., incl. removing old macadam, walks, curbs, etc., 57,578 sq.yd. sub-base, 86,430 sq.yd. 7- to 9-in. concrete, 80 ft. wide. Each project to exceed $25,000.

Calif., Los Gatos — Had plans prepared improving portion Bway., 35,000 sq.ft. 5 in. concrete, 35,000 sq.ft. grading. H. B. Fisher, Growers Bank Bldg., San Jose, engr.

Calif., Sacramento—Sacramento Co. making plans constructing approximately 12 mi. Sherman Island Rd., incl. bridge over 3 mi. slough between Brannan and Sherman Islands. $500,000. C. W. Deterding, Jr., co. engr.

Quebec—Provincial Government, Quebec, takes bids in June or July 12 mi. bituminous macadam on Three Rivers-Grand Mere Rd. from River Caché to Grandmere, 20 ft. $40,000. A. Fraser, Quebec, engr.

Que., Quebec—Election June 5 to 7, $100,000 bonds for widening or enlarging Cote Abraham. L. T. Tremblay, city engr.

Que., Three Rivers—Takes bids in June, 3 mi. concrete paving St. Paul, Bonaventure, St. Marie, Hart, Champlain, Alexander, St. Joseph and St. Olivier Sts., 40 ft. $143,127. C. Gelinas, city engr.

Ont., Ft. William—Plans 25,000 lin.ft. concrete sidewalks on various streets. $35,000. C. B. Symes, City Hall, engr.

Ont., Hamilton—Soon takes bids asphalt paving 16,000 sq.yd. Victoria and Houghton Aves., Dundurn and Cannon Sts., concrete sidewalks on Roxborough Ave. and Cannon St., grading High St., concrete curbing Sline St., $100,000; paving 7,000 sq.yd. Ottawa St. S., Rosthay, Sherman and Dunsmure Aves., asphalt on concrete, $30,000. W. L. McFaul, city engr.

Ont., Hamilton—Wentworth Co. plans to spend $150,000 on county roads for maintenance and new concrete, gravel and macadam roads this year. H. A. Lumsden, Court House, engr.

Ont, Mimica—Plans 4,000 sq.yd. Warrenite bitulithic pavement on Superior Ave., concrete sidewalks on Newcastle St., Queens, Primrose, Hillsdale, Superior and Hay Aves. $30,000.

Ont., Niagara Falls — Soon takes bids paving Morrisson St. $31,791, McCrae St. $28,861, and Queen St. $27,270. Work involves 18,000 sq.yd. asphalt on concrete. T. S. Scott, City Hall, engr.

Ont., Ottawa—Making plans improving Clarence St. $20,000, Augusta St. $20,000, New St. $19,000, The Circle $11,000. Work involves 15,000 sq.yd. asphalt or concrete, etc. A. F. Macallum, City Hall, engr.

Ont., Owen Sound—Grey Co. plans to expend $140,000 for 16,000 sq.yd. concrete and gravel roads, concrete and pipe culverts, etc. Tenders will be called on part of work and balance will be done by day labor. J. Johnson, County Bldg., supt.

Ont., Sandwich—Essex Co. soon takes bids 22,000 sq.yd. rein.-con. paving Front Rd. $60,000. J. J. Newman, Davis Blk. Windsor, engr.

Ont., Toronto—Plans asphalt paving on concrete, Pine Ave. $10,159, Strathmore Blvd. $6,213, Burnfield Ave. $5,651, Wolverleigh Blvd. $12,811, Dundas St. $47,806, Orchard Park Blvd. $14,197, West Toronto St. $21,602, Blackmore St. $1,461; bitulithic on concrete on St. Helens Ave. $17,239, Simpson Ave. $15,733; concrete pavements on Imperial St. $6,853, lane west of Ossington Ave. $16,262, lane north of College St. $27,028; macadam roadway on Harriett St. $3,214, concrete sidewalks on Bathurst St. $506, Duplex Ave. $3,041, Davenport Rd. $844, Patricia Dr. $4,626, King St. W. $1,432, Clendenam Ave. $3,059, St. Germain Ave. $3,564, Harriett St. $2,819, Old Orchard Grove $4,314, Roxton Rd. $1,292; concrete curbs and gutters Woodbine Ave. $254, Pine Ave. $546, Lightbourne Ave. $329, St. Clair Ave. $3,332, West Toronto St., $1,810; grading Strathmore Blvd. $1,837, Wolverleigh Blvd. $2,593, lane between Concord and Delaware Aves. $12,250, lane between McMaster and McPherson Aves. $7,100, Harriett St. $1,896. R. C. Harris, city engr.

BIDS DESIRED

New York—June 20, by A. W. Brandt, comr. highways, Albany, constructing, completing and reconstructing highways in Broome, Essex, Greene, Jefferson, Monroe, Oneida, Ontario, Orange, Schenectady, Warren, Wayne, Steuben and Franklin Counties; adv. E. N.-R. June 12.

New York—June 26, by Bronx Parkway Comn., 72 West Pondfield Rd., Bronxville, paving Bronx River Parkway Dr. between Main St., White Plains, and the railroad crossing south of Valhalla. J. Downer, engr. and secy.; adv. E. N.-R. June 12.

N. Y., Brooklyn—June 18, by E. Riegelmann, boro. pres., Boro. Hall, reconcreting openings in asphalt pavements in various streets.

N. Y., Long Island City—June 16, by M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., grading Van Alst Ave. and 147th Pl., paving Van Alst Ave., 85th Rd., 101st and 87 Sts., grading, curbing, etc. 87th St., Woodside, 4th and 6th Aves.

N. Y., New York—June 18, by J. Miller, pres. Manhattan Boro., Municipal Bldg., repaving New Chambers St., granite block on concrete.

N. Y., Olean—June 19, by Comrs. Pub. Wks., at office G. R. Miles, city engr., paving and improving South Union St.; adv. E. N.-R. June 12.

N. Y., Williamsville—June 30, by Town Bd. of Amherst, Village Hall, Williamsville, paving and laying sewers in Sheridan Dr. G. C. Diehl, 577 Ellicott Sq., Buffalo, civil engr.; adv. E. N.-R. June 12.

N. J., Maple Shade—June 17, by Chester Twp. Comn., P. S. 2, grading and surfacing roads, 23,250 cu.yd. excav., 33,100 sq.yd. cinder surface. Remington & Vosbury, 509 Cooper St., Camden, engrs.

Pennsylvania — July 1, by State Dept. Hys., Harrisburg, constructing 74 mi. 13 projects in 13 counties. P. D. Wright, secy. highways; adv. E. N.-R. June 12.

Pa., Chest Springs—Boro Council taking bids and opens same about July 2, constructing 3,700 ft. Chest Springs Boro Rd., rein.-con. or brick on concrete. $31,000.

Pa., Kingston—June 23, by Boro Council, Boro Bldg., paving, curbing, guttering and sewers in various streets. C. H. Blochberger, secy.; adv. E. N.-R. June 12.

Delaware—June 25, by State Hy. Dept., Dover, constructing 0.25 mi. Contr. 26A, 3.48 mi. Contr. CK-19, 3.8 mi. Contr. CK-23, 3.88 mi. Contr. CS-32, etc.; adv. E. N.-R. June 12.

Maryland—June 17, by State Rds. Comn., Baltimore, macadam resurfacing 3.36 mi. in Allegany Co., Contr. A-29; concrete paving 3.6 mi. in Dorchester Co., Contr. D-39 and 1 mi. in Worcester Co., Contr. Wo-34; gravel surfacing 1.03 mi. in Prince George Co., Contr. P-46, and 3 mi. in Calvert Co., Contr. C-17. J. N. Mackall, chn.; adv. E. N.-R. June 12.

Md., Baltimore—June 18, by Bd. Awards, 9,050 sq.yd. cement concrete paving, Contr. 259-NA. R. K. Compton, 214 East Lexington St., chn. paving comn.

Virginia—June 26, by State Hy. Comn., Richmond, constructing roads and bridges in the following Projects: F-132-A, 142-C, 146-B, all Route 10, F-145-B, Route 35, F-184, Route 32, F-280, Route 34, F-310-C, Route 12, S-323-A, Route 20. C. S. Mullen, ch. engr. Adv. E. N.-R. June 12.

W. Va., Clarksburg—June 17, by city at office of D. H. Hamrick, city clk., improving Hogans Lane, Parrill Court, Hickman, Simpson, North 14th, Marshall, Sumner, Webster and Wilson Sts., Hamil, Virginia, Lynn, Goff, and Buena Vista Aves., also storm and sanitary sewers in Glen Elk 2, Sect. A, 14,130 lin.ft. curb, 3,600 sq.yd. grading, 3,000 cu.yd. rein.-con. paving, 8 manholes, 15 inlets, 1,000 ft. 10- to 24-in. vitr. sewer pipe. Noted Feb. 14.

W. Va., Union—June 16, by State Rd. Comn., and Monroe Co. Court at Court House, paving and bituminous macadam surfacing 2.2 mi. Alderson-Wolf Creek Rd. S. Clark, co. clk.

W. Va., Wheeling—June 30, by Bd. Dirs. Oakmont Impvt. Co., 703 National Bank Bldg., rein.-con. paving, curbing, sidewalks, sewers and water mains at Oakmont, 10th Ward. Conrad & Pugh, Wheeling, engrs.; adv. E. N.-R. June 12.

N. C., Old Fort—June 23, by J. B. Johnson, mayor, 10,000 sq.yd. concrete or asphaltic street paving, 3,000 sq.yd. sidewalk, curbs, etc. $35,000. R. L. Greenlee, Old Fort, engr.

S. C., Greenville—June 17, at office Supervisor Greenville Co., grading and surfacing 1.2 mi. Lower Easley Rd., Judson Mill Project, 7,544 cu.yd. common excav., 13,397 sq.yd. plain cement surfacing or 12,154 sq.yd. bituminous concrete surfacing, etc. E. D. Sloan, Jr., Court House, engr.

S. C., Lexington—June 17, at office Bd. Comrs. Lexington Co., grading and surfacing 14.2 mi. State Route 6, State Project S-519, 114,119 cu.yd. common and 1,070 cu.yd. rock excav., 44,620 cu.yd. topsoiling, etc. State Highway Engineer, 1600 Main St., Columbia, engr.

Tennessee—June 20, by J. G. Creveling, highway comr., Nashville, improving roads in Coffee, Marion, Warren, Grundy, Gibson, Madison, Obion and Tipton Counties. This corrects report in June 5th issue.

O., Cleveland—June 23, by Bd. Educ., grading, walks, masonry, etc., at Sackett School. To exceed $25,000. W. R. McCormack, East 6th St. and St. Clair Ave., engr.

O., Cleveland Heights (Warrensville P. O.)—June 16, by H. H. Canfield, city mgr., at City Hall, Mayfield Rd., or at office of F. A. Pease, city engr., 806 Marshall Bldg., Cleveland, grading, curbing and paving with brick, bituminous macadam, asphaltic concrete, or sheet asphalt, Blanche Ave., Spangler, Lownesdale, Selwyn, Bainbridge and Berkeley Rds.

O., Massillon—June 17, paving 6,700 sq. yd. Green St.; resurfacing 3,900 sq.yd. Main St., sheet asphalt; sidewalks and grading 6,400 lin.ft. 6th, 3rd, Terrace and Rose Sts.; 1,100 lin.ft. 8 in. sanitary sewer in Cherry St.; 1,700 lin.ft. 36- to 20-in. storm sewer in Green St. C. E. Rice, city engr.

Michigan—June 17, by State Hy. Dept. at office Comrs. Alpena Co., Alpena, grading and surfacing 1.235 mi. State Trunk Line Rd. 10-18, C, 20 ft., 5,261 cu.yd. excav., 14,467 sq.yd. concrete, 1.235 mi. same road, over 20 ft., 10,070 lin.ft. storm sewer, 12,966 lin.ft. curb and gutter, 5,247 sq.yd. concrete, etc.; 2.105 mi. State Trunk Line Rd. 10-18, Sect. B, 15,222 cu.yd. excav., 24,658 sq.yd. concrete, etc. G. C. Dillman, Lansing, ch. engr.

Michigan—June 17, by State Hy. Dept. at office Comrs. Alpena Co., Alpena, grading and surfacing 0.38 mi. State Trunk Line Rd. 10-18, D, 1,572 cu.yd. excav., 384 sq.yd. concrete, also one 27 ft. T beam bridge. G. C. Dillman, Lansing, ch. engr.

Michigan—June 18, by State Hy. Dept. at office Comrs. Eaton Co., Charlotte, grading and surfacing 7.618 mi. State Trunk Line Rd. 39-11, A and B, 4,368 cu.yd. excav., 80,890 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 19, by State Hy. Dept. at office Comrs. Tuscola Co., Caro grading and surfacing 0.99 mi. State Trunk Line Rd. 81-5, 2,576 cu.yd. excav., 11,574 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 19, by State Hy. Dept. at office Comrs. Wayne Co., Detroit, grading and surfacing 0.861 mi. State Trunk Line Rd. 17-17, 5,723 cu.yd. excav., 11,287 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 19, by State Hy. Dept. at office Comrs. Jackson Co., Jackson, grading and concrete paving 1.988 mi. State Trunk Line Rd. 14-40, 14,141 cu.yd. excav., 23,331 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Michigan—June 24, by State Hy. Dept. at office Comrs. Lapeer Co., Lapeer, grading and surfacing 1.06 mi. State Trunk Line Rd. 53-10, 9,789 cu.yd. excav., 18,042 sq.yd. concrete, bituminous concrete or sheet asphalt. G. C. Dillman, Lansing, ch. engr.

Michigan—June 24, by State Highway Dept. at office Comrs. Lapeer Co., Lapeer, grading and surfacing 0.845 mi. State Trunk Line Rd. 21-21, 9,426 cu.yd. excav., 19,498 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Ill., Elmhurst—June 16, by City Clerk, grading, concrete curbing and guttering and penetration macadam surfacing 2nd St., etc. $170,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Ill., La Grange—June 16, by City Clerk, grading, concrete curbing and guttering and surfacing various streets. $25,000. E. Hancock, 2047 Ogden Ave., Chicago, engr.

Streets and Roads (Continued)

Ia., Des Moines—June 18, by Auditor Polk Co., concrete paving approximately 50,000 sq.yd. road east of Altoona. $150,000. F. O. Laing, co. engr.

Ia., Logan—June 17, by Auditor Harrison Co., grading, etc., 9.69 mi. Woodbine-Dunlap Rd. $60,000. T. A. Cherry, co. engr.

Minnesota—June 24, by State Hy. Dept., St. Paul, **(SP means State Project, FAP means Federal Aid Project)**, grading 86,000 cu.yd. SP 2-24, Div. C, FAP 129, $40,000, 181,000 cu.yd. SP 2-32, Sect. 1, FAP 348, also Bridge 4224, 50 ft., and Bridge 4225, 75 ft., $65,000; 64,000 cu.yd. Sect. 1, 171,000 cu.yd. Sect. 2, and 193,000 cu.yd. Sect. 3, also Bridge 4186, 130 ft., Bridge 4187, 60 ft., and Bridge 4188, 60 ft., SP 4-29, FAP 342, 270,000 cu.yd. SP 6-31, FAP 343, also Bridge 4234, 140 ft., Bridge 4233, 30 ft., Bridge 4234, 30 ft., and Bridge 4235, 140 ft., $100,000, 173,000 cu.yd. SP 6-42, FAP 343, one 30 ft. bridge and widening 5 bridges, $90,000, 120,000 cu.yd. SP 7-36, FAP 365, $35,000, 150,000 cu.yd. SP 10-51, FAP 361, also Bridge 4258, 100 ft., and Bridge 4259, 20 ft., $70,000, 101,000 cu.yd. SP 13-21, Sect. 1, FAP 346, $35,000, 197,000 cu.yd. SP 37-21, FAP 334, also Bridge 4295, 40 ft., $50,000; paving 42,640 sq.yd. in Red Wing and 33,400 sq.yd. in Lake City, SP 3-31, FAP 283, $200,000; gravel surfacing 7,200 cu.yd. SP 7-20, FAP 247, $25,000, 24,160 cu.yd. SP 13-02, FAP 285, $42,000, 20,160 cu.yd. SP 13-01, FAP 294, $30,000; 24,160 cu.yd. SP 20-24, FAP 253, and SP 20-25, FAP 250, $43,000, 34,400 cu.yd. SP 22-24, FAP 254, $55,000; 18,240 cu.yd. SP 30-01, FAP 271, and SP 30-27, $36,000, 12,300 cu.yd. SP 49-21, FAP 279, $30,000. State Hy. Dept., engrs.

Minn., Rochester — June 17, by A. F. Wright, city clk., improving 14th Ave. S. W., 1,271 sq.yd. vertical fibre cut vitr. brick, 894 lin.ft. combined curb and gutter, $5,670; 7th St. S. W., 2,718 lin.ft. combined curb and gutter, 4,519 sq.yd. various types paving, 12,000 lin.ft. combined curb and gutter on various streets, $10,000.

Kan., Olathe—July 10, by Clerk Johnson Co., grading and concrete surfacing 4.02 mi. Federal Aid Project 246-A, 18 ft. E. C. L. Wagner, 608 Kemper Bldg., Kansas City, engrs. Noted May 22.

N. D., Carson—June 19, by E. A. Holritz, aud. Grant Co., improving 5.157 mi. Federal Aid Project 63, 41,745 cu.yd. earth and 810 cu.yd. rock excav., 3,218 cu.yd. overhaul, 1,182 ft. 18- to 36-in. corrugated metal or concrete pipe culverts; 20,102 lbs. metal reinforcing, etc.; Federal Aid Project 256A, 46,340 cu.yd. earth and 837 cu.yd. rock excav., 11,234 cu.yd. overhaul, 1,126 lin.ft. of 18- and 24-in. corrugated metal or concrete pipe culverts; 21,851 lbs. metal reinforcing, etc. $42,000.

N. D., Rolla—June 20, by J. H. Penny, aud. Rolette Co., grading, etc., 7.094 mi. Federal Aid Project 242, 59,411 cu.yd. earth and 1,185 cu.yd. rock excav., 1,352 lin.ft. 18, 24 and 30 in. corrugated metal or concrete pipe culvert, 5,367 lb. metal reinforcing, etc. $27,000.

Mo., Charleston — June 17, by Bd. Comrs., Pinhook Rd. Dist. of Mississippi Co. at office Swank-Tanner Eng. Co., grading and constructing two course gravel road. C. Percefull, secy.; adv. E. N.-R. June 5.

Mo., Clayton—June 18, by R. Jablouski, engr. St. Louis Co., Court House, grading and paving with asphaltic penetration macadam 5,737 ft. Parker Rd., 14 ft., $25,000.

Ark., El Dorado — June 16, by L. E. Martin, secy. Impvt. Dist. 18, Court House, 8,000 cu.yd. excav., 11,000 ft. concrete curb, 19,243 sq.yd. concrete paving, 19,243 sq. yd. reinforcing mesh, 6,000 lin.ft. expansion joints, 1,675 ft. 15 and 18 in. storm sewers, 6,500 lb. cast iron, 20,000 lb. reinforcing and 250 cu.yd. concrete; by G. R. Crosley, secy. Impvt. Dist. 19, Court House, 9,083 cu.yd. excav., 14,312 lin.ft. concrete curb, 24,797 sq.yd. concrete paving and reinforced mesh, 4,078 ft. 15- to 24-in. storm sewers, 27,300 lb. reinforcing, 13,670 lb. cast iron, 7,180 ft. expansion joint and 273 cu.yd. concrete; by T. N. Chipman, secy. Impvt. Dist. 20, Court House, 2,126 cu.yd. excav., 1,448 lin.ft. concrete curb, 2,944 sq.yd. concrete paving and reinforced mesh, 950 lin.ft. expansion joint, 960 lb. cast iron, 485 lin.ft 15-in. storm sewer. Ford & MacCrea, 215 Gazette Bldg., Little Rock, engrs.

Tex., Angleton—July 2, by J. T. Loggins, judge Brazoria Co. surfacing State Highway 19, State Aid Project 432-C, 9,805 cu.yd. shell. $25,956. E. W. Gustafson, co. engr.

Tex., Denison — June 19, by R. G. Gresham, city secy., concrete paving Myrick St $25,000. C. E. Hayden, city engr.

Tex., Jasper—June 27, by A. D. Hancock, judge Jasper Co. grading and gravel surfacing 11,162 cu.yd. State Highway 45, State Aid Project 441. $54,030. C. P. Hunter, Hunter co., engr. Noted Feb. 14.

Okla., Grandfield — June 16, by G. H. Hoefer, city clk., grading and paving 5 blocks 2nd St., 6,150 sq.yd. concrete, 2,800 lin.ft. curbing, 2,100 cu.yd. excav. $28,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engr.

Colorado—June 18, by State Hy. Dept., Denver, concrete paving 1.249 mi. Federal Aid Project 281-A, $55,293, and 3.068 mi. Federal Ail Project 281-B, $104,297, both Boulder Co., alternate bids for bituminous on concrete; grading 2.711 mi. Federal Aid Project 245-B, Bent Co., $29,893. L. D. Blauvelt, State Office Bldg., Denver, engr.

Arizona—June 19, by W. C. Lefebvre, state engr., c/o Coconino Co. Bd. of Supervs., Flagstaff, improving Winslow-Flagstaff Hy., Federal Aid Project 74, 16,000 cu.yd. roadway excav., 101,000 cu. yd. borrow excav., 6,000 cu.yd. ditches and levees, 390 cu.yd. concrete, 31,000 lb. reinforcing, etc.

Arizona—June 20, by W. C. Lefebvre, state engr., c/o Navajo Co. Hy. Comn., Holbrook, improving Winslow-Coconino Co. Line Hy., Federal Aid Project 22, 3,300 cu.yd. roadway excav., 7,800 cu.yd. roadway borrow, 2,300 sta.yd. overhaul, 80 cu.yd. concrete, etc.

Washington — June 24, by State Hy. Comn., Olympia, clearing, grading and gravel surfacing 2.5 mi. Cascade Wagon Rd., Skagit Co.; 2.9 mi. State Rd. 1, from East Stanwood north, Snohomish Co., 6.6 mi. State Rd. 9, Mason Co.; clearing and grading 14.23 mi. State Rd. 1, from King Co. line to Everett, Snohomish Co., 5.6 mi. State Rd. 1 from Redondo to Milton, King and Pierce Counties, 2.6 mi. State Rd. 2 from Snoqualmie to North Bend, King Co.; clearing, grading and crushed rock surfacing 4 mi. State Rd. 5, Lewis Co.; concrete paving 2.5 mi. State Rd. 2, from Spokane east, Spokane Co. J. Allen, state highway engr.

Wash., Seattle—June 23, by Comrs. King Co., constructing Stevens Pass Line Revision Rd., Sect. 1, 8,543 cu.yd. solid and 4,291 cu.yd. loose rock excav., grubbing 8 acres, clearing 4 acres, etc., Sect. 2, 1,593 cu.yd. solid rock and 5,641 cu.yd. earth excav., clearing 7.6 acres and grubbing 5.1 acres, $50,000; George W. Peck Rd. from Des Moines east, 12,114 sq.yd. concrete paving, 2,433 cu.yd. excav., 5,280 lin.ft. side surfacing, etc., $31,000. T. R. Beeman, co. engr.

California—June 23, by State Highway Comn., Sacramento, paving 8.1 mi. between west boundary and Banta, San Joaquin Co., asphaltic concrete. R. M. Morton, state highway engr. Noted May 8.

California—June 30, by State Highway Comn., Sacramento, grading 4.3 mi. road between Floriston and Nevada state line, Nevada and Sierra Counties; 8.7 mi. road between Gold Run and Forebay, Placer Co.; paving 6.5 mi. road between Eureka and Arcata, Humboldt Co., concrete. R. M. Morton, state highway engr. Noted Oct. 4.

Calif., Chico — Taking bids improving various streets, 581,040 sq.ft. grading, 575,200 sq.ft. 5 in. asphaltic concrete paving, curbs, gutters, walks, etc. To exceed $75,000. C. M. Ennis, city engr. Noted June 5.

Ontario—June 20, by S. L. Squire, deputy minister Dept. Pub. Highways, Toronto, 0.95 mi. asphaltic concrete on Contr. 1127, and 0.95 mi. Contr. 1052, in Cornwall, 6 mi. macadam road on Contr. 1029 in Bellville, 6 mi. concrete paving Contr. 1128 in Belleville. $70,000. C. A. Robbins, Brockville, engr.

BIDS RECEIVED

Vermont—T. W. Dix, ch. engr. State Hy. Dept., Montpelier, paving 3.03 mi. road in Guilford, Federal Aid Project 57A, bituminous macadam, from D. W. Overrocker, Brattleboro, $106,303. Noted May 22.

Mass., Charleston (Boston P. O.)—Pub. Wks. Dept., City Hall, Boston, granite block paving Chelsea St. from Vine St. to Chelsea Bridge, here, from J. W. O'Connell, 73 Tremont St., Boston, $19,420. Engrs. est. $25,000. Noted June 5.

Mass., Quincy—Metropolitan Dist. Comn. 1 Ashburton Pl., Boston, grading surfacing and building bridge, etc., Furnace Brook Parkway, from Hancock St. to Newport Ave., here, from A. S. Tomasello & Son, 68 Devonshire St., Boston, $95,848.

N. Y., Brooklyn—E. Riegelmann, boro. pres., Boro. Hall, grading, curbing and flagging **(1)** East 13th St., **(2)** East 16th St., **(3)** East 28th St., **(4)** 49th St., **(5)** 67th St., **(6)** 85th St., asphalt paving **(7)** East 16th St., **(8)** East 28th St., **(9)** 49th St., **(10)** 87th St., asphalt, repaving **(11)** Foster Ave., **(12)** Grace Court, **(13)** 12th Ave., grading, curbing and laying cement sidewalks on **(14)** 67th St., curbing and asphalt paving **(15)** East 18th St., **(16)** 82nd St., asphalt paving road way of **(17)** 67th St., from F. Persicano, 350 Fulton St., **(1)** $5,791; from G. M. Mandatto, 129-29th St., **(2)** $5,846; from T. B. Scott, 671 Halsey St., **(3)** $3,037 **(4)** $3,950, **(6)** $5,192; from Cranford Co., 52 9th St., **(7)** $8,860 **(15)** $2,835 **(8)** $9,111 **(9)** $8,350 **(10)** $7,413, **(11)** $6,559, **(12)** $6,559, **(13)** $19,873, **(16)** $5,462, **(17)** $30,755; from M. J. O'Hara, 717 65th St., **(12)** $32,876; from Galco Contg. Co., 745 Dean St., **(5)** $6,595; from W. E. Carberry, 45 South Elliott Pl., **(14)** $6,788. Noted May 29.

N. Y., Buffalo—Comr. Pub. Wks., June 5, from Rock Asphalt & Constr. Co., Morgan Bldg., asphalt paving Comstock Ave. $22,407, Kofler St. $11,167, Littlefield Ave. $19,080, Olive St. $14,109, Remington Pl. $14,110, Hopkins St. $76,613, repaving Seymour St. $26,957; from H. P. Burgard Co., 1968 Filmore Ave., asphalt paving Decker St. $23,456, Fennimore Ave. $17,824, Minnesota Ave. $35,907, Kofler St. $11,167. Noted June 5.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., from C. Kurth, 9519 126th St., Richmond Hill, grading, curbing and laying sidewalks on Arcadia and Maurice Aves., $1,965 and $10,645 respectively; from Welsh Bros., 32 Queens St., Astoria, grading, etc., Hunt St. $8,145, and grading, curbing and laying sidewalks on Siboutsen and 1st Sts., $6,040 and $5,782 respectively; from Kennedy & Smith, 93 Amity St., Flushing, grading, curbing and laying sidewalks on Hunt and Opdyke Sts., $19,387 and $8,465 respectively; from W. P. McDonald, 17 West 42nd St., New York, grading, curbing, flagging and asphalt paving, etc., Court St. $1,045, grading, curbing and laying sidewalks on 123rd St., $31,415; from Sicilian Asphalt Paving Co., 41 Park Row, New York, grading, regrading, curbing, recurbing and laying sidewalks on Gasman Ave., $147,825, grading, curbing, laying sidewalks and paving Richard Ave. $11,895; from Cleveland Trinidad Paving Co., Flushing, sheet asphalt paving Maurice Ave. $25,630, Opdyke St. $10,910, Siboutsen St. $10,485, 85th St. $27,170, 86th St. $27,130; from Highway Impvt. & Repair Co., 501 Bloomfield Ave., Montclair, N. J., sheet asphalt paving 85th St., $22,086; from F. Soviero, grading, curbing and laying sidewalks, etc., on 2 sections 85th St. $10,885 and $10,775, 86th St. $10,028, 97th St. $13,573, 103rd Ave. $12,574. Noted May 29.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., constructing Transverse road carrying the center driveway of Grand Blvd. and Concourse under East Fordham Rd., from Bronx Sewer Constr. Co., 375 East Fordham Rd., $394,391. Noted May 29.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving bituminous concrete roadway of Richmond Ave., etc., from J. E. Donovan Paving Co., 2205 Richmond Terrace, Port Richmond, $25,231. Noted May 29.

N. J., New Brunswick—Middlesex Co., paving New Brunswick Ave., Woodbridge Twp., from A. Keyes, Woodbridge, $68,711.

Md., Baltimore—Bd. Awards, June 4, grading, curbing and paving streets listed in Contr. 258-NA, 6,560 sq.yd. asphalt, from P. Flanigan & Sons, Hartford Rd. and Baltimore & Ohio R.R., $29,665; grading streets listed in Contr. 257-OA, from W. Meyer, Phila. Ave. and 5th St., $13,860. Noted June 5.

Pennsylvania—State Dept. Hys., Harrisburg, **(R. means Route and A. Application)**, surfacing either bituminous on concrete or one course rein.-con., 20,826 ft. R. 95, McKean Co., from D. L. Dennis, Eldred, $192,268; rein.-con. surfacing 15,655 ft. A. 2577, Sect. 1, Clarion Co., from Standard Paving & Contg. Co., 210 East Ohio St., Chicago, $130,662, 27,214 ft. Jessup and Bridgewater T, Susquehanna Co., from Pub. Serv. Production Co., 80 Park Pl., Newark, N. J., stone $261,433, gravel $254,863, 4,847 ft. A. 2436, Delaware Co., from Union Paving Co., 30th and Locust Sts., Phila., stone $48,997, gravel $47,639, 35,095 ft. R. 223, Indiana Co., from Paul Constr. Co., Inc., Cresson, $357,018, 23,062 ft. R. 178, Hucks Co., from E. Riley Mixner Co., Goshen, N. J., $177,658, 26,540 ft. R. 110, Greene Co., from S. J. Groves & Sons Co., 306 Globe Bldg., Minneapolis, Minn., $381,991, 7,358 ft. R. 108, Washington Co., from P. Derienzo, Fayette City, $90,081, 26,928 ft. R. 113, Washington Co., from Meredith, McVaugh & Webb, Jamestown, $288,729, 15,071 ft. R. 61, Jefferson Co., from N. Wiesner, 372 Chestnut St., St. Marys, $135,331, 12,991 ft. A. 143,

Streets and Roads (Continued)

Sect. 2, Westmoreland Co., from Frazier & Mansfield, McKeesport, $193,748, 21,401 ft. R. 338, Jefferson Co., from Miller Constr. Co., Spirit Bldg., Punxsutawney, $232,834, 7,282 ft. R. 4, Luzerne Co., from B. G. Coon Constr. Co., 274 Union St., Luzerne, $96,673.

Pa., Phila.—Bureau Hys., Dept. Pub. Wks., grading, Schedule A, 25,091 cu.yd. Albanus, C, Louden, Rosehill and Sheldon Sts., from F. Mark Contg. Co., 21st St., $16,311, 15,250 cu.yd. Beaumont, Belmar, Windsor, 60th and 68th Sts., from E. A. Mullen, Inc., 5512 Vine St., $10,160, 4,082 cu.yd. Ivins and Pembroke Sts. from Byrne Bros., 335 Gates St., $4,041, 3,923 cu.yd. Milne St., from G. F. Dobbin, 1020 South 47th St., $10,129; asphalt paving, Schedule B, Beaumont, Belmar and Creswell Sts., from Barber Asphalt Co., 239 North 30th St., $11,877, Lambert and Woodstock Sts., from Eastern Paving Co., 401 Colonial Trust Bldg., $4,387; 5,451 tons crushed slag, from J. Meehan, 916 West Dakota St., $14,398.

Ind., Madison — Jefferson Co., grading and graveling Oliver Thornton Rd., from D. H. Fatout, 4330 Bway., Indianapolis, $26,775. Engrs. est. $30,160.

O., Cincinnati—Hamilton Co., June 6, constructing 14,690 lin.ft. Eight Mile Rd., 16 ft., 25,000 cu.yd grading, 70,000 gal. Grade 1, tar, etc., from J. S. Sloan, Cincinnati, $60,524. Engrs. est. $68,640. Noted May 29.

O., Cleveland—Improving (1) East 149th St. (2) East 120th St. (3) East 114th St. (1 to 3 inclusive) involves 13,330 sq.yd. asphalt, concrete or brick on concrete, 11,345 ft. stone curbing, 12,110 ft. 4 in. drain tile gutter 7,750 cu.yd. earth excav. (4) East 106th St. (5) Treadway Ave. (6) Gordon St. (4 to 6 inclusive) involves 8,370 sq.yd. asphalt, concrete or brick on concrete, 6,400 lin.ft. stone curb, 6,652 lin.ft. 4 in. drain tile gutter, 8,525 cu.yd. earth excav. (7) Sarenec Rd. (8) Proctor Court (9) East 151st St. (7 to 9 inclusive) involves 29,390 sq.yd. concrete, asphalt or brick on concrete, 12,440 lin. ft. stone curbing, 12,560 lin. ft. 4 in. drain tile gutter, 9,400 cu.yd. earth excav., from Freshwater Constr. Co., National Bldg., (1) $31,878 (6) $3,307; from H. G. Herring, Pavers Exchange, (2) $17,229 (4) $26,119; A. M. Pejsa, 3161 Derbyshire Rd., (3) $24,119; W. E. McHugh, Pavers Exchange, (5) $22,873; Gould & Maybeck, 16311 Sarenec Rd., (7) $52,796; Enterprise Paving & Constr. Co., 8444 Bway., (8) $3,927 Bentley Bros., 3030 Euclid Ave., (9) $80,602.

O., Cleveland Heights (Warrensville P. O.)—Grading, asphalt paving and curbing Oak Ridge Rd., from Rieley Bros., The Arcade, Cleveland, $51,876; Mayfield Rd., and Washington Blvd., from Cleveland Trinidad Paving Co., The Arcade, Cleveland, $58,364 and $106,693 respectively. Noted May 29.

Ind., Noblesville—Hamilton Co., 24,288 sq.yd. concrete paving on Crum Rd., from Standard Paving Co., Anderson, $49,474. Engrs. est. $58,414. Noted May 22.

Ind., Warsaw—Kosciusko Co., concrete paving, 5.66 mi. Swartz Rd., 18 ft., from C. T. Cain, Bluffton, $83,900. Engrs. est. $100,958. Noted May 22.

Michigan — State Hy. Dept., at office Comrs. Ingham Co., Charlotte, grading and surfacing 1.014 mi. Federal Aid Project 100 A1 and A2, 11,486 cu.yd. excav., 12,149 sq.yd. concrete, from H. A. Hoxie, Grand Rapids, $29,205. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Eaton Co., Charlotte, grading and surfacing 4.333 mi. Federal Aid Project 100 A3, 27,736 cu.yd. excav., 50,844 sq.yd concrete, from H. A. Hoxie, Grand Rapids, $114,364. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Otsego Co., Gaylord, grading and gravel surfacing 4.276 mi. State Trunk Line Rd. 32-7, B, 24,794 cu.yd. excav., 40,572 sq.yd. gravel, from Yuill & Stevenson, Vanderbilt, $48,329. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Dickinson Co., Iron Mountain, shaping and surfacing 2.511 mi. State Trunk Line Rd. 12-38, A and B, 9,054 cu.yd. excav., 28,141 sq.yd. concrete, from Carlson & Lundrin, Menominee, $58,488. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Ingham Co., Mason, grading and surfacing 4.875 mi. State Trunk Line Rd. 14-36, A and B, 28,834 cu.yd. excav., 56,144 sq.yd. concrete, from States Impvt. Co., 160 LaSalle St., Chicago, Ill., $111,857. Noted May 22.

Michigan—State Hy. Dept. at office Pentwater Twp. Clerk, Pentwater, shaping and surfacing 3.373 mi. State Trunk Line Rd. 11-25, Sect. B, Oceana Co. (Hart), from Charlevoix Abstract & Eng. Co., Charlevoix, $39,311. Noted May 22.

Mich., Detroit—From Detroit Asphalt Paving Co., 909 Free Press Bldg., paving with 3½ in. sheet asphalt on 8 in. concrete, Beechwood Ave. $37,322, Barton Ave. $24,377, Majestic Ave. $26,413, Petoskey Ave. $19,789, Proctor Ave. $46,508, Rosemary Ave. $39,818, Sparta Ave. $33,815, Ohio Ave. $30,831, Wyoming Ave. $77,466, Wilshire Ave., $39,439, and Warren Ave. $184,397; from Cleveland Trinidad Paving Co., 402 Hammond Bldg., Parkside Ave. $39,331.

Wis., Milwaukee—Dept. Pub. Wks., improving **(a)** concrete **(b)** vibrolithic concrete **(c)** asphaltic concrete **(1)** Vine St., 1,430 cu.yd. grading, 3,122 sq.yd. paving and 2,300 ft. concrete curb and gutter, **(2)** Wilson St., 1,453 ft. concrete curb and gutter, **(3)** 56th St., 8,520 sq.ft. concrete sidewalks, etc., **(4)** 57th St., 9,064 sq.ft. concrete sidewalks, **(5)** 60th St., 7,445 sq. ft. concrete sidewalks, **(6)** 23rd Ave., 4,212 sq.ft. concrete sidewalks, 703 ft. concrete curb and gutter, from Bodemann Constr. Co., 691 48th St., **(a1)** $13,917 **(5)** $3,655; from Milwaukee Genl. Constr. Co., 427 Mitchell St., **(b1)** $13,782 **(6)** $2,395; from Badgerd Constr. Co., 97 Wisconsin St., **(c1)** $14,086; from W. Vanderboom, 97 32nd St., **(2)** $1,320; from F. Schomann, 770 28th St., **(3)** $4,515 **(4)** $3,776.

Wis., Milwaukee—Dept. Pub. Wks., concrete paving, etc., various alleys, 1 alley, from Tallmadge & Hunt Constr. Co., 445 Milwaukee St., $1,273; 1 alley, from F. Blodgett Inc., 521 Newton Ave., $2,199; 2 alleys, from Bodemann Constr. Co., 691 48th St., $9,245; 3 alleys, from Schwerm Bros., 50 Lee St., $9,001; 5 alleys, from J. Bluhm & Son, 1298 Achilles Pl., $32,688; 4 alleys, from Ryback & Sadowski, 1092 2nd St., $16,384. Noted Apr. 10.

Tex., Alice—Jim Wells Co., grading and bridging 14.3 mi. State Highway 12, Federal Aid Project 429-E, 1,362 cu.yd. concrete, 77,762 cu.yd. roadway and 38,877 cu.yd. borrow excav., 2,624 cu.yd. dry structural excav., 146,846 lb. reinforcing, from C. F. Tom, Gonzales, $59,109. Engrs. est. $66,745. Noted May 8.

Tex., Alpine — Brewster Co. grading, gravel caliche surfacing, etc. 13.88 mi. State Highway 3, Federal Aid Project 378-D, 361.5 cu.yd. concrete, 72,667 cu.yd. earth and 994 cu.yd. rock excav., 2,472 sq.yd. 8 in. concrete base. 31,457 lb. reinforcing, 33,912 cu.yd. gravel caliche, to be furnished by county, from Bandy-Crowder-Williams Co., El Paso, $59,540. Engrs. est. $68,648. Noted May 8.

Tex., Bay City—Matagorda Co. **(a)** grading, **(b)** shell surfacing, **(c)** rein.-con. drainage structures on 4.89 mi. State Highway 60, Federal Aid Project 428, 15 ft., from J. M. Neary & L. M. Le Tulle, Bay City, **(a, b and c)** $33,483; from J. Dockery, Wharton, **(a and b)** $27,369; from Dotson & White, Bay City, **(c)** $8,511. Noted May 15.

Tex., Cameron—Milam Co. grading, etc., 4.90 mi. State Highway 43, Federal Aid Project 394-B, 449.8 cu.yd. concrete, 29,063 cu.yd. roadway and 37,343 cu. yd. borrow excav., 54,036 lb. reinforcing, from H. Popejoy, Rosebud, $25,545. Engrs. est. $33,160. Noted May 8.

Tex., Georgetown—Williamson Co. grading, etc., 7.11 mi. State Highway 74, Federal Aid Project 418-A, 1,057 cu.yd. concrete, 43,560 cu.yd. roadway 21,489 cu.yd. borrow and 5,789 cu.yd. rock excav., 111,800 lb. reinforcing, from Brown & Root, Georgetown, $47,567. Engrs. est. $48,690. Noted Mar. 27.

Tex., Georgetown—Williamson Co. grading, etc., 8.48 mi. State Highway 29, Liberty-Hill-Leander Rd., 837.6 cu.yd. concrete, 57,753 cu.yd. roadway and 9,435 cu. yd borrow excav., 73,975 lb. reinforcing, from J. R. Hawkins, Granger, $39,042. Engrs. est. $40,750. Noted Apr. 24.

Tex., Palo Pinto—Palo Pinto Co. **(a)** 29,686 sq.yd. vitr. brick paving, **(b)** 35,624 lin.ft. concrete curbing State Highway 1, Federal Aid Project 383, from General Constr. Co., Cotton Exch. Bldg., Ft. Worth, **(a)** $43,936; Jordan Constr. Co., Plainview, **(a and b)** $66,439. Noted May 8.

Colo., Denver—From Allied Contractors, Omaha, Neb. **(e.e. means engrs. est.)** asphalt paving 12 blocks South Capitol Hill Paving Dist. 3, $40,127, e.e. $43,223, 12 blocks South Denver Paving Dist. 1, $74,713, e.e. $79,652, 12 blocks South Denver Paving Dist. 4, $38,803, e.e. $42,742; from Western Paving & Constr. Co., International Trust Bldg., 12 blocks Capitol Hill Paving Dist. 6, $40,087, e.e. $42,951, 12 blocks Capitol Hill Paving Dist. 12, $37,659, e.e. $41,757, 12 blocks Capitol Hill Paving Dist. 13, $51,285, e.e. $56,476, 12 blocks Capitol Hill Paving Dist. 14, $40,246, e.e. $44,075; from New Mexico Constr. Co., Albequerque, N. M., 12 blocks North Denver Paving Dist. 6, $47,314, e.e. $49,555, 12 blocks Capitol Hill Paving Dist. 3, $36,331, e.e. $43,223.

California—State Highway Comn., Sacramento, improving 8 mi. highway between ⅜ mi. north of Colfax to Gold-Run, Placer Co., 336,200 cu.yd. excav., 640,850 sq.yd. overhaul, 1,530 cu.yd. structure excav., 1,260 ft. 18 in. and 3,050 ft. 24 in. corrugated metal pipe, from C. R. Adams, Merced, $299,411, engrs. est. $313,735; 4.3 mi. road between Greenville and Livermore, Alameda Co., 12,900 cu.yd. roadway embankment, 8,000 sta.yd. overhaul, 3,000 yd. mi. overhaul, 2,910 cu.yd. concrete shoulders, etc., from W. A. Dontanville, 330 Monterey St., Salinas, $51,647, engrs. est. $55,924. Noted May 15.

California—State Highway Comn., Sacramento, paving 4.2 mi. road from Susanville to Johnstonville, Lassen Co., asphaltic macadam, from T. H. and M. C. Polk, Chico, $47,681; 3½ mi. road between Redwood City and south boundary, San Mateo Co., asphaltic concrete with macadam shoulders, from Pacific States Constr. Co., Call Bldg., San Francisco, $119,266. Noted May 8.

Calif., Inglewood — Improving portion Olive St., 191,396 sq.ft. grading, 117,426 sq.ft. 5 in. asphaltic concrete, curbs, gutters, from G. H. Oswald, 366 East 58th St., Los Angeles, $52,916. Noted May 29.

CONTRACTS AWARDED

Maine — State Hy. Comn., Augusta, bituminous macadam surfacing 1.77 mi. section of state highway B in Bridgeton, to Arborio Road Constr. Co., 408 Main St., Hartford, Conn., $40,883; graveling 4.05 mi. section of state highway "J-K" in Orneville and La Grange, to Wyman & Simpson, Waterville, $63,988. Noted May 29.

N. Y., Brooklyn — E. Riegelmann, boro pres., Boro Hall, to Cleveland Trinidad Paving Co., Flushing, repaving with asphalt roadway of East 14th St., $6,817, Kingston Ave. $10,360; to Borough Asphalt Co., 1301 Metropolitan Ave., Lafayette Ave. $48,767; to M. J. O'Hara, 1228 Park Ave., New York, 41st St. $10,192; to H. Johnson, Astoria Ave. and East 46th St., Elmhurst, constructing timber jetty pile, foot of West 10th St., $4,456. Noted May 29.

N. Y., Johnson—Paving Floral and Ackley Aves., bitulithic, to C. W. Rose, 616 Chenango St., Binghamton, $145,427. Noted May 22.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., alterations and improvements to sewer in Beaver St., to P. J. Donlon Constr. Co., Snyder Ave. and East 56th St., Brooklyn, $27,626; curbing, recurbing, flagging and reflagging, etc., West 176th St., to Asphalt Constr. Co., 208 Bway., $8,989; grading, regrading, curbing and recurbing, etc., West 177th St., M. Del Baso, 660 East 221st St., $29,060; curbing, recurbing, flagging, reflagging and paving with asphalt blocks Payson Ave., to Burnside Constr. Co., 270 Burnside Ave., $12,397; sidewalks on park strips on Park Ave., to P. Cramer, 154 East 50th St., $6,749. Noted June 5.

N. J., Bridgeton — Cumberland Co., Court House, concrete paving Sect. 1 Bridgeton-Port Norris Rd., to R. L. Bonham Co., Bridgeton, $171,684, Sect. 2, to Union Paving Co., 30th and Lancaster Sts., Phila., Pa., $158,832. Noted Apr. 10.

N. J., Carteret — Boro. Council paving Grant, Pershing and Atlantic Aves., to W. C. Smith, Carteret, $26,691.

Pennsylvania—State Dept. Hys., Harrisburg, **(R. means Route and A. Application)**, rein.-con. roads R. 71, Sect. 1, Butler Co., to C. Winters Constr. Co., Renfrew, $247,971; R. 231, Adams Co., to Union Constr. Co., Woolworth Bldg., Lancaster, $229,596; Tukhamoch Twp. and Tunkhannock Boro R. 11, Wyoming Co., to Winston & Co., Masonic Temple, Harrisburg, $333,948; A. 1952, Beaver Co., to J. B. Reed, McKees Rocks, $83,215; R. 333, York Co., to P R. Hostetter, Inc., Philadelphia St., York, $172,776. Noted May 29 and Apr. 24.

Pa., Lewistown—Mifflin Co., rein.-con. paving 5,000 lin.ft. 3rd, Brown and Pine Sts., to W. D. Steinback Sons, Lewistown, $40,270.

Pa., Phila.—Grading, Schedule A, Flanders, Woodcrest, 64th and 66th Sts., to R. B. Weimer, 3106 Midvale Ave., $9,463, G St., to T. Flanagan, 531 East Girard St., $18.062, Ritner St., to F. Brennan, 2507 Tasker St., $984, 32nd St., to E. A. Mullen, Inc., 5512 Vine St., $6,363, 47th St., to Kelly Colgan Co., Inc., Wayne St., $3,817;

Streets and Roads (Continued)

asphalt paving (assessment work) Schedule B, Champlost St., to Eastern Paving Co., 401 Columbia Trust Bldg., $31,298; repairs and reinforcement of bridge at 6th St. and Allegheny Ave., Schedule F, to G. F. Dobbins, 1020 South 47th St., $19,225.

Pa., Phila.—Bureau Hys., Dept. Pub. Wks., grading, 25,091 cu.yd. Albanus, C, Louden, Rosehill and Sheldon Sts., to F. Mark Contg. Co., 21st St., $16,311, 15,250 cu.yd. Beaumont, Belmar, Windsor, 60th and 68th Sts., to E. A. Mullen, Inc., 5512 Vine St., $10,160, 4,082 cu.yd. Ivins and Pembroke Sts. to Byrne Bros., 335 Gates St., $4,041, 3,923 cu.yd. Milne St., to G. F. Dobbin, 1020 South 47th St., $10,129; asphalt paving, Beaumont and Belmar Sts., to Barber Asphalt Co., 239 North 30th St., $9,872; 5,451 tons crushed slag, to J. Meehan, 916 West Dakota St., $14,398.

Delaware—State Hy. Dept., Dover, grading, paving, etc., 3.24 mi. Mission-Gumboro Rd., concrete, Contr. CS-33, to R. L. Bonham Co., Bridgeton, N. J.; 5.39 mi. Willow-Grove-Wyoming Rd., Contr. CK-22, to Hannaman-Burroughs Co., Salisbury, Md., $169,503; 4.05 mi. Basin Corner-Newport-Lincoln Highway, Contr. CN-20, to D. E. O'Connell & Sons, Ridley Park, Pa., $159,593. Noted May 15.

Md., Baltimore—Concrete paving Alley Contr. 94, to J. J. Bresnan & Co., 1626 Bank St., $34,337. Noted June 5.

North Carolina—State Hy. Dept., Raleigh, **(S. P. means State Project)** grading and plain concrete paving 6.17 mi. S. P. 812-B, Burke Co., to Overstreet & Nance, Bedford, Va., $195,367, 2.05 mi. S. P. 890, Yancey Co., to Fiske-Carter Constr. Co., Greenville, S. C., $87,051, 12 mi. S. P. 107-B, Bertie Co., to F. Mitchell Constr. Co., Greenville, $347,017; grading, etc., 10.77 mi. S. P. 212, Craven Co., to Eagle Eng. Co., New Bern, $71,574; grading and topsoiling 16.66 mi. S. P. 134, Gates Co., to Smith Bros., Inc., Allen Bldg., Raleigh, $67,148; grading and sand asphalt paving 8.13 mi. S. P. 318, Brunswick Co., to W. F. Bowe, Augusta, Ga., $98,221; grading and waterbound macadam paving 14.18 mi. S. P. 888, Yancey Co., to W. E. Graham, Mt. Ulla, $143,922; grading, rein.-con. bridges and culverts 2.47 mi. S. P. 966-A, Macon Co., to Herbert & Witt, Murphy, $39,000 (engrs. est.). Noted June 5.

Fla., Gulfport—To Bowyer & Kendrick, 1st Natl. Bank Bldg., Tampa, vitr. brick, asphalt filler paving, 11,125 sq.yd. Bon Air, Grant, Palm, Shore and 2nd Sts.; Lakeview Ave.; 17,452 sq.yd. 3rd St.; 18,760 sq.yd. Sunset Ave.; 19,082 sq.yd. Lee Ave.; 27,000 sq.yd. Davis Blvd., each $2.40 per sq.yd. Noted June 5.

Fla., West Palm Beach—Palm Beach Co. improving 5½ mi. Delray West Rd. 1 in Special Rd. & Bridge Dist. 19, to C. W. Brown and D. S. Ashton, Bocaratone, $38,854.

Ala., Decatur — Morgan Co. repairing with crushed stone and asphalt 25 mi. Courtland and Moulton Rds., 30 ft., to Columbia Asphalt Co., Columbia, Tenn., $25,000. Noted May 15.

La., Haynesville—City Council, grading, concrete curbing, guttering and paving with concrete 7 blocks downtown streets, to E. J. Deas, Shreveport, approximately $25,000. Noted May 8.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, grading, etc., 9.62 mi. Davidson Co. line-Dickson Co. line Rd., 18 ft., Federal Aid Project 205, Cheatham Co., to Womack Constr. Co. and Texas Willite Road Constr. Co., 1205½ Capitol Ave., Houston, Tex., $126,333. Noted June 6.

Ohio—Dept. Highways and Pub. Wks., Columbus, to F. D. Francis, Columbus, paving 2.005 mi. Sect. "G-2" and 4.687 mi. Sect. "H" Cambridge-New Comerstown Rd., Guernsey Co., asphaltic macadam, $54,007 and $154,946 respectively; to P. B. Putnam, Van Wert, 3.674 mi. Sect. "A," and 2.109 mi. Sect. "F-2" Bellefontaine-Richwood Rd., Logan Co., asphaltic macadam, $80,512 and $46,619 respectively, 6.174 mi. Sects. "K" and "M" Bryan-Pioneer Rd., Williams Co., bituminous macadam, asphalt $82,637, 4.48 mi. Sects. "N" and "L" Bryan-Pioneer Rd., Williams Co., bituminous macadam, tar $59,189; to Wapakoneta Cement Block Co., Wapakoneta, 3.308 mi. Sects. "C-1" and "C-2," 1.6589 mi. Sect. "B," and 0.0647 mi. Sect. "West Milton" Dayton-Covington Rd., Miami Co., rein.-con., $96,761. $39,024 and $1,961 respectively; to J. F. Stambaugh, Ada, 3.513 mi. Sect. "G" Mt. Gilead-Mt. Vernon Rd., Morrow Co., rein.-con. $122,570; to Republic Asphalt Paving Co., 801 Schwind St., Dayton, resurfacing 1.536 mi. Sect. "M" Shelby-Mansfield Rd., Richland Co., bituminous concrete, $34,612; to A. B. Shaw, Delaware, grading and structures on 9.731 mi. Sects. "N," "O" and "P" Pomeroy-Marietta Rd., Meigs Co., $124,594; to G. Keener, Madison, bridge approaches on 0.121 mi. Sects. "A" and "C" Painesville-Warren Rd., Lake Co., $19,856; to I. J. Kuhner, Jackson, Bridge "FJ," on Jackson-Pomeroy Rd., Jackson Co., $8,080. Noted May 15.

O., Cleveland—Paving Edgewater Park, 7,000 sq.yd. bituminous concrete, to Ricicy Bros., The Arcade, $46,134. Noted June 5.

O., Cleveland — Cuyahoga Co., paving Fitzwater River Rd., 26,000 sq.yd. concrete, 2,970 lin.ft. 6 x 14 cement curbing, 25,650 lin.ft. 4 in. drain tile gutter, 11,300 cu.yd. earth excav., to Hannon Constr. Co., Niles, $104,078. Engrs. est. $114,750. Noted May 15.

Ind., Crown Point—Lake Co., graveling 7.6 mi. Meyn Rd., 30 ft., to J. J. Nejdl, 408 La Porte Ave., Whiting, $133,400, engrs. est. $135,500; 11 mi. Fulton Rd., 30 ft., to M. D. Heiney, Gary, Ind., $168,900, engrs. est. $170,000. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Huron Co., Bad Axe, grading and surfacing 0.41 mi. State Trunk Line Rd. 19-8, Sect. B, 2,527 cu.yd. excav., 7,477 sq.yd. concrete, to Schultz & Liken, Sebeawing, $23,208. Noted June 5.

Michigan — State Hy. Dept. at office Comrs. St. Joseph Co., Centreville, grading and surfacing 8.746 mi. State Trunk Line Rd. 60-3, 51,826 cu.yd. excav., 93,717 sq.yd. 7 in. concrete, to Whitlow & Nelson, Muskegon, $172,511. Noted May 15.

Michigan -- State Hy. Dept. at office Comrs. Lapeer Co., Lapeer, grading and surfacing 0.68 mi. State Trunk Line Rd. 36-5, 5,657 cu.yd. excav., 14,404 sq.yd. concrete, etc., to C. H. Frame & Son, Harbor Beach, $35,747, also 1.244 mi. State Trunk Line Rd. 36-4, 9,507 cu.yd. excav., 6,340 sq.yd. gravel, 7,660 sq.yd. concrete to R. C. Bailey, Corunna, $25,792. Noted June 5.

Michigan — State Hy. Dept. at office Comrs. Ingham Co., Mason, received no bids May 28, grading and surfacing 0.876 mi. Federal Aid Project 88, Sect. C, 10,723 sq.yd. concrete. Work will be done by day labor. G. C. Dillman, Lansing, ch. engr. Noted May 22.

Michigan—State Highway Dept. at office Bd. Van Buren Co. Rd. Comrs., Paw Paw, grading and surfacing 3.295 mi. State Trunk Line Rd. 40-1, Sect. A, 34,800 sq.yd. concrete, 21,027 cu.yd. earth excav., to Kalamazoo Paving Co., Kalamazoo, $68,071. Noted May 29.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, **(31-22 Fulton means State Route 31, Sect. 2, Fulton Co.)**, paving 31-22 Fulton, to Sutton & Moore, Canton, $111,212; 27-13X Williamson, to Montague Constr. Co., Carbondale, $29,399; 2-55 DeWitt-McLean, to McMahan Constr. Co., Rochester, Ind., $188,688; paving 2-70 and grading 2-70A LaSalle, to Powers-Thompson Constr. Co., Joliet, $31,217 and $115,745 respectively; grading 2 and 35-17A Pulaski-Alexander, to C. I. Jones, Omaha, $154,490. Noted Nov. 1, Mar. 13 and 27 and May 29.

Ill., East St. Louis—Grading and rein.-con. surfacing 6 mi. State St., 66 ft., to Keeley Bros. Constr. Co., 21st and State Sts., $317,688. Engrs. est. $343,000.

Wis., North Milwaukee—W. E. Chase, city clk., improving various streets, to Milwaukee General Constr. Co., 427 Mitchell St., Milwaukee, 15,102 cu.yd. grading $0.88 per sq.yd. and 22,661 sq.yd. concrete pavement $2.85. Noted May 29.

Wis., Waupaca—F. A. Houseman, city clk., paving 23,000 sq.yd. various streets, asphaltic concrete on macadam, to F. P. Coughlin Co., 130 North Wells St., Chicago, Ill., $43,608. Noted May 15.

Ia., Cedar Falls — Asphaltic concrete paving, etc., about 24,460 sq.yd. incl. 5,740 lin.ft. 6 x 15 in. curb and gutter, and 7,180 lin.ft. 6 x 18 in. curb, to E. Rasmussen, 1116 3rd Ave. N., Ft. Dodge, $58,710.

Ia., Cedar Rapids—Cement concrete paving in Cobban Court and 4 streets, to Ford Paving Co., 208 2nd St., $36,930; 9 alleys, to Stark-Schneider Constr. Co., Cedar Rapids, $11,748. Noted May 8.

Minnesota—State Hy. Dept., St. Paul, to Nolan Bros., 18 North 2nd St., Minneapolis, 5.4 mi. State Project 1-26, Federal Aid Project 321, 57,444 sq.yd. concrete, $2.42 per sq.yd., total $144,645, grading 6 mi. State Project 15-30, Div. C, Federal Aid Project 341, 88,000 cu.yd. excav., $25,948; to Volden Bros., Milan, grading 13 mi. State Project 14-23, Federal Aid Project 355, 141,000 cu.yd. excav., $25,948; to Arlington Cement Stone Co., Arlington, culverts on same $4,936; to Enbeck & Anderson, Warren, grading 14.7 mi. State Project 64-22, Federal Aid Project 353, 194,000 cu.yd. excav., $55,050, to E. Mattson, 116 Rose St., St. Paul, culverts on same $13,696. Noted May 15.

Minn., St. Paul—Resurfacing East 7th St. between Hope St. and Phalen Ave., 18,421 sq.yd. 3 in. sheet asphalt, 850 sq.yd. sheet asphalt with new concrete base, to White Constr. Co., 17 North Dearborn St., Chicago, Ill., $25,314. Noted May 15.

Kan., Minneapolis—Ottawa Co. grading 7.021 mi. Federal Aid Project 185-A, to Campbell & Lachenmaier, Miltonvale, $16,966, culverts, to W. B. Honske, Osborne, $10,076, 4 bridges, to Yancey Constr. Co., Abilene, $10,921. Noted May 8.

Kan., Wichita—To Globe Constr. Co., 1069 North Water St., Improving Ellis, 15th, Ida, Green, Jackson, Grand, Morris, Martinson, Murdock, 2nd. Wichita, Dayton, Lewellen, Hiram and Harrison Sts., Alleys North and South of Douglas St., 43,318 sq.yd. concrete at $1.79 per sq.yd., 470 sq.yd. concrete $2.10, 12,162 cu.yd. excav. $0.90, 1,004 sq.yd. sand fill $0.25; Mosley St., 460.67 sq.yd. brick $3.25, 500 cu.yd. excav. $0.90. Engrs. est. $200,000. Noted Mar. 6.

Neb., Kearney—To E. D. Tyner Constr. Co., 14th and Elmwood Sts., Kansas City, Mo., improving West 28th St., Dist. 61, 18,000 sq.yd. asphaltic concrete at $2.24 per sq.yd., 3,500 cu.yd. grading at $0.45; to E. R. Edwards & Son, Kearney, 8,500 lin. ft. curb and gutter at $0.58. Noted June 5.

Wyo., Casper — Paving with 5 in. bituminous concrete, and laying sewers in Paving Dist. 43, to Warren Constr. Co., Casper, $104,971.

Mo., St. Charles—Resurfacing with concrete, etc., various streets, to H. Werrminghaus, St. Charles, $28,890.

Mo., St. Louis—Improving Oleatha, Sulphur and Thedore Aves., to Skrainka Constr. Co., Security Bldg., $41,305, engrs. est. $47,700; Bates, Macklind and Tholozan Aves., to J. E. Perkinson, 3237 Carter Ave., $82,863, engrs. est. $94,700. Noted June 5.

Ark., Morrilton—Grading and rein.-con. paving about 1 mi. Dist. 3, to Mooley Constr. Co., Morrilton.

Tex., Abilene—Taylor Co. paving with 2 in. Warrenite bitulithic on 5 in. concrete, 17,055 sq.yd. Oak St., 8,066 sq.yd. Chestnut St. and 8,500 sq.yd. Sealy St., to West Texas Constr. Co., Park Office Bldg., $51,633, $28,661 and $27,500 respectively. Engrs. ests. $55,000, $30,000 and $30,000 respectively.

Tex., Amarillo—Paving with 3 in. brick on 4 in. concrete 6 blocks Tyler St., 60 ft., to Plains Paving Co., Amarillo, $32,816; grading, brick paving, etc., 6 blocks Washington St., 60 ft., to Willmering & Mullen, Amarillo, $28,686.

Tex., Austin—Travis Co. grading, etc. 6 mi. Colton Rd., 26 ft., to E. Shelton, Temple, $7,531, metal and concrete drainage structures on same, to W. E. Dozier, Austin Natl. Bank Bldg., $13,903; grading and bridging 19.7 mi. Austin-Cameron Rd., 24 ft., to W. E. Dozier, Austin Natl. Bank Bldg., $33,723.

Tex., Dallas—Dallas Co., concrete surfacing drainage structures on 3.3 mi. State Highway 1, east of Mesquite, to Smith Bros., Inc., Amer. Exch. Bank Bldg., $121,993. Noted June 5.

Tex., Liberty—Liberty Co. grading and gravel surfacing 4.16 mi. State Highway 35, Federal Aid Project 426-A, 12 ft., to C. Vick, Cleveland, $20,693; constructing drainage structures, rein.-con. timber piling, to E. E. Board, Livingston, $8,472. Noted May 8.

Tex., Lubbock — Lubbock Co. improving various streets, 196,000 sq.yd. 2½ in. vitr. brick on 4 in. concrete, 70,000 lin.ft. combined curb and gutter, to Panhandle Constr. Co., Lubbock, $667,494. Engrs. est. $700,000.

Tex., Memphis — Hall Co. grading and bridging 5.5 mi. State Highway 18, State Aid Project 473-B, 24 ft., to Smith Bros., Inc., Amer. Exch. Bank Bldg., Dallas, $37,829. Engrs. est. $41,390.

Tex., Venus — Concrete paving various streets, to P. M. Skinner, Marlin, $25,000

Oklahoma—State Hy. Dept., Oklahoma City, improving roads, **(F. A. P. means Federal Aid Project, E. E. means engineers estimate)**, grading and concrete paving 21,600 sq.yd. road from Bristow North, F. A. P. 128-A, Creek Co., to J. J. Harrison, 906 West 13th St., Oklahoma City, $63,302, E. E. $75,000, 10,557 sq.yd. Meridian Highway, F. A. P. 124-A, Kingfisher Co., to Gudgel & McVay, Stillwater, $28,909, E. E. $30,000; grading and graveling 4.0303 mi. road west from Moffett, F. A. P. 151-A, 18 ft., Sequoyah Co., to Stebbins, Waraham & Lewis, Sallisaw, $28,606, E. E. $30,000. 4.0168 mi. road in south east part of County, F. A. P. 74-C, 18 ft., Murray Co.,

Streets and Roads (Continued)

to W. T. Pharoah, Sulphur, $48,190, E. E. $50,000, 4.4 mi. road over Winding Stair Mountain, F. A. P. 116-B, 18 ft., La Flore Co., to Gravelle Hamblin Co., Manhattan Bldg., Muskogee, $60,856, 145,000 sq.yd. Talihina-Wister Rd. over Winding Stair Mountains, F. A. P. 116-A and C, Le Flore Co., to Maney Bros., Empire Bldg., Oklahoma City, $226,577, E. E. $250,000; surfacing with vertical fibre brick on concrete 28,415 sq.yd. Edmond Rd., F. A. P. 130-A, Oklahoma Co., to Green Beekman Co., 1200 West 11th St., Oklahoma City. $110,410, E. E. $125,000, with Bates Type concrete, 88,989 sq.yd., Russett-Johnston Carter Co. line Rd., Johnson Co., to Garrett & Mills, 1432 West Main St., Oklahoma City, $179,756, E. E. $190,000. Noted May 29.

Okla., Bartlesville—To Hamilton Constr. Co., Bartlesville, improving Kaw, Comanche, 7th, Chickasaw, Cherokee and other streets, concrete paving $3.00 per sq.yd., curbing $0.80, earth excav. $0.85, rock excav. $1.75, total $58,466.

Colorado — State Hy. Dept., Denver, graveling 7.703 mi. Federal Aid Project 242-A, Mesa Co., to D. Hinman, 3358 Race St., Denver, $81,256; grading and graveling 3.239 mi. Federal Aid Project 258-A, Gunnison Co., to R. P. Morrison, Golden, $34,901. Noted June 5.

Wash., Tacoma — Pierce Co., paving Veterans Dr., from Gravelly Lake Blvd. to new Veterans Hospital at American Lake, to Albertson, Cornell Bros. & Walsh, 1113½ A St., Tacoma, $40,626. Engrs. est. $37,599. Noted May 29.

Wash., Vancouver—Clarke Co., to Leisman Constr. Co., Vancouver, surfacing 15.17 mi. La Center-Amboy Rd., 16 ft., Unit 1, 6,982 cu.yd. base course, 600 cu.yd. extra course, and 4,189 cu.yd. top course, all $2.70 per cu.yd., total $31,189 cu.yd. top course, all $2.70 per cu.yd., total $31,782, Unit 2, 9,870 cu.yd. base course, 1,000 cu.yd. extra course, and 5,922 cu.yd. top course, all $2.39 per cu.yd., total $45,338, Unit 3, 3,058 cu.yd. base course, 500 cu.yd. extra course and 1,835 cu.yd. top course, all $2.39 per cu.yd., total $31,782. Engrs. est. $109,000.

Oregon—State Highway Comn., Salem, to Joplin & Eldon, Portland, improving 6 mi. Alsea Mountain Sect. of Alsea Hy., Benton Co., 5,000 cu.yd. broken stone base course $2.85 per cu.yd., 9,000 cu.yd. broken stone top course $3, 3,000 cu.yd. broken stone maintenance $2.90, 1,000 cu.yd. sand filler $0.40, total $50,350; to Greenwood & Dann, 500 North Front St., Portland, 8.17 mi. Missouri Bend Sect. Alsea Hy., Lincoln and Benton Counties, clearing, etc. $15,000, 43,000 cu.yd. common excav. $0.40, 30,500 cu.yd. intermediate excav. $0.60, 45,500 cu.yd. solid rock excav. $1.15, 98,000 sta.yd. overhaul $0.05, 23,000 ft. lumber $80, 540 lin.ft. 18 in. vitr. clay pipe $2.75, 810 lin.ft. 24 in. vitr. clay pipe $5, total $126,470.

Calif., Glendale — Improving Camulos Ave., 109,020 sq.ft. 2 in. oil macadam, etc., to C. L. Hill, 320 West Vine St., about $40,710. Noted May 29.

Calif., Stockton—Improving Wilson Way, to Blumenkranz & Vernon, Farmers & Merchants Bank Bldg., Stockton, $29,595. Noted June 5.

Calif., Los Angeles—To G. H. Oswald, 366 East 58th St., improving Tamarind Ave., grading $5,000, 96,670 sq.ft. warrenite-bitulithic $0.26 per sq.ft., 2,130 ft. curb $0.70, 15,899 sq.ft. walks $0.22, 5,035 sq.ft. gutter $0.35, total to exceed $35,000; to W. Liddington, 420 East 60th St., portion 59th Pl., grading $4,173, 1,510 sq.ft. concrete $0.24, 113,471 sq.ft. oil and roll $0.059, 7,600 ft. curb $0.52, 28,233 sq.ft. walks $0.195, 16,265 sq.ft. gutter $0.30.

Calif., Los Angeles—Los Angeles Co., improving 19,568 lin.ft. Michigan Ave., Rd. Dist. Impvt. 257, 17,948 cu.yd. excav., shaping 44,565 sq.yd. roadbed, 44,565 sq.yd. 5 to 8 in. concrete paving, shaping 19,568 lin.ft. shoulders, etc., to Sully-Miller, 250 Bennett Ave., Long Beach, approximately $97,500. Noted June 5.

Calif., San Diego—Improving Cleveland Ave. and Vermont St., to G. R. Daley, 4430 Boundry St., $59,756. Noted May 29.

Ontario — Dept. Provincial Highways, Toronto, washed gravel concrete paving 7.8 mi. Contract 1021 from Oshawa to Bowmanville, to Johnson Bros., Brantford, $210,000; 6.2 mi. Contract 1022 from New Hamburg to Shakespeare, to McArthur Eng. & Constr. Co., Guelph, $175,000; 6.5 mi. Contract 1050 from Lambeth to Delaware, to Warren Chalmers Constr. Co., 520 Dundas St., London, $175,000, 5.8 mi. Contract 1053 from Thamesford to Ingersoll, to Johnson Bros., Brantford, $180,000; 5.2 mi. Contract 1084, from Essex to Division Rd., to Chick Contg. Co., Windsor, $150,000.

Ont., New Toronto—For 11,000 sq.yd. bituminous paving on 6th St., to Standard Constr. Co., Mimico, $39,408. Engrs. est. $40,000.

Ont., Petersboro—Paving various streets 25,000 sq.yd. bituminous concrete and asphalt, to Warren Bituminous Paving Co, 54 University Ave., Toronto. Engrs. est. $100,000.

Ont., Sandwich—Essex Co. Good Roads Com., 2 mi. concrete paving Riverfront Rd., to S. J. West & Co., Sandwich St. E., $54,000. Engrs. est. $60,000.

Quebec — J. L. Boulanger, Dept. Rds., Quebec, oiling 180 mi. roads from Quebec to Montreal and National roads, to Imperial Oil Ltd., Principal St., St. Laurent, $131,873. Noted Apr. 10.

Industrial Works

PROPOSED WORK

Me., York—Storehouse—York Mfg. Co., having plans prepared by Lockwood, Greene & Co., engrs., 24 Federal St., Boston, Mass., for extension to storehouse 5.

N. Y., Binghamton—Creamery—Cloverdale Creamery Co., 60 Exchange St., plan 2 story and basement, 40 x 120 ft., tile and concrete, Moore and Jackson Sts., to exceed $60,000.

N. Y., Binghamton — Factory — The Chenango Silk Co., 265 Robinson St., plans to build concrete, brick and steel. $70,000.

Pa., Franklin—Plant—Franklin Valveless Engine Co. plans rebuilding plant recently damaged by fire. $150,000.

La., Shreveport — Warehouse — See "Floating Equipment, etc.," under "Unclassified."

Tenn., Nashville—Plant—Swift & Co., 76 West Monroe St., Chicago, Ill., soon takes bids 4 story, brick, concrete and steel, 800 4th Ave. N. $85,000. Private plans.

Ky., Louisville — Plant — Englehardt & Sons, 805 West Main St. having plans prepared by A. G. Tafel, Coleman Bldg., 5 story, 80 x 100 ft., coffee roasting plant, 14th and Magazine Sts. To exceed $50,000. Noted May 22.

O., Cleveland—Factory—W. S. Tyler Co., C. Zimmerman, secy., 3613 Superior Ave., had plans prepared by G. S. Rider & Co., Century Bldg., 2 story and basement, brick and rein.-con., East 36th St. and Superior Ave. $150,000.

O., Cleveland—Factory—Adam Hoffman Co., 10522 Cedar Ave., having plans prepared by Hadlow, Hick & Co., Finance Bldg., 2 story and basement, 50 x 80 ft., brick, steel and concrete, 10522 Cedar Ave. $40,000. Noted May 15.

Ind., Batesville—Factory—Union Furniture Co., having plans prepared by M. Fisher, Brighton Bank Bldg., Cincinnati, O., 4 story and basement, 18 x 72 ft., steel, brick and timber. $50,000.

Ind., Indianapolis — Plant — Cornelius Printing Co., North Capitol Ave., having plans prepared by R. N. Edwards, engr., Union Trust Bldg., 1 story, 120 x 250 ft., rein.-con., brick and steel, West Washington St. $150,000.

Ind., Mt. Vernon—Mill—J. E. Kelly, plans 4 story hominy mill, rein.-con. $150,000. Private plans.

Ind., Richmond—Factory—F. and N. Lawn Mower Co., having plans prepared by J. Mueller & Co., Palladium Bldg., 4 story, 75 x 100 ft., rein.-con., brick and steel. $100,000.

Ind., Richmond — Laundry — Richmond Home Laundry Co., plans 1 story and basement, 57 x 157 ft., rein.-con., brick and steel, $45,000. Werking & Son, Amer. Trust Bldg., archt.

Wis., Milwaukee—Plant—Retailers Tallow Calf Skin Assn., c/o J. Hermann, 2322 State St., having revised plans prepared by M. Fernekes, 915 Chestnut St., 4 story, 58 x 90 ft., brick and concrete, plain foundation, Muskego St. $45,000. Former bids rejected. Noted May 15.

Kan., Lyons—Plant—Amer. Salt Co. plans evaporating plant. $1,000,000.

Mo., Columbia—Plant—Polar Wave Ice & Fuel Co., 3654 Olive St., St. Louis, soon takes bids 2 story and basement, rein.-con. and brick, here. $200,000. H. G. Clymer, Wainwright Bldg., St. Louis, archt.

Tex., Dallas—Oil Refinery—Amer. Refining Co., Staley Bldg., Wichita Falls, plans 140 x 300 ft., Alma and Wall Sts., here. $300,000. Engineer and architect not announced.

Tex., Eagle Lake—Mill—Industrial Cotton Mills, Inc., plans brick and rein.-con. plant. $250,000. B. H. Faber, Eagle Lake, archt. and engr.

Tex., Port Arthur—Plant—Gulf Refining Co. making plans 2 story, 110 x 260 ft., brick and concrete. $300,000. Owner plans to expend $1,700,000 within next 10 months for additional brick and concrete stills. Probably by day labor. J. W. Tyron, supt. Private plans.

Tex., San Angelo—Mill—C. A. Broome and associates plan woolen mill. $250,000. Engineer and architect not announced.

Colo., Colorado Springs — Plant — Voted $1,250,000 bonds, purchase or build municipal electric light and power plant.

Colo., Denver — Warehouse, etc. — Westinghouse Electric Mfg. Co., Union Bank Bldg., Pittsburgh, Pa., making plans warehouse, service facilities and repair shops, here. $500,000.

Wash., Tacoma — Power House — City Light Dept. soon takes bids power house, part of Cushman Power Project. $250,000. J. L. Stannard, engr. in charge.

Calif., Glendale—Factory—Amer. Concrete Co., 1147 Glendale Blvd., Los Angeles, plans concrete factory, here. To exceed $40,000, incl. equipment.

Calif., Oakland—Shops, etc.—Union Constr. Co., Key Route Fill, plans rebuilding ship yard buildings, incl. pattern, machine shops, etc., recently destroyed by fire.

Que., Quebec — Plant — Canadian Wood Impregnating Co., Regina, Sask., plans to purchase site for plant. $200,000.

Ont., Cobalt—Mill—Coniagas Mining Co., St. Catharines, plans rebuilding mill, here, recently destroyed by fire. F. D. Reid, genl. mgr.

Ont., Guelph — Factory — Canadian Diamalt Co. plans plant for manufacture of malt products. $150,000.

Ont., Toronto—Plant—Peerless Artificial Stone Co., Coxwell Ave., plans plant here. $150,000.

BIDS DESIRED

Mass., Springfield—Boiler House—June 20, at office of City Clerk, Administration Bldg., boiler house, Taylor St. yard, for Dept. Streets & Engineering. R. P. Marsh, supt.

Pa., Phila.—Dye House and Plant—June 17, by Ballinger Co., archts. and engrs., 12th and Chestnut Sts., 4 story, part basement and bridge, 94 x 266 ft., brick and steel, plain foundation, Marshall St. between Oakdale and Harold Sts., for Hardwick & Magee, 1200 Mark St. $400,000.

Pa., Phila.—Mill—June 13, by C. E. Wunder, archt., 1520 Locust St., 2 story and basement, 42 x 142 ft., brick, plain foundation, 19th St. and Hunting Park, for Wakefield Knitting Mills, Dell and Luzerne Sts. $45,000.

Mich., Detroit—Plant—June 16, by J. W. Reid, comr. Pub. Wks., City Hall, stationary asphalt plant, 6,000 sq.yd. 2 in. topping per 10 hr. day. G. Jerome, city engr. $150,000.

Ont., London—Factory—Richards Wilcox Canadian Co., Chelsea Green, taking bids 150 x 250 ft., hollow tile. $50,000. W. R. Yendall, mgr.

BIDS RECEIVED

Calif., Merced — Power House — See "Dams."

CONTRACTS AWARDED

Mass., Pittsfield — Plant — The General Electric Co., 1 story, 90 x 400 ft. addition to plant, to J. R. Hampson Co., Pittsfield.

Mass., Worcester — Manufacturing — H. Mandell, c/o H. L. Meacham, archt., 571 Main St., 2 story, 60 x 125 ft., Foster St., to C. Rocheford, 58 Front St. Archts. est. to exceed $40,000. Noted Dec. 27, 1923.

Pa., Phila. — Factory — Rosenau Bros., Inc., Westmoreland St. east of 25th St., 1 story and basement, 70 x 200 ft., brick, plain foundation, to Bowden Constr. Co., 1935 Chestnut St. Archts. est. $60,000.

Ala., Birmingham—Plant—W. H. Kettig, 2747 Niazuma St., and others, 2 story, 150 x 200 ft. chemical plant, rein.-con., Inglenook suburb, to Inglenook Constr. Co., 4011 1st Ave., $400,000.

O., Cleveland—Factory—Industrial Machine Co., c/o H. L. Freeman, pres., 2160 Superior Ave., 1 story, 50 x 100 ft., brick and steel, East 47th St., to Hunting Constr. Co., Discount Bldg. Archts. est. $40,000.

O., Cleveland—Factory—Willard Storage Battery Co., c/o P. H. Voth, engr., East 131st St. and St. Clair Ave., 4 story, 40 x 100 ft., brick and rein.-con., East 131st St., to A. A. Lane Co., 1869 East 55th St. Archts. est. $100,000. Noted Mar. 20.

Ind., Indianapolis—Plant—Kingan Packing Co., West Maryland St., will build 9 story and basement, 80 x 145 ft., rein.-con., and brick, West Washington St., by day labor. $300,000. Private plans.

Ill., Granite City — Warehouse — Natl. Lead Co., International Life Bldg., St. Louis, Mo., general contract, 4 story, 80 x 160 ft., rein.-con. and brick, here, to Fruin-Colnon Constr. Co., Merchants-Laclede Bldg., St. Louis, Mo. Archts. est. $75,000.

Tex., Houston—Mill, etc.—Houston Textile Mills, 1 story, 139 x 388 ft., main mill building, 100 x 125 ft. warehouse, brick boiler house, to Standard Constr. Co., West Bldg.

Industrial Works (Continued)

Minn., Detroit — Power House — City, 1 story, 40 x 120 ft. brick addition, to A. S. Randolph, Detroit, $24,415; two 255 hp. watertube boilers, to J. G. Robertson, 2542 University Ave., St. Paul, $33,000. Noted May 22.

Mo., Springfield — Plant — Springfield Packing Co., general contract, 3 story, 100 x 150 ft., to G. F. Hentschel, Springfield. Archts. est. $50,000. Noted Apr. 10.

Tex., Houston — Mill — Houston Cotton Mills Co., B. Clayton, pres., Chamber of Commerce Bldg., (first unit) brick, concrete and steel, East Montgomery Rd., to Standard Constr. Co., Humble Bldg., $175,000.

Calif., Los Angeles — Printing Plant — Fletcher-Ford Co., 1300 East 1st St., will build 2 story, 150 x 150 ft., brick and heavy timber, Grand Ave., by day labor. Private plans.

Buildings

PROPOSED WORK

N. H., Manchester — Museum — Art Museum, R. J. Pearsley, chn. Bd. of Trustees, 638 River Rd., having plans prepared by R. C. Sturgis, 120 Boylston St., Boston, Mass., 2 story and basement, 80 x 130 ft., rein.-con., brick and marble. To exceed $200,000.

Mass., Barnstable—Office, etc.—K. Karris, Main St., plans office building and filling station, Main St. $250,000. Private plans.

Mass., Boston—Hospital—Massachusetts General Hospital Inc., raising $200,000 for enlarging and improving Fruit St. J. R. Macomber, engr., chn. of com.

Mass., Cambridge — College — Harvard University, raising funds for chemical laboratories. $500,000 (part of $3,000,000 project). W. Lawrence, chn. Noted May 22.

Mass., Dorchester (Boston P. O.) — Court House—City of Boston plans court house, Washington St. and Melville Ave., here. Mulhall and Holmes, 33 Newbury St., Boston, archts. $200,000.

Mass., East Boston (Boston, P. O.)—School House Dept., Boston, having plans prepared by J. M. Gray Co., 175 High St., Boston, 3 story and basement, 160 x 225 ft., rein.-con., and brick, White St., here. $1,300,000.

Mass., Everett (Boston P. O.)—School—City of Boston plans elementary school, Shawmut Ave. and West Concord St., here. To exceed $150,000. T. P. Glynn, chn.

Mass., Lowell—Court House—Commonwealth of Massachusetts, Middlesex Co., Cambridge, having preliminary plans prepared by C. R. Greco, 11 Beacon St., Boston, rein.-con. and brick, Hurd St., here. $200,000.

Mass., Medford (Boston P. O.)—Hospital—City plans Nurses Home addition to Lawrence Memorial Hospital. $150,000. Engineer and architect not selected.

Mass., Milton (Boston, P. O.)—Church—Mattapan Methodist Epicopal Church plans to raise $150,000 for new church, Blue Hills Parkway near Brooks St. T. Hancock, chn.

Mass., Wakefield—High School—Supt. of Schools having preliminary plans prepared by F. I. Cooper Corp., 172 Tremont St., Boston, brick addition, Franklin St. $150,000.

R. I., Pawtucket—Church and Rectory—St. John the Baptist Church, c/o A. Graton, pastor, having revised plans prepared by W. F. Fontaine, 285 Main St., Woonsocket, 1 story, 75 x 180 ft., brick and steel, Woodlawn Sect. $350,000. Noted Mar. 13.

Conn., Enfield — High School — School Com., having plans prepared by F. I. Cooper Corp., 172 Tremont St., Boston, 1 and 2 story and basement, 55 x 180 ft. and 70 x 150 ft., brick, Main St. $250,000.

N. Y., Buffalo—Store—J. N. Adams & Co., 389 Main St., plans rein.-con., brick and steel, Main St. to exceed $200,000.

N. Y., Canton—School—Election June 19, $185,000 bonds, new school. D. D. Kieff, Flower Bldg., Watertown, archt. Address H. M. Barber, city clk.

N. Y., Plattsburgh—Theater and Office—W. E. Benton, Saratoga, had plans prepared by W. H. Vaughan, Saratoga, 64 x 122 ft., stone, steel and brick, here. $150,000.

N. Y., Schenectady—Hospital—Ellis Hospital, Nott St., having plans prepared, 4 story, 44 x 124 ft., addition to wing C, and 4 story addition to Whitemore Home for nurses, brick and steel, plain foundation. $225,000. Engineer and architect not selected.

N. Y., Schenectady — School — R. L. Bowen, city archt., has prepared sketches, 12 room, Bellevue School. $170,000.

N. Y., Syracuse — Office — Chamber of Commerce plans new building or addition to present building, South Warren St., to exceed $150,000. F. V. Bruns, pres.

N. Y., Watertown—Convention Hall—Media Temple, Mystic Shrine plans convention hall. $400,000. Address F. L. Moore, chm. building com.

N. J., Camden—Detention House—Bd. Chosen Freeholders, Camden Co., Court House, Camden, plans 2 story and basement, 50 x 200 ft. detention house, plain foundation, Pensauken Twp. $150,000. Lackey & Hettle, 5 Hudson Ave., archts.

Pa., Hazelton—Church—St. Gabriels Roman Catholic Congregation rejected bids 1 story and basement, 66 x 150 ft., brick and steel. Plans will be revised. Sheridan & Knoblock, Merkle Bldg., archts. Noted May 15.

Pa., Phila.—School—Wm. Penn Charter School, 12th and Chestnut Sts., having plans prepared by Zantzinger, Borie & Medary, Otis Bldg., group buildings, West School Lane, Germantown.

Md., Baltimore—College—Mayor and City Council, City Hall, having plans prepared by Buckler & Fenhagen, 325 North Charles St., 4 story, stone, 33rd St. $2,000,000. Engineer not selected. Noted May 24.

W. Va., Morgantown—City Hall—Election June 26, 150,000 bonds for city hall. P. C. White, city clk.

Fla., Panama City—Hotel—St. Andrews Bay Hotel Co., plans hotel, Harrison and 1st Sts. F. A. Black, secy. $400,000.

Fla., Jacksonville—Hotel—J. L. Tallevost and Associates, c/o H. L. Anderson, Atlantic Natl. Bank Bldg., plan 10 story, Hogan and Adams Sts. $750,000.

La., New Orleans — Hotel — Guarantee Development Co., Roosevelt Hotel, having revised plans prepared by Favrot & Livaudais, archts. Hibernia Bank Bldg. and Toledano, Wogan & Barnard, associated archts., Title Guarantee Bldg., addition to Roosevelt Hotel. $2,000,000. Noted May 29.

Ky., Bowling Green—Hospital—City having plans prepared by R. E. Turbeville, Price Bldg., 3 story and basement, L shaped, 60 x 175 ft., 8th and Park Sts. $150,000.

Ky., Lexington—Hospital—Julius Markes Sanitarium plans tuberculosis sanitarium, Georgetown Rd., near here. $150,000. Frankel & Curtis, Lexington, archts.

Ky., Louisville—Home and Hospital—Kosair Assn., 212 West Bway. having plans prepared by Joseph & Joseph, Francis Bldg., 1 and 2 story and basement home for crippled children, Eastern Parkway. $150,000. Noted Oct. 25.

Ky., Williamsburg—Church—Daugherty & Gardner, archts., Stahlman Bldg., Nashville, Tenn., takes bids in about 6 weeks, brick and stone, here, for Williamsburg Baptist Church. $150,000.

Ky., Wilmore—Dormitory—Asbury College soon takes bids rebuilding girls dormitory. $150,000. H. A. Churchill and J T. Gilling, Lexington, archts. Noted May 1.

O., Canton—Hotel—J. H. Thompson Hotels Co., Leader News Bldg., Cleveland, plans hotel, here. $1,500,000.

O., Canton—Office and Mercantile—C. Bowen, having plans prepared by Structural Eng. Co., 1st Natl. Bank Bldg., 3 story and basement (ultimately 6 story), 22 x 168 ft., steel, limestone, gray brick, and concrete, North Market St. $150,000.

O., Canton—Office—Canton Building Co., plans 6 story and basement, 23 x 200 ft., (66 ft. at rear), brick, steel and concrete, Market and 2nd Aves. $250,000. I. S. Sweaney, pres.

O., Cleveland — Apartment — K. Green, 1931 East 89th St., had plans prepared by A. W. Harris, Discount Bldg., 3 story and basement, 42 x 150 ft., brick, 2626 North Morland Blvd. $300,000.

O., Cleveland—Commercial—Davis & Farley Co., Davis and Farley Bldg., plans 3 story, brick, steel and concrete, Prospect Ave. $150,000. Engineer and architect not selected.

O., Cleveland—Commercial and Temple—Brooklyn Masonic Temple Co., 3415 West 25th St., having preliminary plans prepared by D. Farnam, 608 Caxton Bldg., 4 or 5 story, brick, steel and concrete, West 25th St. and Garden Ave. $400,000.

O., Salem—Office and Store—C. A. McKinley Co. plans 6 story and basement, 50 x 150 ft., steel and concrete, 105-109 Main St. $175,000.

Ind., Evansville — Hospital, etc. — Bd. Comrs. Vanderburg Co., plans election soon $655,000 bonds for hospital, nurses home and power plant for Boehne Tuberculosis Camp.

Ind., Indianapolis — Store — Selig Dry Goods Co., 20 West Washington Ave., plans 7 story and 2 basements, rein.-con., and brick, Washington Ave., $500,000. Vennegut, Bohn & Mueller, Indiana Trust Bldg., archt.

Ind., Terre Haute—Office—Citizens Gas & Fuel Co., 636 Wabash Ave., plans 4 story and basement, rein.-con., brick and steel. $250,000. Shourds-Stoner Co., Tribune Bldg., archt.

Mich., Detroit—Apartment—T. Davidson, 725 Detroit Savings Bank, having plans prepared by F. W. Wiedmaier, 51 Campau Bldg., 4 story and basement, irregular shape, concrete, brick and steel, plain foundation, Woodward Ave. and Covington Dr. $400,000.

Mich., Detroit—Club House—Wolverine Athletic Club, 1156 Penobscot Bldg., having preliminary plans prepared by Bonnah & Chaffee, 528 Farwell Bldg., 21 story and basement, 350 room, rein.-con., brick and steel, Bates St. and Cadillac Sq. $3,000,000.

Mich., Detroit — Hospital and Nurses Home—Pub. Welfare Comn., Clinton and Raynor Sts., having preliminary plans prepared by Carey & Esselstyn, 602 Hoffman Bldg., 3 and 4 story, rein.-con., brick and steel, plain foundation, St. Antoine St. $900,000.

Mich., Detroit — Office — United States Mortgage Bond Co., 312 Majestic Bldg., having plans prepared by H. Angell, 607 Free Press Bldg., 9 story and basement, about 60 x 80 ft., concrete, brick and steel, plain foundation, Shelby St. About $1,000,000.

Mich., Detroit—Office—Wormer & Moore, 2231 Park Ave., having preliminary plans and sketches prepared about 6 story, concrete, brick and steel, plain foundation, Park Ave. and Elizabeth St. $500,000. Engineers and architects names withheld.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Verner, Wilhelm & Molby, 602 Book Bldg., 1 story and part basement, 54 rooms, concrete, brick and steel, plain foundation, Lawley and Dequindre Aves. $350,000.

Mich., Echo City (Royal Oak, P. O.)—School—Bd. Educ., had plans prepared by F. D. Madison, Royal Oak, 2 story and part basement, 15 room, rein.-con. and brick, plain foundation, Pierce St. $225,000.

Ill., Chicago—Fine Arts—South Park Dist. voted $5,000,000 bonds restoring and reconstructing Fine Arts Building, in Jackson Park.

Wis., Madison—Fraternity—Alpha Sigma Phi, 619 North Lake St., having plans prepared by R. C. Velguth, 211 Grand Ave., Milwaukee, 2 story and basement, concrete and stone, plain foundation. $150,000.

Kan., Great Bend — High School — Bd. Educ., having plans prepared by T. W. Williamson & Co., 312 Central Natl. Bank Bldg., Topeka, 2 story, 116 x 144 ft., rein.-con. and brick, plain foundation. $200,000. Noted Apr. 1.

Kan., Winfield—Hospital—City, c/o H. H. Hanlen, city clk., plans 2 story hospital. $200,00. H. P. Haynes, Winfield, engr.

Neb., Lincoln—Theatre—Capitol Enterprises, 503 Davidson Bldg., Kansas City, Mo., soon takes bids rein.-con., brick, stone and marble, N St., here. $500,000. Private plans.

Mo., St. Louis—Church—J. H. Lynch, archt., Dolph Bldg., revising plans 2 story and basement, rein.-con., brick and stone, Kingshighway-Cote Brilliante Sts., for Salem Methodist Episcopal Church. $150,000.

Mo., St. Louis — Office — Southwestern Bell Telephone Co., Bway. and Locust St., soon takes bids 19 story and basement, rein.-con., steel, stone and brick, 10th, 11th, Pine and Chestnut Sts. $8,000,000. Mauren, Russell & Crowell, Chemical Bldg., archts.

Mo., St. Louis—Y. M. C. A., c/o B. W. Moser, pres., 6186 McPherson Ave., soon takes bids, on Central, West End, South St. Louis and Carondelet buildings, additions to Railroad and Negro Y. M. C. A., Meramec Valley outing camp, North Side addition, etc. $3,000,000. Noted Feb. 28.

Mo., Springfield—Dormitory, etc.—Drury College having preliminary plans prepared, 2 and 3 story, dormitory, library and conservatory of music, brick, stone and concrete. $400,000. Private plans.

Tex., Dallas—Department Store—A. Harris & Co., Akard and Elm Sts., plans 6 or 7 story, brick and concrete, 25 x 50 x 100 ft., brick and concrete, Elm St. $150,000. Engineer and architect not announced.

Tex., Lubbock—School—Bd. Educ. making plans 3 story and basement, 64 x 164 ft., brick and stone. $150,000. Peters & Haynes, Leader Bldg., engrs. and archts.

Tex., San Antonio — Dormitory, etc. — Westmoreland College (Methodist Episcopal Church), 726 West Waco St., plans to raise $250,000 for 2 to 3 story dormitory, also $150,000 for gymnasium, brick or stone and concrete. E. R. Stanford, pres.

Tex., Wichita Falls—Club—B. P. O. E. 1155, having plans prepared by C. J. Pate, 1005 City Natl. Bank Bldg., and J. M. Schaefer, 1208 Staley Bldg., 3 story and basement, 50 x 150 ft., brick, stone, steel

Buildings (Continued)

and terra cotta, 9th and Lamar Sts. $160,000.

Okla., Bartlesville—High School—Voted $360,000 bonds for 3 story and basement. W. J. Mullins, city clk. Engineer and architect not selected.

BIDS DESIRED

Mass., Attleboro—School—June 11, by L. A. Fales, supt. of schools, 2 story, 60 x 90 ft. addition to Richardson School, brick, stone and steel. $150,000.

Mass., Brighton (Boston, P. O.)—Apartment—York Apartments, Inc., c/o W. L. Minor, archt., 60 Pemberton Sq., Boston, taking bids (1st of 8 units) 3 story, 53 x 90 ft. brick and stone, Allston St., here. $350,000.

Conn., Danbury—June 20, by Danbury Natl. Bank, 1 story, 50 x 80 ft., concrete, stone and steel, plain foundation, Main St. $200,000. Sunderland & Watson, 248 Main St., archts.

Conn., Stratford, (Bridgeport, P. O.)—High School—E. W. Mohr, secy. School Com., taking bids 1 and 2 story and basement, 200 x 200 ft., brick and stone, North Parade St. $250,000. F. I. Cooper Corp., 172 Tremont St., Boston, archt.

N. Y., Jamestown—Church—First Presbyterian Church taking bids, 2 story and basement and tower, 60 x 115 ft., rein.-con., brick and stone. $200,000. Noted Sept. 13, 1923.

N. Y., Lowville — School — June 15, by Bd. Educ., new school. $500,000. Address S. B. Richardson, chn. building comn.

N. J., Elizabeth—Administration—June 16 (extended date), Union Co. Park Comn., 286 North Broad St., administration building No. 6, Warinanco Park. C. G. Poggi, 275 Morris Ave., archt.; adv. E. N.-R. June 12.

Del., Wilmington—Club House—Wilmington City Club, W. H. Fenn, Jr., chn. Building Comn., Dupont Bldg., will build 2½ story and basement, 58 x 177 ft., brick and stone, plain foundation, by separate contract. $200,000. E. W. Martin, and R. R. Neely, 2301 Spruce St., Phila., Pa., archts. Noted May 1.

Pa., Rosedale — High School — June 24, by Muhlenberg Twp. S. D., plans 2 story and basement, 50 x 120 ft. with two wings each 43 x 93 ft., brick and steel, plain foundation. Ritcher & Eiler, 147 North 5th St., Reading, archts.

Ky., Louisville—Hospital—June 24, by A. Loomis, archt., and Bd. Tuberculosis Hospital, at Todd Bldg., 1st unit of Waverly Hill Tuberculosis Sanitarium, 3 story, 50 x 480 ft., rein.-con. $700,000. Noted Nov. 29.

O., Canton—Exchange—June 23, by Ohio Bell Telephone Co., C. P. Cooper, pres., 4300 Euclid Ave., Cleveland, 3 story, 66 x 164 ft., brick, steel and concrete, here. $300,000. Hubbell & Benes, 4500 Euclid Ave., Cleveland, archts. Noted May 8.

O., Canton—Store and Office—June 16, by C. E. Firestone, archt., Renkert Bldg., 5 story and basement, 66 x 100 ft., steel, brick and concrete, Tuscarawas and Cleveland Aves. W., for Cole-Brant Co., Canton. $200,000. Separate bids will be received for heating, etc.

O., Oberlin — Hospital — Allen Memorial Hospital of Oberlin College Group, taking bids 3 story, 43 x 102 ft., brick, steel and concrete. $200,000. C. Gilbert, 244 Madison Ave., New York City, archt.

O., Sylvania—High School—June 18, by Bd. Educ., 2 story and basement, 71 x 134 ft., brick, steel and concrete. $175,000. T. D. McLaughlin and associates, 610 Savings Bldg., Lima, archts. Noted June 5.

O., Youngstown — Hotel — Ohio Hotel Operating Co., Boardman and Hazel Sts., taking bids 4 story, 120 x 156 ft., brick and steel addition. $350,000. Stanley & Scheibel, 1301 Wicks Bldg., Cleveland, archts. Noted Feb. 7.

Mich., Detroit—Apartment—Beckett & Akitt, archts., 406 Temple Bldg., taking bids and open same about June 20, 3 story and basement, brick and steel, plain foundation, Grand River Ave., for G. H. Thompson, 3269 Pingree Ave. $200,000.

Mich., Detroit—Manastery—Donaldson & Meier, archts., 1312 Penobscot Bldg., taking bids and open same about June 20, 2 story and basement, 125 x 138 ft., brick, steel and stone, plain foundation, Dix and Junction Aves., for Holy Redeemer Church, 1721 Junction Ave. $200,000.

Mich., Detroit—Schools—June 16, by Bd. Educ., 1354 Bway. Ave., 2 story and part basement, 82 x 171 ft. with 31 x 64 ft. wing, concrete, brick and steel addition to McCullock School, plain foundation, Hazelridge St., also 2 story and part basement, 82 x 171 ft., with 31 x 64 ft. wing, concrete, brick and steel addition, plain foundation, Hamburg Ave. Malcolmson & Higginbotham, 1217 Griswold St., archt.

Mich., Hamtramck—High School—June 17, by S. A. Majewski, secy. Bd. Educ. Junior High School, 2 story and basement, 150 x 180 ft. rein.-con., brick and steel, and bridge connecting with present school, Hewitt Ave. J. G. Kastler & Co., 523 Detroit Savings Bank, Detroit, archts.

Mich., Pontiac—School—June 17, by R. Hazelton, secy. Bd. Educ., 2 story and basement, rein.-con., brick and steel addition, plain foundation, Sanford and Midway Sts. $150,000. Fisher Bros., 24 West Huron St., archt.

Mich., River Rouge—Church—June 20, by Stahl & Kinsey, archts., 628 McKerchey Bldg., Detroit, 2 story and basement, 110 x 130 ft. brick and steel, plain foundation, for River Rouge Methodist Episcopal Church. $150,000.

Ill., Lake Forest—Inn—Lake Forest Inn, Inc., c/o W. A. Morrow, archt., 30 North Michigan Ave., Chicago, taking bids masonry and carpentry work for 4 story and large basement, 40 x 225 ft., brick and rein.-con., Deerpath Rd., here. $300,000.

Wis., Appleton — Church — June 14, by Childs & Smith, archts., 720 North Michigan Blvd., Chicago, Ill., 2 story, 60 x 177 ft., brick and stone, plain foundation, here, for First Methodist Congregation. J. Holmes, 737 Lawrence St., pastor. $250,000. Noted May 15.

Wis., Milwaukee—Apartment—Rosman & Wierdsma, 490 Bway., taking bids, 4 story and basement, 46 x 136 ft., brick and concrete, plain foundation, Grand Ave. $150,000. Owner's name withheld.

Wis., Milwaukee—Dormitory—R. Messmer & Bro., archts., 221 Grand Ave., taking bids 3 story and basement, concrete and brick, plain foundation, 31st and State Sts., for Concordia College, 3127 State St. $150,000. Noted Dec. 13.

Wis., Milwaukee—Store—June 20, by Voelz & Siebert, 373 Bway., 2 story and basement, 110 x 139 x 300 ft., brick and concrete, plain foundation, Forest Home and Mitchell Sts., for G. A. Butler, 603 Mitchell St. $400,000. Noted Feb. 14.

Wis., South Milwaukee—Store—R. B. Williamson, archt., 405 Bway., Milwaukee, taking bids 3 story and basement, 62 x 120 ft., brick and tile, plain foundation, here, for Bettinger & Sons. $150,000.

Ia., Indianola—High School—June 20, by C. D. Proudfoot, secy. Bd. Educ., 2 story, 147 x 173 ft., rein.-con., brick and steel, plain foundation. $150,000. Keffer & Jones, 202 Masonic Temple, Des Moines, archts. Noted Feb. 28.

Mo., St. Louis—School—June 20, by Bd. Educ., 911 Locust St., Elias Michael school for crippled children, 2 story and basement, brick, rein.-con. and stone, Euclid St. $202,650. R. M. Milligan, c/o Bd. Educ., engr. and archt.

Calif., Palo Alto — Theatre — Weeks & Day, archts., 315 Montgomery St., San Francisco, taking bids rein.-con., University Ave., here, for Palo Alto Theatre Co., c/o architects. $150,000. Noted Dec. 20, 1923.

Calif., Yreka—Hotel—L. L. and W. J. Weaver, Albany Hotel, Albany, Ore., will build 3 story concrete or brick, here. $150,000. Work will be done by separate contracts under supervision of owner. Tourtelotte & Hummel, Failing Bldg., Portland, Ore., archts. Noted June 5.

BIDS RECEIVED

Mo., Koch—Employees, etc.—Bd. Pub. Serv., 208 City Hall, St. Louis, general contracts, 3 story and basement, employees building, and 2 story and basement kitchen, on Robert Koch Hospital Grounds, from E. A. Steininger, Laclede Gas Light Bldg., $201,712 and $58,836 respectively. Noted May 8.

CONTRACTS AWARDED

Mass., Boston — Mercantile — Governor Sq. Building Co., 120 Franklin St., 3 story, 50 x 400 ft., rein.-con., brick and stone, Newbury and Brookline Sts., to National Eng. Corp., 60 Federal St. Archts. est. $300,000.

Mass., Malden (Boston P. O.)—School—City, 2 story and basement, 120 x 215 ft., rein.-con. and brick, Cross St., to Leighton-Mitchell Co., 99 Chauncey St., Boston, $384,291.

Mass., New Bedford — Home — Sacred Heart Home, concrete, brick and steel, plain foundation, Austin St., to L. Bolduc & Son, 579 Middle St., Fall River, $200,000.

Mass., Springfield—Bank—H. J. Perkins Co., 435 Dwight St., altering and constructing addition, Lyman St., to Fred T. Ley & Co., Inc., 145 State St. Archts. est. to exceed $150,000.

Mass., West Springfield (Springfield P. O.)—Monastary and Retreat House—Passionist Fathers, Monastery St., West Hoboken, N. J., 4 story, 60 x 310 ft., concrete, stone and steel, here, to J. G. Roy & Son Co., 21 Silver St., Springfield, $450,000.

Conn., Hartford—School—School Bd., 3 story and basement, 85 x 156 ft., brick and economy stone, plain foundation, Vine St., to S. C. Poriss Co., 54 Church St., $213,017.

N. Y., Binghamton—High School—Bd. of Contr. & Supply, East Junior High School, brick, stone, concrete and steel, Broad Ave. and Robinson St., general contract, to B. Klein, 29 Highland Ave., $365,485. Noted Apr. 24.

N. Y., Brooklyn — Apartment — Fourth Ave. Court Constr. Co., c/o A. J. Simberg, archt., 2113 62nd St., will build brick and steel, plain foundation, 4th Ave. between 74th and 75th Sts., by day labor $1,000,000.

N. Y., Buffalo—Apartment—W. Parke, genl. mgr. Parke Apartments, 10 story, 33 Gates Circle, to H. L. Stevens & Co., 522 5th Ave., New York, about $2,000,000.

N. Y., Troy—School—Rensselaer Polytechnic Institute, 3 story and basement, brick and steel, plain foundation, 15th St., to Amsterdam Building Co., 138 East 44th St., New York City, $264,093. Noted Feb. 21.

Pa., Altoona—Store—Silverman Bros., 1322 12th Ave., 5 story and basement, 60 x 120 ft., steel, plain foundation, to C. Singiser, Chamber Commerce Bldg., $300,000. Noted Feb. 28.

Pa., Mahanoy City—Theatre—Chamberlain Amusement Enterprise, Inc., Shamokin, 3 story and basement, 70 x 161 ft., brick and steel, plain foundation, Main and Market Sts., here, to Stofflet & Tillotson, Wesley Bldg., Phila., cost plus percentage basis. Archts. est. $300,000. Noted Mar. 31.

Pa., Phila. — Apartment — Twenty-one thirty Locust St. Corp., c/o Hodgens & Hill, archts., 130 South 15th St., 4 story and basement, 42 x 100 ft., brick and steel, plain foundation, to Barnet Constr. Co., Walnut and Juniper Sts.

Pa., Phila. — Church — St. Francis of Assisi, J. D. Nevin, pastor, Greene and Logan Sts., 1 story and basement, 80 x 100 x 164 ft., steel and stone, plain foundation, to D. W. O'Dea, 5th and Lindley Sts. Archts. est. $500,000.

Pa., Phila.—Recreation—City, general contract George A. Ware recreation center, 1 and 2 story and basement, 80 x 259 ft., brick and steel, plain foundation, to S. S. Lewis, Real Estate Trust Bldg., $136,478. Noted May 15.

Md., Baltimore — High School — Mayor and City Council, City Hall, Gwynns Falls Junior High School, 3 story, rein.-con., and brick, plain foundation, Hilton St., to J. H. Miller, Inc., Eutaw and Franklin Sts., $917,000. Noted June 5.

N. C., Durham—Church—Trinity Church Society, R. L. Badwin, chn. Building Comn., church, to Consolidated Constr. Co., Durham. Archts. est. $300,000.

Ala., Birmingham — Hotel — Redmont Hotel Co., Atlanta, Ga., 14 story, rein.-con., 5th Ave., to Smallman-Brice Constr. Co., 1115 Avenue E., $1,250,000. Noted May 8.

O., Cleveland—Apartment—Shelton Apartment Co., c/o Braverman & Havermaet, archts., 6 story and basement, brick, steel and concrete, East 102nd St., to S. W. Emerson Co., 1836 Euclid Ave., $550,000.

O., Cleveland—Commercial and Garage—Abrams Realty Co., c/o L. Abrams, Engineers Bldg., 1 and 2 story, 116 x 240 ft., brick, steel and concrete, East 79th St. and Lexington Ave., to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $175,000.

O., Cleveland — Commercial, Club and Office—Union Mortgage Co., c/o E. C. Daonst, secy., Natl. City Bldg., 2 story, 96 x 369 ft., brick and rein.-con., East 6th St. and St. Clair Ave., to Craig-Curtiss Co., 4614 Prospect Ave. Archts. est. $400,000. Noted June 5.

Mich., Highland Park (Detroit P. O.)—Hospital and Nurses Home—Highland Park General Hospital, general contract 3 and 4 story, rein.-con., brick and steel addition, plain foundation, to Corrick Bros., 507 Owen Bldg., Detroit, $200,000.

Mich., National Mine—High and Grade School—F. Moody, secy. Bd. Educ., Tilden Twp., 2 story and basement, 96 x 200 ft., concrete, brick and tile, plain foundation, to Foster Constr. Co., 114 Grand Ave., Milwaukee, Wis. Archts. est. $190,000. Noted May 15.

Buildings (Continued)

Wis., Racine — Church — St. Patricks Congregation, W. F. McCarthy, pastor, 1199 Douglas Ave., 2 story, 123 x 145 ft., brick and stone, plain foundation, to Barry, Byrnes & Ryan, 104 South Michigan Blvd., Chicago, Ill. Archts. est. $150,000. Noted Apr. 17.

Wis., Whitewater—School—Bd. Normal Regents, W. J. Kettle, secy., Madison, 2 story and basement, 60 x 250 ft., rein.-con., brick and steel addition, plain foundation, here, to Schafer & Olson, Chippewa Falls. Archts. est. $175,000. Contractor desires sub-bids on all contracts.

Wis., White Fish Bay—Grade School—School Dist. No. 1, W. A. Klatte, clk., 2 story and basement, brick and tile addition, plain foundation, to B. Wilke, 1011 Island Ave., Milwaukee. Archts. est. $150,000. Noted May 1.

Ia., Tipton — School — Bd. Educ., C. Miller, secy., 2 story and basement, rein.-con., brick, tile and stone, to G. Lanning Constr. Co., Oskaloosa, $179,800. Noted May .

Minn., Minneapolis—Hospital—State Bd. Control, St. Paul, general contract 3 story, basement and sub-basement, rein.-con., brick and tile, State U. to L. Fleisher Co., 505 Plymouth Bldg., $265,000. Noted May 29.

Mo., St. Louis — Apartment — Mardyke Investment Co., c/o contractor, 6 story and basement, rein.-con., brick, terra cotta, tile and limestone, Skinker and McPherson Sts., to Dougherty-Sheehan Real Estate Co., 721 Chestnut St.

Tex., Abilene—Bank and Office—J. M. Alexander, Radford Bldg., 7 story and basement, 75 x 100 ft., brick and concrete, 1st and Pine Sts., to Walsh & Burney, Abilene, $310,000. Noted May 22.

Tex., Dallas—Shop—W. A. Browning Mchy. Co., 3125 Elm St., 50 x 100 x 300 ft., brick and concrete, Exposition and Commerce Sts., to H. T. Apple, 2613 Warren St., $40,000 plus.

Tex., San Antonio—Office—San Antonio Builders Exch. Co., 206 Bedell Bldg., 9 story and basement and roof garden, brick, rein.-con. and stone, plain foundation, Pecan and St. Marys Sts., to J. Aiken, 802 Delmar St., $179,815. Noted May 29.

Wash., Seattle—Medical and Dental—Bradner Building Co., 18 story, 41 x 64 x 100 x 230 ft., rein.-con., fireproof, 5th and Westlake Sts., to A. W. Quist & Co., Hoge Bldg. Archts. est. $2,500,000.

Calif., Long Beach—School—Long Beach City School Dist., Whittier School, brick and concrete, general contract, to W. G. Reed, Pacific Southwest Bldg., $119,400. Noted June 5.

Que., Three Rivers—Station and Office—Ross & McDonald, archts., Belmont St., Montreal, 2 story, 32 ft. high, 80 x 25 ft., rein.-con., brick, steel and stone, Champflour St., here, to Thompson-Starrett Co. Ltd., Keefer Bldg., Montreal, for Canadian Pacific Ry. Co., Windsor St. Sta., Montreal. $300,000. Noted May 15.

Federal Government Work

PROPOSED WORK

Ky., Louisville—Castings, etc.—U. S. Engineer Office, P. O. Box 72, plans furnishing 72 tons steel and iron castings and forgings, 88 tons c.i. castings, for river wall valves, etc., for Locks 49 and 50, Ohio River.

H. T., Pearl Harbor—Steel Water Tank—Spec. 4992—Bureau Yards & Docks, Navy Yard, Wash., D. C., soon takes bids steel water tank at Naval operating base here.

BIDS DESIRED

N. Y., Buffalo—Dredge—June 20, by U. S. Engineer Office, U. S. dipper dredge Sodus; adv. E. N.-R. June 12.

Ind., Elkhart—Alterations, etc.—July 7, by Treas. Dept. at office Supervising Architect, Wash., D. C., alterations in present post office, etc., here; adv. E. N.-R. June 12.

Wyo., Laramie—Post Office—June 27, by Treas. Dept. at office Supervising Architect, Wash., D. C., remodeling and enlarging U. S. Post Office, here; adv. E. N.-R. June 12.

Mo., Boonville—Dike—June 28, by U. S. Engineer, Kansas City, 2,400 lin.ft. clump dike in Missouri River at Diana Bend, 5 mi. below here.

BIDS RECEIVED

Ill., Chicago—Dredging—U. S. Engineer Office, 537 South Dearborn St., dredging in North Branch Chicago River, 100,000 cu.yd. from Great Lakes Dredge & Dock Co., 104 South Michigan Ave., $0.44 per cu.yd. Noted Apr. 24.

Nevada—Roads—C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., San Francisco, Calif., 10.64 mi. Austin-West Forest Highway, Lander Co., from W. J. Schmidt, 2010 Shattuck Ave., Berkeley, $36,160. Noted May 8.

California—Bridge—U. S. Engineer, Bureau Pub. Rds., Main St. San Francisco, rein.-con. bridge over Big Bear Lake Dam. San Bernardino Co., from F. Bryant, 286 West San Carlos St., San Jose, $32,162.

CONTRACTS AWARDED

Mass., Chelsea—Porches and Walks—Spec. 4965—Bureau Yards & Docks, Navy Dept., Wash., D. C., inclosed porches and concrete walks at Naval Hospital, here to F. J. Lowe & Co., 80 Boylston St., Boston, $8,500. Noted June 5.

N. Y., West Point—Stadium—E. T. Timberlake, quartermaster Military Academy, rein.-con. stadium, to seat 16,000, to Newport Constr. & Eng. Co., Newport News, Va. Archts. est. to exceed $150,000. Noted Apr. 24.

Pa., Aspinwall—Hospital—U. S. Veterans Bureau, Arlington Bldg., Wash., D. C., constructing U. S. Veterans Hospital, here to W. T. Trimble & Sons Co., 1719 Penna. Ave., $760,250; plumbing to Virginia Eng. Co., Inc., Newport News, Va., $191,806; electric work to Michaels & Co., Inc., Norfolk, Va., $39,620. Noted May 29.

W. Va., Huntington—Power House—U. S. Engineer Office, War Dept., Wash., D. C., fireproof power house at Dam 32, Ohio River, to H. Campbell & Sons, Huntington, $33,000. Noted May 8.

Fla., Jacksonville—Dredging—U. S. Engineer Office, dredging in St. Johns River, to Seaboard Dredging Co., Durkee Bldg., $72,000. Noted May 1.

Ky., Louisville—Pumps—U. S. Engineer, P. O. Box 72, furnishing 16 steam pumps 4 x 6 x 6 in., to Henry Vogt Mchy. Co., 1402 West Main St., $1,468. Noted May 29.

Ill., Great Lakes—Boilers—Spec. 4982—Bureau Yards & Docks, Navy Dept., Wash., D. C., resetting boilers at Naval Training Sta., to Fort Dodge Boiler Wks., 311 2nd Ave., S., Ft. Dodge, Ia., $11,352. Noted June 5.

Mo., Liberty—Post Office—Treas. Dept. at office Supervising Archt., Wash., D. C., 1 story, 62 x 64 ft., brick and tile post office, here, to W. McDonald Constr. Co., Odd Fellows Bldg., St. Louis, $48,578. Noted Apr. 24.

Calif., San Diego—Hospital—Spec. 4955—Bureau Yards & Docks, Navy Dept., Wash., D. C., hospital at Naval Operating Base to R. McKee, 607 Commonwealth Bldg., $422,400. Noted May 8.

Unclassified

PROPOSED WORK

Playground—Brighton (Boston P. O.), Mass.—City of Boston plans playground at Oak Sq., here. $50,000. F. H. Fay, chn.

Underground Station—Boston, Mass.—City plans new station in Cambridge tube at Cambridge and Charles St. $800,000. E. R. Springer, Transit Dept., 1 Beacon St., engr.

Floating Equipment, etc. — Shreveport, La.—C. E. Smith, city engr., completed plans and submitted same to L. E. Thomas, mayor, for following improvements to River Terminals and floating equipment, etc., 2 tow boats $320,000, 10 barges $200,000, submerged dyke (Bossier side) $40,000, 12 ft. piling (City side) $50,000, 100,000 sq.ft. bank paving $20,000, landing platform $5,000, warehouse $30,000, 4 conveyors $30,000, tracks and platforms $5,000, contingencies, etc. $30,000.

White Way—Louisville, Ky.—Bd. Pub. Wks., plans "White Way" on 5th St. from Jefferson to Market Sts., and on Liberty, Walnut, Guthrie and Chestnut Sts. To exceed $25,000. T. B. Crutcher, acting chn.

Retaining Wall—Cleveland, O.—Cleveland Union Terminal Co., Marshall Bldg., had plans prepared rein.-con., retaining wall 338 ft. long, 50 ft. high and 18 ft. wide at base, Ontario St. $400,000. H. D. Jouett, 323 Lakeside Dr., archt. and engr.

Track, Conveyors, etc.—Evansville, Ind.—Bedford-Nugent Co., Inc., Goodsell St., plans incline track, spur and sand conveyors, etc., at sand handling plant on bank of Ohio River, near here. $25,000.

Grand Stand — La Crosse, Wis. — La Crosse Interstate Fair Assn., c/o W. Doerfler, chn. building com., plans rein.-con. grand stand. $50,000. Engineer not selected.

Park Improvement, etc.—Cisco, Tex.—Making plans improving City Park, sidewalks, paving. $25,000 plus. Koch & Fowler, Central Bank Bldg., Dallas, engrs.

Lighting System — Claude, Tex. — Voted $35,000 bonds complete municipal lighting system. Noted May 15.

Slip Improvements—Port Arthur, Tex.—Attorney General approved $90,000 bonds for slip improvements. J. P. Logan, mayor.

Transmission Line—California—Southern Counties Gas Co., 3rd St., Pomona, appropriated funds for approximately 30,000 ft. 8 in. transmission line from Covina to Spadra. $55,000. Private plans.

Fire Alarm System—Los Angeles, Calif.—Had plans prepared fire alarm box system. To exceed $850,000. J. Griffin, city engr.

Street Lighting System—Los Angeles, Calif.—See "Streets and Roads."

Tunnel—San Francisco, Calif.—City and San Francisco Co. plan Eureka Valley Tunnel. $1,572,654 (city will pay $393,163 towards cost, balance by property owners under assessment plan). M. M. O'Shaughnessy, city engr.

Wharf, etc.—Little Current, Ont.—Regal Gasoline & Oil Co., Collingwood, plans wharf, warehouse and office here. $25,000.

Subway—Ottawa, Ont.—City plans concrete, rein.-con. and steel subway, 66 ft. wide, in Elgin St. $45,000. A. F. Macallum, city engr.

BIDS DESIRED

Mechanical Equipment, etc.—Brooklyn, N. Y.—June 30, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., mechanical equipment, plumbing, heating and ventilating apparatus, etc., in P. S. 28 (2nd part) Fulton St., in P. S. 180, 16th Ave., in P. S. 212, Bay 49th St., in P. S. 214, Pitkin Ave., in P. S. 215, Ave. S., in P. S. 216, Ave. X., and in P. S. 217, Newkirk Ave.

Mechanical Equipment, etc.—Long Island City, N. Y.—June 30, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, mechanical equipment, plumbing, heating and ventilating apparatus, etc., in P. S. 125, Nelson Ave., here.

Trucks—Long Island City, N. Y.—June 16, by M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., three 7½ ton motor trucks.

Mechanical Equipment, etc.—New York, N. Y.—June 30, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, mechanical equipment, plumbing, heating and ventilating apparatus, etc., in P. S. 77, Ward Ave., Bronx Boro.

Heating and Ventilating Apparatus — St. George, N. Y.—June 16, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, heating and ventilating apparatus in addition to P. S. 16, Daniel Low Terrace, here.

Heating System, etc.—Utica, N. Y.—June 18, by State Hospital Comn., Capitol, Albany, repairs to heating system in main building Utica State Hospital. S. W. Jones, Albany, state archt.; adv. E. N.-R. June 12.

Subway—Phila., Pa.—July 15, by H. E. Ehlers, dir. Dept. City Transit, 4 track subway in Broad St., etc.; adv. E. N-R. June 12.

Ornamental Street Lighting — Merrill, Wis.—June 17, by H. R. Allen, city clk., 1¾ mi. ornamental street lighting, incl. posts, wire and cable, fixtures, etc. $25,000. A. Deleglise, City Hall, engr. Noted June 5.

Wharf—Cockburn Island, Ont.—June 17, by N. Desjardins, acting secy. Dept. Pub. Wks., Ottawa, repairing wharf here, East Algoma Dist.

Breakwater — Collingwood, Ont. — June 17, by N. Desjardins, acting secy. Dept. Pub. Wks., Ottawa, reconstructing superstructure of portion of eastern breakwater, here, Simcoe Co.

Insulators — Melbourne, Victoria, Australia—Aug. 4, by R. Liddelow, secy. State Electricity Comn. of Victoria, 66,000 volt insulators, Spec. 24-25, for Morwell Power Scheme; adv. E. N.-R. June 12.

BIDS RECEIVED

Bleachers — Roxbury (Boston P. O.), Mass.—City of Boston, loaming and concrete bleachers at W. E. Carter playground, from J. A. Singarella, 110 High St., Boston, $17,950. Engrs. est. $25,000.

Plumbing and Heating, etc. — Long Island City, N. Y.—Dept. Educ., 500 Park Ave., New York, plumbing in P. S. 109, here, from T. E. O'Brien, Inc., 6311 5th Ave., Brooklyn, $50,974; heating from Alvord & Swift, Grand Central Terminal, New York, $131,675; electric work, from Arc Electrical Constr. Co., 405 Lexington Ave., New York, $33,320.

Subway—Cincinnati, O.—Rapid Transit Comrs., City Hall, June 6, 5.3 mi. Sects. 7, 8 and 9, rapid transit line incl. 1,600 ft.

Unclassified (Continued)

subway, 415,000 cu.yd. earth excav., 20,200 cu.yd. rein.-con., 5,200 cu.yd. mass concrete, etc., from Hickey Bros., 4200 Spring Grove St., $1,089,157, engrs. est. $1,000,000; 1.6 mi. Sect. 7 rapid transit line, from Byrnes Conway Co., Bodman Bldg., $172,890; 1.47 mi. Sect. 9 rapid transit line, from Cannell-Conrad Constr. Co., Madison Rd. and Oakley Ave., $451,644, engrs. est. $407,692. Noted May 29.

CONTRACTS AWARDED

Fire Alarm System—New York, N. Y.—Dept. Pub. Welfare, Municipal Bldg., local fire alarm system in New York City Children's Hospital and Schools Dist., Randalls Island, to Jandous Electric Equipment Co., 109 West 31st St., $45,777. Noted Apr. 10.

Heating and Ventilating—Baltimore, Md.—Mayor and City Council, heating and ventilating in Gwynns Falls Park Jr. High School, Hilton St., to Enterprise Steam and Hot Water Heating Co., 619 West Franklin St., $128,870. Noted June 5.

Grand Stand—Marinette, Wis.—Lauerman Bros., Dunlap Sq., will build rein.-con. grand stand, plain foundation, by day labor. $30,000. Private plans.

Athletic Field—Milwaukee, Wis.—Grading, etc., field at South Division High School, to R. Gumz, 831 13th Ave., $27,500, field at Bay View High School, to C. F. Schneider, 678 2nd St., $12,455; concrete retaining walls, to Johns & Knuth, 1331 28th St., $26,500. Noted May 22.

Wire and Cable—Milwaukee, Wis.—Central Bd. Purchases, 81,000 ft. street lighting wire and cable, to Hazard Mfg. Co., 552 West Adams St., Chicago, Ill., $12,804.

Grand Stand—West Allis, Wis.—J. D. Jones, comr. State Dept. of Agriculture, Madison, north section rein.-con. addition to grand stand, at State Fair Park, here, to H. Danischefsky, 1484 Humboldt Ave., Milwaukee, $99,603. Noted May 22.

Grain Elevator — Dallas, Tex. — J. M. Lawther, 2425 Elm St., grain elevator, head house and bins, 34 x 34 x 144 ft., concrete, to Jones-Hettlesater Constr. Co., Municipal Bldg., Kansas City, Mo., $50,000.

Stadium — San Francisco, Calif. — City and San Francisco Co., stadium, incl. concrete retaining walls, concrete stairways, aisles and tennis courts, wooden seating, capacity 20,000, 70,000 cu.yd. excav. and fill, etc., to Palmer & McBryde, 503 Market St., $164,408. Noted Apr. 17.

Trolley Poles—San Francisco, Calif.—City and San Francisco Co., concrete trolley poles, to J. M. Smith, 759 Ocean Ave., $15,840. Noted Apr. 24.

Transmission Line — Ontario — Hydro-Electric Power Comn., 190 University Ave., Toronto, will build about 15 mi. transmission line from Blenheim to Highbanks and Erieau, by day labor. $25,000. F. A. Gaby, ch. engr.

Electric Distribution System—Toronto, Ont.—Toronto Electric Comrs., Yonge St., will expend $425,000 on electrical distribution system. Work will be done by day labor. Private plans.

Gas Distribution System—Toronto, Ont.—Consumers Gas Co., Adelaide St. E., will extend gas distribution system, by day labor. $500,000. A. Hewitt, mgr.

Material and Equipment

PROPOSED WORK

Stone Crusher—Floyd, N. Y.—Town Bd. plans to purchase stone crusher. $3,500 to $4,000. G. Roberts, town clk.

Fire Equipment — Beckley, W. Va. — See "Streets and Roads."

Tenn., Knoxville—Plans to purchase 10 ton roller with scarifier, street sweeper, 5 ton caterpillar tractor and grader. $15,000. L. Brownlow, city mgr.

Tanks—Houston, Tex.—Magnolia Petroleum Co., Magnolia Bldg., Dallas, plans 8 steel gasoline storage tanks, McKinney and Milby Sts., here. $25,000. Private plans.

Power Equipment—Cameron Falls, Ont.—Hydro Electric Power Comn., 190 University Ave., Toronto, soon takes bids equipment for units 5 and 6 of Cameron Falls Power Development on Nipigon River, each unit 12,000 hp. vertical with direct connected generator, switches, transformers, etc. $750,000. F. A. Gaby, ch. engr.

BIDS DESIRED

Castings, Asphaltic Cement, etc.—New York, N. Y.—June 12, by J. Miller, pres. Manhattan Boro., Municipal Bldg., steel castings, 500,000 gal. asphaltic cement and 8,000 cu.yd. ¾ in. binder stone.

Bituminous Concrete and Sheet Asphalt—Trenton, N. J.—June 30, by State Hy. Comn., Broad St. Bank Bldg., 7,831 tons bituminous concrete and 465 tons sheet asphalt. A. L. Grover, secy.; adv. E. N.-R. June 12.

Graders—Williamsport, Pa.—June 12, by C. L. Jones, city councilman, 2 graders, one for light work and other for heavy work. M. C. Krause, Williamsport, engr.

Equipment—Detroit, Mich.—June 16, by Pub. Lighting Comn., J. S. Foley, secy., 138 East Atwater St., furnishing machinery and equipment for 18 railway substations. Smith, Hinchman & Drylls, 800 Marquette Bldg., engrs.

Cable—Minneapolis, Minn.—June 19, by F. S. Gram, city purch. agt., 42,292 lin.ft. cable for Fire Dept. electric signal system, standard specifications. N. W. Elsberg, city engr. June 5.

Paving Materials, etc.—St. Paul, Minn.—June 17, by H. W. Austin, city purch. agt., materials for paving roadways on each side of Earl St. Bridge between East 7th and Ross Sts., 1,370 sq.yd. 3 in. vertical fibre brick, 370 bbl. Portland cement, etc.; 25 tons pig lead, for Water Dept.

Grader—Marlin, Tex.—Falls Co. taking bids 7 ft. grader, mule hitch. J. P. Wehrung, co. engr.

Street Sweeper and Motor Trucks—San Francisco, Calif.—City and San Francisco Co., L. Leavy, Purch. Agt., in market for one Elgin street sweeper without pickup; six or more 2½ ton and seven 5 ton motor trucks, one 2½ ton motor truck with air compressor and one motor truck with eductor for sewer repair department, one 1½ ton truck for use of corporation yard.

BIDS RECEIVED

Paving Blocks — Boston, Mass. — Pub. Wks. Dept., City Hall, 1,500,000 granite paving blocks, from Rockport Granite Co., 31 State St., $144 per M. Noted May 22.

Slurry Tanks—Cementville (San Antonio P. O.), Tex.—W. E. Simpson, engrs. Natl. Bank Commerce Bldg., San Antonio, June 5, 10 rein.-con. slurry tanks, from Rayburn Eng. Co., St. Louis, Mo., for San Antonio Portland Cement Co., Lakeside Ave., San Antonio, $66,650. Noted May 29.

OFFICIAL PROPOSALS

Bids: July 1.

Bridge

Norristown, Pa.

Sealed proposals will be received at the office of the County Controller, Court House, Norristown, Penna., on July 1, 1924, at 10 o'clock Standard Time and opened at 11 o'clock Standard Time for furnishing tools, machinery, labor and materials necessary for the construction complete of a reinforced concrete bridge over the Schuylkill River on DeKalb Street, between Norristown and Bridgeport, Montgomery County, Penna., in full accordance with plans and specifications on file in the office of the County Commissioners.

The bridge consists of seven spans 115 ft. each and a total width of 60 ft.

All proposals must be for the work complete in full accordance with plans and specifications and must be made on the form of proposal attached to and forming a part of the specifications.

Copies of the plans and specifications may be obtained in the office of the Consulting Engineer, J. B. Long, 59-61 Boyer Arcade, Norristown, Penna., on payment of five dollars per set.

Each bidder must accompany his proposal with a certified check for $15,000.00 made payable to the Commissioners of Montgomery County, Penna., as a guarantee of good faith and to protect the County from any loss by failure to comply with the terms of the proposal. This check shall be handed to the Chief Clerk to the County Commissioners at least one hour before the time set for opening the bids.

The right is reserved to reject any or all bids.

WM. C. IRVIN,
County Controller.

Bids: June 30.

Paving, Sewers, Water Pipe, etc.

Wheeling, W. Va.

Sealed proposals, for the furnishing of all labor and material necessary in the construction of the improvements, listed below, at Oakmont, Tenth Ward, City of Wheeling, will be received by the Board of Directors of the Oakmont Improvement Company at its offices, 703 National Bank Building, Wheeling, W. Va., until 12 o'clock noon, June 30, 1924.

16,850 Sq. yards 7" reinforced concrete pavement.
10,000 Linear feet integral concrete curb.
35,700 Sq. feet concrete sidewalk.
1,300 Linear feet 6" vitrified tile sewer.
3,400 Linear feet 8" vitrified tile sewer.
1,600 Linear feet 10" vitrified tile sewer.
730 Linear feet 12" vitrified tile sewer.
1,100 Linear feet 24" vitrified tile sewer.
480 Linear feet 30" vitrified tile sewer.
32 Sewer manholes.
29 Drop inlets.
7,000 Linear feet 6" cast iron water pipe.
6,820 Linear feet 4" wrought iron gas pipe.
610 Linear feet 6" wrought iron gas pipe.

Certified check, made payable to the Oakmont Improvement Company, for five (5%) per cent of the amount bid, must accompany each proposal.

Plans and specifications are on file at the office of the Company.

Plans and specifications will be furnished at the cost of blue printing. Bidding blanks will be furnished free of charge.

OAKMONT IMPROVEMENT COMPANY
C. H. DOWLER,
President.

CONRAD & PUGH, Engineers.
Wheeling, W. Va.

Bids: June 18.

State Hospital Work

Utica, N. Y.

Sealed proposals for Heating Work—Repairs to Heating System (Main Building) Utica State Hospital, Utica, N. Y., will be received by the State Hospital Commission, Capitol, Albany, N. Y., until 2 o'clock P.M. (Standard Time) on Wednesday, June 18, 1924, when they will be publicly opened and read. Proposals shall be enclosed in an envelope furnished by the State Architect, sealed and addressed, and shall be accompanied by a deposit consisting of a certified check drawn upon some legally incorporated bank in this State and made payable to the State of New York, or money, equal to five per cent (5%) of the amount of the proposal. The contractor to whom the award is made will be required to furnish surety company bond in the sum of fifty per cent (50%) of the amount of contract within thirty (30) days after official notice of award of contract and in accordance with the terms of Specification No. 4309. The right is reserved to reject any or all bids. Drawings and specifications may be examined at the Utica State Hospital, Utica, N. Y., at the New York Office of the Department of Architecture, 18th Floor, Fuller Building, Broadway & 23rd St., and at the Department of Architecture, Capitol, Albany, N. Y. Drawings, specifications and blank forms of proposal may be obtained at the Department of Architecture, Capitol, Albany, N. Y., upon reasonable notice to and in the discretion of the State Architect, Sullivan W. Jones, Capitol, Albany, N. Y.

Dated: June 3, 1924.

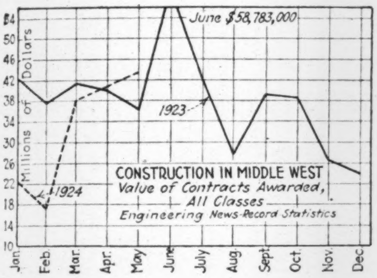
CONSTRUCTION NEWS

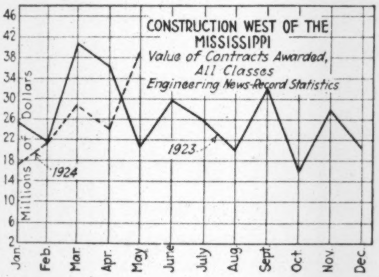
Engineering News-Record, June 19, 1924

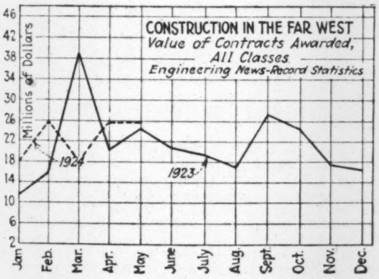
The Construction Barometer

Decline in Contract Letting During Past Week—Production of Building Materials, Except Steel, Steadily Increasing—Improvement in Demand Imminent

CONTRACT letting in both private and public work showed an appreciable decline during the week ended June 12 as compared with the week preceding. Public building awards, of $150,000 and over, increased in number but decreased in average value per contract during the week. A comparison of May contracts with those of the month preceding, however, showed strong gains in all sections of the country except the group consisting of the following states: Idaho, Utah, Nevada, Arizona, Washington, Oregon and California. Production of all building materials except steel, is steadily increasing as the season advances. Consumers' stocks of other basic materials are comparatively small; a resumption of more active production schedules is therefore expected in the not too distant future. With construction cost 21 per cent below the 1920 peak and credit conditions still favorable, a depression equalling in severity that of 1920-21 is not anticipated at the present time.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
May 29	$24,429,000	$19,422,000	$43,851,000
June 5	27,725,000	19,189,000	46,914,000
June 12	19,883,000	13,002,000	32,885,000
3 weeks	$72,037,000	$51,613,000	$123,650,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

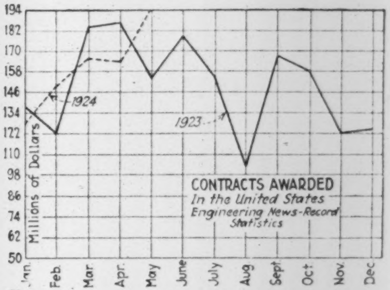
Week Ended	No.	Public Work	No.	Private Work
May 29	11	$4,377,000	19	$12,425,000
June 5	8	4,801,000	47	13,899,000
June 12	12	3,558,000	22	11,355,000

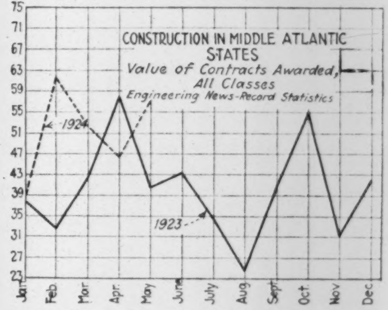
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

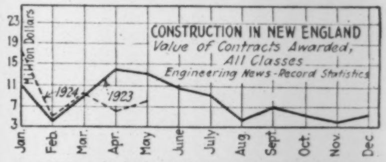
			Public		
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
May 29	24	45	84	35	213
June 5	35	53	95	55	250
June 12	27	48	99	41	236

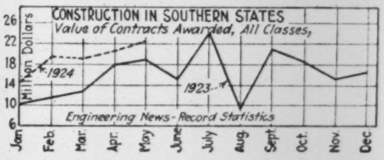
PINE LUMBER FIRMER — OTHER MATERIALS SHOW LITTLE CHANGE

	Quoted on June 19 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.10 @2.25	$2.10 @2.30	June 5
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M.ft.	60.00	59.00	June 12
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr.	.56	.55	Apr. 24









PROPOSALS

For proposals Advertised see the pages immediately following the "Construction News" Section.

WATERWORKS

Bids Close		See Eng. News-Record
June 20	Boston, Mass.	June 19
June 20	Boston, Mass.	June 19
June 23	Essex, Ont.	June 19
June 24	Tampa, Fla.	May 22
June 24	Jackson, Tenn. Adv. June 5 to 19.	June 5
June 24	Morganfield, Ky.	June 5
June 24	Williams, Ariz.	June 12
June 24	Buffalo, N. Y.	June 19
June 25	Baltimore, Md.	June 19
June 26	Durham, N. C. Adv. May 22 to June 19.	May 29
June 27	Marshalltown, Ia.	June 19
June 27	Cookeville, Tenn.	June 19
June 27	Los Angeles, Calif.	June 19
July 1	Detroit, Mich. Adv. June 19.	June 19
July 2	Jackson, Mich.	May 29
July 2	Lavallette, N. J.	June 19
July 7	Park Ridge, N. J. Adv. June 19.	June 19
July 16	Shreveport, La.	June 5
July 24	Dallas, Tex.	June 5

SEWERS

Bids Close		See Eng. News-Record
June 19	Shreveport, La. Adv. June 12 and 19.	June 12
June 23	Little Rock, Ark.	June 19
June 24	Burbank, Calif.	June 12
June 30	Grand Rapids, Mich.	June 12
June 30	Wash., D. C. Adv. June 12 and 19.	June 12
June 30	Adams, Mass. Adv. June 19.	June 19
July 1	St. Louis, Mo.	June 5
July 8	Springfield, Mass. Adv. June 19.	June 19

WASTE DISPOSAL

Bids Close		See Eng. News-Record
July 7	Ambridge, Pa. Adv. June 5 to 19.	June 5

BRIDGES

Bids Close		See Eng. News-Record
June 24	Minnesota	June 12
June 24	Missouri	June 19
June 24	Wyoming	June 19
June 27	Seattle, Wash.	May 15
June 27	La Grange, Tex.	June 5
June 30	Alabama	June 5
June 30	California	June 12
July 1	Pennsylvania Adv. June 12 and 19.	June 12
July 2	Baton Rouge, La. Adv. June 12 and 19.	June 12
July 3	Bousall, Calif.	June 12
July 14	Houston, Tex.	June 19

DAM

Bids Close		See Eng. News-Record
June 25	Providence, R. I.	June 12

RAILWAYS

June 23	Michigan	June 19

EXCAVATION, DRAINAGE IRRIGATION

June 24	Pine Bluff, Ark.	June 19
June 25	Baltimore, Md.	June 19
June 28	Kaufman, Tex.	June 12
July 3	Buffalo, N. Y.	June 19
	Adv. June 19.	

STREETS AND ROADS

June 20	New York	June 12
	Adv. June 12 and 19.	
June 21	Upper Darby, Pa.	June 19
June 23	Kingston, Pa.	June 12
June 23	Cleveland, O.	June 12
June 23	Old Fort, N. C.	June 12
June 23	Bexley, O.	June 19
June 23	Springtown (Bloomsbury P. O.), N. J.	June 19
	Adv. June 12 and 19.	
June 23	Phila., Pa.	June 19
June 23	Sarasota, Fla.	June 19
June 23	Tavares, Fla.	June 19
June 24	Massachusetts	June 19
June 24	Roxbury (Boston P. O.), Mass.	June 19
June 24	Wisconsin	June 19
June 24	Wyoming	June 19
June 24	Michigan	June 12
June 24	Minnesota	June 12
June 24	South Highlands, La.	June 5
June 24	Howard, Kan.	May 29
June 24	Washington	June 12
June 24	Allison, Ia.	June 19
June 24	Louisiana	June 19
June 24	Gardner, Mass.	June 19
	Adv. June 19.	
June 24	Bastrop, La.	June 19
June 24	Tampa, Fla.	June 19
June 24	Edgefield, S. C.	June 19
June 24	Missouri	June 19
June 24	Buffalo, N. Y.	June 19
June 25	Ansonia, Conn.	June 5
June 25	Delaware	June 12
June 25	Elkhart, Ind.	June 19
June 25	Bluffton, Ind.	June 19
June 25	Baltimore, Md	June 19
June 25	George, Ia.	June 19
June 26	Wisconsin	June 19
June 26	Little Rock, Ark.	June 19
June 26	Huntsville, Tex.	June 5
June 26	Newton, N. J.	June 5
	Adv. June 5 to 19.	
June 26	Virginia	June 12
June 26	New York	June 12
June 26	Laurens, S. C.	June 19
June 27	Carthage, Mo.	June 5
June 27	Jasper, Tex.	June 12
June 27	Greenwood, S. C.	June 19
June 27	Carthage, Tex.	June 19
June 27	Waupun, Wis.	June 19
June 27	Crown Point, Ind.	June 19
June 27	Brownstown, Ind.	June 19
June 27	Bluffton, Ind.	June 19
June 28	Williamsport, Ind.	June 19
June 30	California	June 12
June 30	Wheeling, W. Va.	June 12
	Adv. June 12 and 19.	
June 30	Tennessee	June 5
June 30	Williamsville, N. Y.	June 12
	Adv. June 5 to 19.	
June 30	Schafer, N. D.	June 19
June 30	South Bend, Ind.	June 19
June 30	Laurel, Miss.	June 19
June 30	Marion, Ind.	June 19
July 1	Massachusetts	June 19
July 1	Lisbon, O.	May 15
July 1	Lisbon, O.	May 22
July 1	St. Louis, Mo.	June 5
July 1	Pennsylvania	June 12
	Adv. June 12 and 19.	
July 1	Grand Rapids, Minn.	June 19
July 1	Louisiana	June 19
July 1	Hillsborough, Calif.	June 19
July 2	Angleton, Tex.	June 12
July 3	Alabama	June 19
July 3	Pine Bluff, Ark.	June 19
July 3	Newton, N. J.	June 19
	Adv. June 19.	
July 7	New York	June 19
	Adv. June 19.	
July 7	San Jose, Calif.	June 19
July 7	Martinez, Calif.	June 19
July 8	Williamson, W. Va.	June 19
July 8	Petersburg, Ind.	June 19
July 10	Olathe, Kan.	June 12
July 11	Osborne, Kan.	June 19
July 15	Faribault, Minn.	June 5
July 15	Alabama	June 12

INDUSTRIAL WORKS

June 22	Detroit, Mich.	June 19
June 26	Detroit, Mich.	June 19

BUILDINGS

Bids Close		See Eng. News-Record
June 20	New York, N. Y.	June 5
June 20	Trenton, N. J.	June 5
June 20	Pocono Manor, Pa.	June 19
June 23	Kenosha, Wis.	June 5
June 23	Delanco, N. J.	June 5
June 23	Canton, O.	June 12
June 23	Union, N. J.	June 19
June 23	Nashville, Tenn.	June 19
June 23	Lowville, N. Y.	June 19
June 24	New York, N. Y.	May 29
June 24	Louisville, Ky.	June 12
June 24	Rosedale, Pa.	June 12
June 24	Flint, Mich.	June 19
June 27	Lubbock, Tex.	May 29
June 27	Ft. Worth, Tex.	June 19
June 28	Kent, O.	June 5
June 28	Knoxville, Tenn.	June 19
June 30	Ardmore, Pa.	June 5
July 1	Dallas, Tex.	May 22
July 2	Columbus, Neb.	June 19
July 7	Alliance, O.	June 19

FEDERAL GOVERNMENT WORK

June 20	Steel Boats—Huntington, W. Va.	June 5
June 20	Dredge—Buffalo, N. Y.	June 12
	Adv. June 12 and 19.	
June 23	Dredging — Philadelphia, Pa.	June 5
June 23	Bridge—Quantico, Va.	June 5
June 23	Alterations — Norfolk, Va.	June 19
June 23	Repairs to Pier — Wash., D. C.	June 19
	Adv. June 12 and 19.	
June 23	Roads and Walks — Norfolk, Va.	June 19
June 23	Roof—Newport, R. I.	June 19
June 23	Repairs to Equipment—Wash., D. C.	June 19
	Adv. June 12 and 19.	
June 24	Hospital—Rutland, Mass.	May 29
June 24	Mess Hall, etc.—Gulfport, Miss.	May 29
June 24	Buildings, etc.—Federal Park, Md.	May 29
June 25	Bridges—Wilmington, Del.	May 1
June 25	Building — New York, N. Y.	June 19
June 25	Road—Arizona	June 19
June 26	Dredging—Baltimore, Md.	May 29
	Adv. May 29 to June 19.	
June 26	Current Retards—Lexington, Mo.	June 5
June 27	Post Office — Laramie, Wyo.	June 12
June 28	Dike—Boonville, Mo.	June 12
June 30	Post Office — Cohoes, N. Y.	June 5
July 1	Road—Arizona	June 19
July 1	Road—New Mexico	June 19
July 7	Steamboat Hull—Nashville, Tenn.	June 5
	Adv. June 5 to 19.	
July 7	Post Office—Elkhart, Ind.	June 12
	Adv. June 12 and 19.	
July 9	Radio Building—Destruction Island, Washington	June 5
July 9	Radio Building—Point St. George, Calif.	June 5
July 9	Road—New Mexico	June 19
July 30	Store House Depot, etc.—Pearl Harbor, H. T.	June 5
Aug. 5	Bridge—Florence, Ala.	May 15
	Adv. May 15 to June 19.	

UNCLASSIFIED

June 20	South Boston (Boston P. O.), Mass.	June 19
June 24	Brighton (Boston P. O.), Mass.	June 19
June 30	Mechanical Equipment, etc. — Long Island City, N. Y.	June 12
June 30	Mechanical Equipment — Brooklyn, N. Y.	June 12
June 30	Mechanical Equipment — New York, N. Y.	June 12
July 15	Subway—Phila., Pa.	June 12
	Adv. June 12 and 19.	
Aug. 4	Insulators—Melbourne, Victoria, Australia	June 12
	Adv. June 12 and 19.	

MATERIAL AND EQUIPMENT

June 25	Cast Iron Pipes—Baltimore, Md.	June 19
June 27	Steel Castings—St. Louis, Mo.	June 19
June 30	Bituminous Concrete and Sheet Asphalt — Trenton, N. J.	June 12
	Adv. June 12 and 19.	
Aug. 29	Dredger—Brisbane, Queensland, Australia	Apr. 10

Where name of official is not given inquiries should be addressed to City Clerk, County Clerk or corresponding official.

Waterworks

PROPOSED WORK

Mass., Hudson—Bd. of Selectmen, Town Hall, plans waterworks and sewerage systems. $40,500.

N. Y., Corning—Bd. Pub. Wks. and Common Council plan extending and improving water supply. $50,000. W. D. Drake, city engr.

Pa., Hawley—See "Industrial Works."

Pa., Phila.—Plans to expend $2,000,000 to improve and enlarge Forresdale filters. Total estimate $7,000,000.

S. C., Spartanburg—Mayor and Bd. City Comrs. approved development South Pacolet River. $1,350,000. Bd. Water Comrs. have been instructed to take necessary steps toward issuance bonds. P. H. Norcross, 1404 Candler Bldg., Atlanta, Ga., consult. engr.

Fla., Palatka—Election July 1, $40,000 bonds, enlarging waterworks system. H. A. Davis, mayor.

Wis., Eau Claire—Soon takes bids, 3 m.g. concrete reservoir, 2,500 ft. 24 in. mains, also 10, 12 and 16 ft. mains. $165,000. L. P. Wolff, 1000 Guardian Life Bldg., St. Paul, Minn., engr. Noted Mar. 6.

Wis., Green Bay—Allouez Twp. making plans 100,000 gal. concrete reservoir, pumping station, 75,000 gal. steel tank and tower, etc., near here. $75,000 A. E. McMahon, City Hall, Menasha, engr. W. Brenner, 129 South Washington St., Green Bay, chn.

Minn., Albany—Had plans prepared and soon takes bids waterworks system, incl. mains, 4 tubular wells, each 26 ft. deep, one 300 gal. per minute pump and motor. $20,000. R. E. Borrowman, 3 Weber Blk., St. Cloud, engr.

Minn., Swanville—Had plans prepared waterworks system, incl. mains, deep well, pump house and equipment, 200 gal. per minute pump, 50,000 gal. steel tank and tower. $22,000. R. E. Borrowman, 3 Weber Blk., St. Cloud, engr.

S. D., Gettysburg—Voted $20,000 bonds waterworks. B. Klein, city aud.

Tex., Amarillo—City Light & Water Co. had plans prepared 6- to 8-in. main extensions and fire hydrants between 12th and 22nd Sts. $300,000. J. B. Jones, Amarillo, engr.

Tex., Gilmer—Voted $22,000 bonds waterworks improvements. Municipal Eng. Co., 715 Praetorian Bldg., Dallas, engrs. Noted May 22.

Tex., Houston—J. C. Boyles, engr., Court House, soon takes bids 50,000 gal. tank and tower, settling basin, deep well, pumps, c.i. pipe mains, etc., in Nettlebrook addition, for San Jacinto Trust Co., Humble Bldg.

Tex., Irving—Irving Fresh Water Impvt. Dist. election June 21, $25,000 bonds, complete waterworks, well, etc. Koch & Fowler, Central Bank Bldg., Dallas, engrs. Noted May 15.

Tex., Lufkin—Plans 2 concrete settling tanks, 250,000 gal. capacity each, new pumps, etc. $15,000-$20,000. G. C. Brown, Lufkin, engr.

Okla., Heavener—Election July 15, $125,000 bonds, 15,000 ft. 12 in. c.i. mains, elevated tank and tower, filter plant and motor driven pumps. V. V. Long & Co., 1300 Colcord St., Oklahoma City, consult. engrs.

Okla., Okmulgee—Election soon $100,000 bonds for filtration plant. Burns & McDonnell Eng. Co., 401 Interstate Bldg., Kansas City, Mo., engrs. Noted Dec. 20.

Calif., San Diego—See "Dams."

Calif., Santa Monica — Had plans prepared, 2 concrete reservoirs, 5 m.g. and 2,500,000 gal. capacity respectively. J. Morton, city engr.

BIDS DESIRED

Mass., Boston—June 20, by Dept. Pub. Wks., City Hall, mains in Bismarck, Germania and La Grange Sts., West in Roxbury, Ruskin Rd., Hyde Park and Wabash St. in Dorchester. $15,000. J. A. Rourke, City Hall, comr.

Mass., Boston—June 20, by Dept. Pub. Wks., City Hall, two hundred 6 in., two hundred 8 in., two hundred 12 in., and fifty 10-in. gate valves. $7,000. J. A. Rourke, comr.

N. Y., Buffalo—June 24, by Commissioner Pub. Wks., Municipal Bldg., 12, 16, 20, 24 and 30 in. Standard Class "A" c.i. pipe, for Buffalo filter plant. G. E. Andrews, Col. Ward Pumping Sta., engr.

N. J., Lavallette—July 2, by Boro Council, water supply system. Sherman & Sleeper, 501 Cooper St., Camden, consult. engrs.; adv. E. N.-R. June 19.

Md., Baltimore—June 26, by Bd. Awards, brass service pipe fittings to Water Dept. V. B. Siems, City Hall, water engr.

Tenn., Cookeville—June 27, by J. E. Owens, city clk., settling basins, elevated tank on tower, centrifugal pumps, pump houses, valves, hydrants, 48,250 ft. 4- to 10-in. c.i. mains and 5 mi. transmission line. $150,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, Okla., engrs. Noted Apr. 24.

Mich., Detroit—July 1, by Bd. Water Comrs., 4,000 lin.ft. more or less test

Waterworks (Continued)

borings. G. H. Fenkell, gel. mgr.; adv. E. N.-R. June 19.

Ia., Marshalltown — June 27, low lift pumping station, rein.-con. substructure, 26 ft. diameter, 18 ft. below surface, brick superstructure. A. T. Luce, supt. Water Works Dept., City Hall. Noted Apr. 17.

Calif., Los Angeles—June 27, by City Harbor Comn., Byrne Bldg., J. G. Starr, secy., 75,000 gal. sprinkler tank and tower at Berths 175 and 176.

Ont., Essex — June 23, by R. R. Brett, town clk., rein.-con. reservoir. $25,000. James, Proctor & Redfern, 36 Toronto St., Toronto, engrs. Noted May 1.

BIDS RECEIVED

N. Y., Albany—Bd. Contr. & Supply, furnishing c.i. pipe and fittings from Chapman Valve Co., 180 Lafayette St., New York City, $10,600; meter for filtration plant, from Builders Iron Fdry. Co., Albany, $2,108; pumps, etc., from Worthington Pump & Mchy. Co., 115 Bway., New York City, $19,888; electric wiring from Alpha Electric Constr. Co., 124 Hudson Ave., $10,880.

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Fort Hamilton Parkway, Delamere Pl., Howard, Sutter, 9th, 15th, 16th, M, N and O Aves., 52nd, 54th, 56th, 70th, 81st, East 8th, East 9th, East 27th, East 46th, East 52nd, East 54th, East 55th, East 56th, East 98th, West 1st and West 23rd Sts., from W. Norton, 510 West 149th St., $12,740. Noted June 5.

Pa., Phila.—Director Pub. Wks., City Hall, 16 in. mains, Contr. 673, from J. J. McHugh, 1617 Race St., $32,357; 8 soot blowers, Contr. 678, from Vulcan Soot Blower Co., 1104 Commonwealth Bldg., $3,952; 12,220 c.i. laterals, Contr. 684, from M. Ware Cast Iron Pipe Co., 209 Crozier Bldg., $25,418; 500 kw. generator, Contr. 685, from Genl. Electric Co., 804 Witherspoon Bldg., $22,738. Noted June 5.

Wis., Milwaukee—Central Bd. Purchases, City Hall, from Kennedy Valve Co., 116 East Miller St., Elmira, N. Y., one 48 in. gate valve at $2,888; two 54 in. at $2,624 and $3,657 each and four 30 in. at $841 each. Noted June 5.

CONTRACTS AWARDED

Mass., Waltham (Boston P. O.)—Metropolitan Dist. Comn., Water Div., 1 Ashburton Pl., Boston, about 15,400 ft., 60-in. steel and 200 ft. 16- to 60-in. c.i. mains, here, to C. and R. Constr. Co., 3 Tremont Row, Boston. $563,230. Noted June 12.

N. Y., Fulton—Bd. Pub. Wks., will lay mains western section of city, by day labor, under direction of H. Andrews, comr. $65,080.

Ill., Villa Park—For 100,000 gal. steel tank on tower, to Chicago Bridge & Iron Co., 608 South Dearborn St., Chicago, $10,640; 2 wells, 12 in. deep, to J. P. Miller Artesian Well Co., 428 Orleans St., Chicago. Noted June 12.

Ia., Cresco—To Sewell Well Co., St. Louis, Mo., drill well., 15.5 in. diam. wrought iron casting, 17 in. wrought iron stand pipe, 250 lin. ft. 13 in. wrought iron casing. etc., $15,000, to I. M. Ipsen, Fairfield, 5,808 lin. ft. 4 in. c.i. pipe, 10 hydrants, and 16 valves, $3,058.

Mo., Kansas City—For 500 tons 6 in. c.i. pipe, to Natl. Cast Iron Pipe Co., 603 Land Bldg., $28.425.

Que., Aylmer—Extensions to waterworks and sewers in Jubilee Ave. and Bancroft St., to A. Lavigne, Aylmer, $57,000.

Que., Montreal—Rein.-con. tunnel under Lachine Canal for two 36 in. and one 48 in. water conduits, to Foundation Co., St. Catherine St. W., $278,640. Noted June 5.

Ont., Smiths Falls—J. J. Marsh, chn. Waterworks Dept., general contract for concrete dam, and filter beds to Schultz Bros., Ltd., Albion St., Brantford, $54,000; filter equipment, to International Filter Co., Confederation Life Bldg., Toronto, $15,953; pumps to Bowden Machine Co. Ltd., Sterling Rd., Toronto, $2,568; waterwheel to C. Barber & Sons, Meaford, $2,523, 200,000 gal. steel tank and tower to Horton Steel Wks. Ltd., Bridgeburg, $23,650, stop log winch to W. Kennedy & Son, Owen Sound, $2,646. Noted May 15.

B. C., Vancouver—Will extend waterworks and strengthen intake systems, $150,000, also fire protection system in Stanley Park, by day labor. C. Brackenridge, city engr. of former project and A. D. Wooton, Park Bd., engr. of latter.

Sewers

PROPOSED WORK

Mass., Hudson—See "Waterworks."

W. Va., Beckley—Election June 24, $50,000 bonds paving streets. B. H. Ashworth, city recorder.

Fla., Palatka—Election July 1. $40,000 bonds, extending sewerage system. H. A. Davis, mayor.

Tenn., Bristol—Voted $25,000 bonds extending sewerage system. C. B. Davis, city engr.

Tenn., Chattanooga—Plans election to vote on $500,000 bonds sanitary sewers in various districts. E. Bass, comr. Pub. Wks.

Ill., Staunton—Making preliminary plans 22 mi. 8- to 18-in. sanitary sewers, etc. $270,000. F. Yanonick, city clk.

Wis., Beaver Dam—Making plans new sewerage system incl. septic tank. To exceed $25,000. E. B. Parsons, Jefferson, engr.

Kan., Independence — See "Streets and Roads."

Kan., Independence—Making plans 2,500 ft. 12- to 15-in. vitrified sewers and pumping plant. $35,000. G. H. Hackmaster, Independence, engr. Noted Mar. 20.

Kan., Topeka—Plans disposal plant and rebuilding 176 mi. sewers in various streets. To exceed $1,500,000. C. A. Haskins, 3923 Oak St., Kansas City, Mo., engrs. Noted Aug. 16, 1923.

Mo., Mountain—Grove—Making preliminary plans complete sanitary and storm sewerage systems, disposal plant, etc. $25,000. L. M. Slaughter, Mountain Grove, engr.

Tex., Beaumont — Making plans 5 in. rein.-con. sewers in Long Ave. $25,000. R. M. Fulweiler, city engr.

Tex., Conroe—Election June 27, $45,000 bonds, complete sanitary sewerage system. Baker & Von Zuben, Ellison Bldg., Ft. Worth, engrs. Noted Mar. 13.

Tex., Gilmer—Voted $28 000 bonds sewer extensions. Municipal Eng. Co., 715 Praetorian Bldg., Dallas, engrs. Noted May 22.

Tex., Houston—J. C. Boyles, engr., Court House, soon takes bids 19 mi. sanitary sewers in Nettlebrook Addition, for San Jacinto Trust Co., Humble Bldg.

Calif., Ripon—Ripon Sanitary Dist. plans election to vote on $30,000 or more bonds, disposal system, incl. 6, 8 and 12 in. pipe, manholes, flushtanks and Imhoff tanks.

Calif., Salinas—Having estimates made, storm water and sanitary sewers. $25,000 or more. H. W. Cozzens, city engr.

Calif., Santa Ana — See "Streets and Roads."

Calif., Victorville — Victorville Sanitary Dist. making plans disposal system, 9,000 lin.ft. 14 in. sewer main, filtration plant in sands, 8 ft. lower than the river. Bonds will be issued to finance construction. W. A. Foster, Victorville, consult. engr.

Ont., Ford — Making plans sewers in Parent, Rossini and Aubin Rds. $135,000. J. F. Foster, city engr.

B. C., Vancouver—Making plans extending sewers in various parts of city. Part of work to be done by day labor, and part by contract. $200.000. C. Brackenridge, City Hall, engr.

BIDS DESIRED

Mass., Adams—June 30, by Bd. of Selectmen, constructing 2 mi. sanitary sewers, adv. E.N.-R. June 19.

Mass., Springfield—July 8, by Bd. Supervs. Dept. of Streets & Engineering, City Hall, for Washburn street sewage pumping station and appurtenances. Metcalf & Eddy, 14 Beacon St., Boston, consult. engrs.; adv. E. N.-R. June 19.

Mass., Springfield—Sewer Dept. taking bids pumping station. $60,000. P. P. Marsh, city engr.

Ark., Little Rock—June 23, by Comrs. Sewer Dist. 94, City Hall, 11,400 ft., 15- to 36-in. trunk sewers, 73 manholes, also repairing and renewing 6- to 12-in. laterals. $211,498. V. P. Knott, 407 Southern Trust Bld., Engrs.

Ark., Pine Bluff — See "Streets and Roads."

BIDS RECEIVED

N. Y., New York — See "Streets and Roads."

O., Cleveland—Cuyahoga Co., 8- to 36-in. **(a)** rein.-con. or **(b)** segmental block sewer in Impvt. 59, from Gantose Constr. Co., Columbia Bldg., **(a)** $59,461; Langahan Constr. Co., Marshall Bldg., **(b)** $55,241.

O., Cleveland—Sewers in **(1)** Broadview Rd. **(2)** Grand Divison Ave. **(3)** East Blvd. **(4)** Denley Ave. **(5)** Lacota Ave. **(6)** East 143rd St. (1-6 inclusive) involves 17,240 ft. 12- to 20-in. tile pipe, **(7)** 820 ft. 12 in. vitr. tile and 1,310 ft. 24 in. rein.-con. sewer in East 144th St. **(8)** East 144th St. **(9)** 3,650 ft. 8 in. and 1,330 ft. 7 ft. 6 in. brick or concrete pipe in West 130th St. **(10)** 675 ft. 4 in., 730 ft. 3 in. and 320 ft. 3 ft. 6 in. brick or concrete and 4,360 ft. 12- to 24-in. vitr. tile sewer in Lake Shore Blvd., from Hadded & Kairal Constr. Co., 415 Eagle Ave., **(1)** $13,225 **(4)** $11,327 **(7)** $11,825; W. McDowell & Son, 10319 Miles Ave., **(2)** $17,215; Sprague & Burkhardt, 11811 Browning Ave., **(3)** $9,196 **(5)** $2,549; C. Cesa & Son, 2462 Baldwin Ave., **(6)** $11,450 **(8)** $6,598; Gallagher-Burke Constr. Co., 1228 Bonnieview Ave., Lakewood, **(9)** $18,391; Joseph Co., Prospect 4th Bldg. **(10)** $40,769. Noted May 15.

CONTRACTS AWARDED

Pa., Phila.—Delaware River Bridge Joint Comn., Widener Bldg., sewers for bridge over Delaware River, between here and Camden, to Lombardi Co., Inc., Lincoln Bldg., $173,464. Noted June 12.

O., Canton—Additions to disposal plant, to Melbourne Constr. Co., 1220 9th Ave. N. E., $676,814. Noted Dec. 13.

O., Columbus—See "Streets and Roads."

O., Euclid—Concrete sewer in Bliss Rd., to Hadded-Mall Co., Schofield Bldg., Cleveland, $194,129. Noted June 12.

Mich., Port Huron—For 5,320 ft. 24. 30, 33, 36 and 48 in. sewers in Taylor and Botsford Sts., to O'Sullivan & Woodrow, Port Huron, $41,700. Noted May 29.

Minn., Waconia—Sanitary sewerage system, 16,032 lin.ft. 8 in. and 1,497 ft. 10 in. sewer, disposal plant, etc., to Gjellefald-Chapman Constr. Co., Forest City, Ia. Noted May 22.

Ark., Atkins—See "Streets and Roads."

Ark., Pine Bluff — Jefferson Co. Sewer Dist. 1, 63,962 ft. sewerage system and disposal plant, to Rowen & Rickard, Oklahoma City, $85,225. Noted June 12.

Okla., Tulsa—Storm sewers, to Tibbets & Pleasant, 209 North Nogales St., $180,504.

Calif., Irvington — Irvington Sanitary Dist., 7½ mi. 6- to 12-in. sewers, to Oakland Sewer Constr. Co., 1003 85th Ave., Oakland, $33,110. Noted June 12.

Calif., San Diego—Sewerage system, Mission Beach St., 27,945 lin.ft. 6 in., 5,470 lin.ft. 10 in., 6,781 lin.ft. 12 in. concrete pipe, 127 manholes, 6 flush tanks, one settling tank, 3 pumping stations, 1,200 lin. ft. c.i. outfall pipe, to Downer & Mero, 401 16th St., Richmond, $159,016. Noted June 12.

Que., Aylmer—See "Waterworks."

Waste Disposal

PROPOSED WORK

N. Y., Elmhurst—M. E. Connolly, pres. Quens Boro, Quens Subway Bldg., Long Island City, soon takes bids incinerator, Queens Blvd. near Woodhaven Ave., here. $275,000.

Wis., South Milwaukee—R. Schauer, city clk., soon takes bids disposal plant. $35,000. Alvord, Burdick & Howson, 8 South Dearborn St., Chicago, Ill., engrs.

Bridges

PROPOSED WORK

Mass., Cohasset—Voted $31,000 bonds to relocate and reconstruct bridge over Gulf River, on Bordes St.

New Jersey—State Hy. Dept., Trenton, plans repairing timber and steel bridge crossing Delaware River between Lambertville, N. J., and New Hope, Pa. L. Focht, State Office Bldg., engr.

Tenn., Maryville—City and Blount Co. soon take bids concrete bridge and viaduct. $150,000. Freeland, Roberts & Co., Independent Life Bldg., Nashville, engrs.

Ky., Burnside—Cincinnati, New Orleans & Texas Pacific Ry. Co., (branch of Southern Ry.), 4th and Sycamore Sts., Cincinnati, O., plans railroad truss bridge over Cumberland River, here. To exceed $100,000. A. A. Woods, ch. engr. maintenance of way and structures.

Wis., Beaver Dam — See "Streets and Roads."

Wis., Milwaukee—Making plans 1,000 ft. concrete and steel bridge on Holton St. $1,000,000. M. C. Cutler, City Hall, engr.

Wis., Milwaukee—Park Bd., F. Schumacher, secy, City Hall, soon takes bids reinforcing steel for rein.-con. bridge, on Mason St., $230,000. Clas, Shepherd & Clas, 445 Milwaukee St., engrs. Noted Jan. 3.

Calif., Asti—Sonoma Co. (Santa Rosa), making plans bridge over Russian River, here. $100,000 if rein.-con. E. A. Peugh, Santa Rosa, co. surv.

B. C., North Vancouver—Plans steel bridge with concrete deck, 30 and 150 ft. with abutments over Lynn Creek. $60,000. G. S. Hanes, 128-3rd St., engr.

BIDS DESIRED

S. C., Greenwood — See "Streets and Roads."

S. C., Laurens—See "Streets and Roads."

Missouri—June 24, by State Hy. Dept., Jefferson City, one 60 ft. steel truss and five 20 ft. rein.-con. slab spans, etc., over Third Fork Platte River, De Kalb Co.; one 80 ft. steel truss and four 40 ft. I-beam spans, etc., over East Fork Grand River, Worth Co.; three 20 ft. rein.-con.

Bridges (Continued)

slab spans, etc., over Howell Creek, Howell Co.; one 70 ft. steel truss and seven 20 ft. rein.-con. slab spans, etc., over Cane Creek, Butler Co.; two 30 ft. rein.-con. deck girder spans over Buffalo Creek, one 40 ft. rein.-con. deck girder and six 20 ft. rein.-con. slab spans, etc., over Limestone Creek, Dade Co.; one 40 ft. I-beam span over Drainage Ditch 15, one 50 ft. I-beam span over Drainage Ditch 14, Cape Girardeau Co.; one 10 ft., one 12 ft. and one 20 ft. rein.-con. slab spans, etc., over Creek, Barton Co.; one 30 ft. rein.-con. deck girder, one 12 ft. and two 20 ft. rein.-con. slab spans over Creek, Bates Co.; two 12 ft. rein.-con. slab spans, etc., over Creek, and one 100 ft. steel span, etc., over Joachim Creek, Jefferson Co.; two 12 ft. rein.-con. slab spans, etc., over Dayce Creek, three 40 ft. rein.-con. deck girder spans, etc., over Flat River, one 25 ft. rein.-con. deck girder spans, etc., over Joachim Creek, one 150 ft. and one 100 ft. steel truss spans, etc., over Big River, St. Francois Co. B. H. Piepmeier, ch. engr.

Wyoming—June 24, by State Highway Comn., Cheyenne, 159 ft. rein.-con. arch bridge over Shoshoni River at Cody, Federal Aid Project 129, Park Co., $27,000; two 120 ft. steel span bridge over Gros Ventre Creek, at Teton, Federal Aid Project 163 A, Jackson Co., $36,000. J. F. Seiler, Cheyenne, engr.

Tex., Carthage—See "Streets and Roads."

Tex., Houston—July 14, at office City Secretary, rein.-con. bridge across Buffalo Bayou at intersection Congress Ave., Smith and Acuff Sts. O. F. Holcombe, mayor. Noted Feb. 7.

Calif., San Jose—City Council taking bids and opens same about June 23, concrete girder bridge, 360 piles, 25 ft. long, over Guadalupe River at Santa Clara St., also 67 ft. rein.-con. girder bridge, 140 ft., over Los Gatos Creek at Santa Clara St. To exceed $50,000. W. Popp, city engr.

BIDS RECEIVED

N. J., Jersey City—Bd. Freeholders, Hudson Co.; bridge on Boulevard at Summit Ave. Tube Sta., from Stillman Delehanty-Ferris Co., 1 Exch. Pl., $1,342,783.

Ind., Lawrenceburg—Dearborn Co., concrete arch bridge, from C. Runck, Jr., 1st Natl. Bank Bldg., Cincinnati, O. $69,933. Engrs. est. $75,000.

Calif., Los Angeles—Rein.-con. viaduct over Los Angeles River, on 9th St., from North Pacific Constr. Co., Detwiler Bldg., $401,897 (city will furnish cement); rein.-con. bridge over Pacoima Wash, from R. Beyrle, 957 East 23rd St., $26,724. Noted May 8.

CONTRACTS AWARDED

S. C., Saluda—See "Streets and Roads."

Alabama—See "Streets and Roads."

Ohio—See "Streets and Roads."

West Virginia—State Road Comn., Charleston, concrete substructure and approach fills to Gassaway Bridge 932 across Elk River, Project 3157, Braxton Co., to Skene-McAlpin Constr. Co., Pt. Pleasant, $26,246; two 40 ft. span through girders across Ralston Run, Randolph Co., to G. H. Lewis, Pedlar Mills, Va., $15,078; concrete substructure to Opaquon Bridge 957 near Martinsburg, Project 3221, Berkley Co., to Concrete-Steel Bridge Co., Clarksburg, $10,747.

Ind., Muncie—Delaware Co., concrete arch, known as Moore Bridge, over White River, to Natl. Concrete Co., 825 Lemcke Bldg., Indianapolis. $454,900. Engrs. est. $56,290. Noted May 29.

Michigan—State Hy. Dept., at office Comrs. Monroe Co., Monroe, rejected bids Bridge 580711 over Raisin River, on Federal Aid Project 73 G, Frenchtown Twp., also Bridge 581206 Monroe Twp. Work will be done by day labor.

Michigan—State Hy. Dept. at office Comrs. Oakland Co., Pontiac, Bridge 632303, 40 ft. span, and Bridge 632301, 44 ft. span, on Trunk Line 10, Federal Aid Project 97, Waterford Twp., to Bailey & Demuth, Owosso, $11,667 and $7,995 respectively; Bridge 680102, 35 ft. rein.-con. girder, on Trunk Line Rd. 33-4 A, Big Creek Twp., to Frank & Stiehl, Au Gres, $9,424. Noted May 22.

Ia., Clarion—Bd. Supervs. Wright Co., 15 concrete box culverts, to Hilderbrand & Kragh, Belmont, $5,274; 9 I-beam spans, 2 wood bridges and one repair job, to Iowa Bridge Co., 1263 East 19th St., Des Moines, $26,168, 5 concrete box culverts, to E. F. Rochet, Woolstock, $1,575. Engrs. est. $33,017.

Ia., Newton—Jasper Co., 13 culverts and 1 slab span bridge, to C. W. Mason, Monroe, $8,379; 35 box culverts, to W. Palmer, Kellogg, $18,666; 24 box culverts and 1 slab span bridge, to W. J. Schuman, Newton, $15,737.

Minn., St. Paul—Ramsey Co., 892 ft. temporary bridge over Mississippi River at Jackson St., 24 ft. roadway, one 6 ft. sidewalk, all timber except one 92 ft. through plate girder lift span, to W. M. Murphy & Son, 342 Endicott Bldg., Minneapolis, $59,254. Noted May 29.

Kan., Anthony—Harper Co. three 100 ft. span bridge, rainbow arches, 20 ft. roadway, 938 cu.yd. concrete, 67,000 lb. steel bars, 55,480 lb. structural steel, rock foundations, near here, to Maxwell Constr. Co., Columbus, $32,275.

South Dakota—State Hy. Comn., Pierre, **(F. A. P. means Federal Aid Project)** one 130 ft., one 144 ft., one 23 ft. and one 34 ft. viaducts and 3 culverts on F. A. P. 163, Butte & Lawrence Counties, also one 102 ft. viaduct on F. A. P. 162 B, Haakon Co., to Concrete Eng. Co., Rapid City, $31,999 and $10,513 respectively; one 108 ft. and one 120 ft. viaducts on F. A. P. 149 B and C, Spink Co., to Iowa Bridge Co., 1263 East 19th St., Des Moines, Ia., $27,354; one 23 ft. viaduct on F. A. P. 170 B, Lake Co., to C. M. Fassett, Brookings, $2,014; one 48 ft. and one 36 ft. viaducts on F. A. P. 175, Hand Co., to M. A. Stump, Mobridge, $10,040. Noted June 5.

Ark., Little Rock—North Arkansas Rd. Impvt. Dist. 2, 37 steel bridges from 20 to 200 ft. long, on North Arkansas Rd. 2, to W. H. Dennison, Cushman, $162,260.

Tex., Austin—See "Streets and Roads."

Wash., Seattle—Timbered approach to West Spokane St. bridge, to V. Ramaglia and I. Ives, 4415 Corliss Ave., $43,868.

Calif., Pasadena—City will build rein.-con. bridge over Arroyo Seco, Linda Vista Ave., 423 ft. long, 240 ft. between faces of abutments with 2 arch span approaches on each side, by day labor under supervision of W. C. Earle, city engr. Noted May 29.

Dams

PROPOSED WORK

Pa., Hawley—See "Industrial Works."

Wis., Friendship—Friendship Power Co., G. Polvika, mgr., having plans prepared by L. A. De Guere, Wisconsin Rapids, 300 ft., rein.-con. dam 25 ft. head, 6 mi. high-voltage power transmission line, two kw. hydroelectric units, and transformers. $25,000.

Oregon—See "Unclassified."

Calif., Merced—Merced Irrigation Dist. rejected bids furnishing aggregates for dam, power house and railroad. Noted June 12.

Calif., San Diego—Common Council plans election probably late in August, $3,600,000 bonds for acquisition of lands and constructing arched, gravity section, masonry type dam at Mission Gorge Dam Site 2 on San Diego River; $400,000 for another dam and reservoir also on San Diego River. F. A. Rhodes, city engr.

CONTRACTS AWARDED

Mich., Menominee—M. & M. Paper Co., J. H. Delbridge, mgr., Marinette, about 400 ft., rein.-con. dam, 11 ft. head on Menominee River, and about 30 x 80 ft., rein.-con. power house, to C. R. Meyer & Sons Co., 50 State St., Oshkosh.

Railways

PROPOSED WORK

California—See "Dams" under Merced.

Canada—Canadian Pacific Ry., Windsor Sta., Montreal, Que., plans engine houses at Three Rivers, Que., and Schreiber, Ont., plans to purchase machinery $302,020, constructing coaling plant $211,746, rail replacement $1,286,857, mechanical coaling plants at McLean and Eyebrow, Sask., extending engine houses at Outlook and Wynyard, Alta, 27 mi. line from Mont Laurier to St. Anne du Lac, Que. J. M. Fairbairn, Montreal, Que., ch. engr.

California—See "Unclassified" under San Diego.

Ontario—Temiskaming & Northern Ontario Ry., North Bay, having preliminary surveys prepared 20 mi. branch line railway from end of steel on St. James Bay Extension, 70 mi. north of Cochrane, westerly to Smoky Falls on Mattagami River. $800,000. S. B. Clement, ch. engr.

BIDS DESIRED

California—City Harbor Comn., J. G. Starr, secy., 312 Byrne Bldg., Los Angeles, taking bids and opens same about June 27, 2,000 tons 75 lb. A. S. C. E. rail.

Excavation, Drainage, Irrigation

PROPOSED WORK

Fla., Belleair Heights—Plans election to vote on $25,000 bonds, 1 mi. of dredging, incl. 500 x 1,500 ft. yacht basin, 9 ft. deep. E. E. Carley, mayor.

Tex., El Paso—R. B. Kimbrough plans diverting 900 acre ft. water from Rio Grande River, will irrigate 800 acres. $40,000. Private plans.

Tex., Houston—H. W. Washburn, aud. Harris Co. takes bids early in July, 6 mi. ditches for D. D. 7. $15,000. J. S. Boyles, Court House, engrs.

Calif., San Diego—Common Council plans election probably late in August $250,000 bonds, dredging bay front between Columbia and 8th Sts., and constructing 3,000 ft. bulkhead. F. A. Rhodes, city engr.

Ont., Park Hill—McGillivray Twp. takes bids about middle of July dredging and deepening Aux Sable River, 60,000 cu.yd. excav. A. Farncombe, Dominion Savings Bldg., London, engr.

BIDS DESIRED

N. Y., Buffalo—July 3, at office Dept. Pub. Wks., Municipal Bldg., channel dredging Sect. 2, Buffalo River and Cazenovia Creek, 950,000 cu.yd. excav.; adv. E. N.-R. June 19.

Md., Baltimore—June 25 by Bd. Awards, dredging in Harbor of Baltimore. B. Hill, City Hall, Harbor engr.

Ark., Pine Bluff—June 24, by Comrs. Plum Bayou D. D. at office of Coleman & Gantt, attys., 615 Citizens Bank Bldg., levee across Ash Flat at southern terminus of Plum Bayou Levee, 20,000 to 25,000 cu.yd. excav. W. D. Dickinson, Boyle Bldg., Little Rock, engr. Noted Oct. 10.

BIDS RECEIVED

Fla., Tampa—Hillsborough Co., for 125,000 cu.yd. hydraulic fill, from Erler Corp., (by B. B. Logan, agt.), Tampa, $43,487. Noted May 1 under "Unclassified."

Wis., Milwaukee—J. H. Fowler, secy., Sewerage Comn., 508 Market St., backfilling around sewage disposal plant, Jones Island, from W. H. Gillen, 902 Summit Ave., 80,000 cu.yd. dredging at $0.875 per cu.yd. and 450 tons rip rap at $10 per ton.

CONTRACTS AWARDED

Mass., Orleans—Dept. Pub. Wks. Div. Waterways, State House Boston, dredging about 44,000 cu.yd. in Nanset Harbor, Town Cove, Namequoit River and Pleasant Bay, here, to W. E. Burke, 28 School St., Boston, $20,252. Noted June 12.

Fla., Tampa—Interstate Investment Co., Citizens Bank Bldg., 160,000 cu.yd. dredging channel to estuary property, and turning basin at docks, to Seaboard Dredging Co., 105 Jackson St., $0.25 per cu.yd.

Calif., Blythe—Palo Verde D. D., 36 mi. open drains, incl. in the main 1,460,000 cu. yd. excav., also timber and concrete structures, to D. A. Foley & Co., 701 Grant Bldg., Los Angeles, $0.1333 cu.yd., total approximately $300,000. Noted May 15.

Streets and Roads

PROPOSED WORK

Mass., Boston—City plans widening, relocating and constructing Cambridge and Court Sts., as highway from Charles to Brattle Sts. $3,500,000. J. F. Sullivan, secy. street laying out dept.

Mass., Chelsea (Boston P. O.)—Plans improving various streets this summer. $200,000.

Mass., Dorchester (Boston P. O.)—City of Boston plans constructing various streets, here. $25,000. J. T. Sullivan City Hall, Boston, secy. Street Laying Out Sept.

Mass., Roxbury (Boston P. O.)—City of Boston plans constructing various streets here $25,000. J. T. Sullivan, City Hall, Boston, secy. street laying out dept.

New York—A. W. Brandt, comr. highways, Albany, received no bids constructing and reconstructing 4.55 mi. Highway 1659, St. Regis Indian Reservation Rd., Franklin Co. $167,095. Noted May 22.

N. Y., Albany—Common Council plans repairing South Ferry and South Swan Sts. To exceed $25,000. Address J. F. Donovan, clk.

N. Y., Oneida—Voted $45,000 bonds paving Elm and Warner Sts. J. M. Hutton, engr. Noted May 22.

N. Y., Rome—Common Council and Engineering Dept. plan paving Kent, North Washington and East Whitesboro Sts. Address F. L. Martin, Mayor.

Streets and Roads (Continued)

N. J., Newton—Freeholders Sussex Co., plans paving 3 mi. Sparta-Woodport Rd., 10 ft. $50,000. H. Snook, Newton, engr.

N. J., Trenton—Mercer Co. soon takes bids paving Sullivan Way from city line to Trenton Junction, concrete $80,000, and River Rd. from Yardley Bridge to Villa Victoria, asphalt, $30,000. H. F. Harris, Court House, engr.

W. Va., Beckley—Election June 24, 38,000 bonds for sewers. B. H. Ashworth, city recorder.

Fla., Belleair Heights — See "Unclassified."

Fla., Palatka—Election July 1, $60,000 bonds, paving and repaving streets and sidewalks. H. A. Davis, mayor.

La., Farmersville—Union Parish, voted $400,000 for grading and gravel surfacing various roads. Noted May 15.

La., Gretna—Jefferson Parish, election June 17, $500,000 bonds road improvements in 7th, 8th and 9th Wards.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, plans grading and surfacing, probably concrete, 3.5 mi. Ooltewah-Bradley Co. line Rd., 18 ft., Hamilton Co. J. G. Creveling, highway comr.

Tenn., Gallatin — Making plans paving various streets, probably asphalt, $35,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, engrs.

Tenn., McKenzie—Making plans improving streets and sidewalks, etc. $30,000. B. H. Klyce, 4th and 1st Natl. Bank Bldg., Nashville, engrs.

Tenn., Nashville—Plans grading and surfacing 9th Ave., probably granite block on concrete. To exceed $25,000. W. W. Southgate, city engr.

Ky., Clay—Making plans asphalt, concrete or brick paving various streets. N. Orcutt, O. V. Bank Bldg., Henderson, engr. Noted Jan. 24.

Ky., Greenville—Making plans resurfacing and reconstructing various streets, limestone macadam and asphalt. $50,000. C. W. Wardelle, Central City, engr.

Ky., Louisville—Plans resurfacing sections of 12th St., to exceed $25,000. Address Bd. Pub. Wks., engrs.

O., Canton—Plans improving 0.75 mi. 19th St S. W., 25 ft., $30,000, probably asphalt, 0.75 mi. 13th St. N. E., 25 ft., $25,000; 1 mi. Columbus Ave., 30 ft., $40,000; 0.75 mi. 16th St. N. E., 20 ft., $25,000. W. E. Sarver, city engr.

O., Canton—Soon takes bids asphalt paving 0.75 mi. Plain Ave. N. E., 30 ft. $30,000. W. E. Sarver, city engr.

O., Canton—Stark Co., soon takes bids brick paving 3.374 mi. Massillon-Canton Rd., 20 ft. $183,000. A. M. Wise, Court House, engr.

O., Columbus — Making plans grading, laying necessary water services and sewer connections, and paving 522 ft. Green St., 24 ft., brick $7,095, asphalt $5,830, concrete $5,295; 550 ft. Longview Ave., 24 ft., brick $11,963, asphalt $9,811; 2,220 ft. Parsons Ave., 28 ft., brick $35,871, asphalt $26,937; 4,029 ft. Bruck St., 26 ft., brick $65,485, asphalt $50,329. R. H. Simpson, city engr.

O., New Philadelphia — Plans repaving 0.75 mi. Bway., 40 ft., probably sheet asphalt, $38,000, also 1 mi. High St., 40 ft., sheet asphalt on old brick, $60,000. G. E. Arnold, city engr.

O., Wooster—Wayne Co. plans improving 2.5 mi. Sect. J, Akron-Wooster Highway, 20 ft. $75,000.

Ind., Fowler—Benton Co. plans grading and graveling 2.7 mi. Klingert Rd., 24 ft. $26,078. D. Heaton, Fowler, engr.

Ind., Lebanon—Rejected bids hardsurfacing 11,000 sq.yd. North Meridan St., $31,000. Will readvertise. Address city engineers.

Ind., Wabash—Wabash Co., plans concrete paving 12,672 sq.yd. La Salle Rd. $29,460. H. Hartmen, Wabash, engr.

Mich., Detroit — Making plans paving with 3½ in. sheet asphalt on 8 in. concrete, 11,100 sq.yd. Pleasant St. $55,900, 790 sq.yd. Main St. Sect. 2, $4,060, 18,900 sq.yd. Fords Highway $95,000, 8,200 sq.yd. Buena Vista Ave. $41,600, 7,620 sq.yd. McDougall Ave. $38.160, 5,190 sq.yd. Wilfred Ave. $25,970, 6,000 sq.yd. Coplin Ave. $30,160, 5,100 sq.yd. Cloverdale Ave. $25,970, 3,200 sq.yd. Ford Ave. $15,080, 3,200 sq.yd. Yellowstone Ave. $16,200, 4,500 sq.yd. Fairfield Ave. Sect. 1 $22,880, 3,120 sq.yd. Lawton Ave. Sect. 2 $15,660, 3,900 sq.yd. Princeton Ave., Sect. 3 $19,760, 7,800 sq.yd. Maine Ave. Sect. 3 $39,000, 4,420 sq.yd. Indiandale Ave. $22,360, 4,550 sq.yd. Devonshire Ave. $23,260, 18,200 sq.yd. Davison Ave. Sect. 1, $91,200, 4,005 sq.yd. 3 alleys with one course concrete, $14,890. G. Jerome, city engr.

Ill., Galesburg—Bd. Local Impvts. soon takes bids grading, curbing, guttering and paving 11 blocks Blaine Ave., Arnold and West Brooks Sts. $55,930. A. L. Richey, city engr.

Ill., Highland Park—Branigar Bros., 160 North LaSalle St., Chicago, having preliminary plans prepared improving about 2 mi. Sunset Terrace sub-division, here, 27,000 sq.yd. 8 in. rein.-con. paving, integral curb, etc. Windes & Marsh, 598 Birch St., Winnetka, engrs

Wis., Beaver Dam—Making plans 50 ft. concrete bridge on South Spring St., 1 mi. of concrete curb and gutter on various streets. E. B. Parsons, Jefferson, engr.

Ia., Adel—Had plans prepared paving 10 blocks Race Court, Rapids and Church Sts., concrete, vibrolithic concrete or sheet asphalt, etc. $32,000. Capper Eng. Co.. Adel, engrs.

Ia., Des Moines—Polk Co. voted $1,350,000 paving roads. F. O. Laing, co. engr. Noted May 29.

Ia., Muscatine — Muscatine Co. defeated $1,350,000 bonds June 2, paving primary road system.

Ia., Tipton—Cedar Co. defeated $2,000,000 bonds for paving primary road system. H. L. Phelps, co. engr. Noted May 29.

Ia., Waterloo—Plans paving 40 blocks and resurfacing 20 blocks various streets. R. B. Slippy, city engr.

Kan., Independence—Making preliminary plans grading and paving 4,700 ft., Walnut St. from 4th to 10th Sts., 30 ft., vitr. brick on 5 in. concrete; Pine St. from 13th to 16th Sts. Takes bids about June 28, 2,400 ft. 10 in. vitr. clay tile sewer and pumping plant with 2 motor driven pumps. G. H. Hackmaster, City Hall, engr.

Kan., Washington—Washington Co. plans grading, etc., 7.397 mi. Federal Aid Project 211, Sect. C, 28 ft. E. C. L. Wagner, 608 Kemper Bldg., Kansas City, Mo., engr.

Neb., Omaha — Plans opening and improving 13th St. from Cuming to Lake Sts. $96,000. H. Beal, city engr.

Neb., Omaha—Making plans paving 6 mi. Florence, Turner and 11th St. Blvds. $200,000; Paving Dists. G-2371, 2473, 2521, 2541 and 2558. $25,00. H. Beal, city engr.

South Dakota—State Highway Comn., Pierre, soon takes bids grading etc. 9 mi. Federal Aid Project 186 A. Davidson Co. and 21 mi. Federal Aid Project 186, B and C, Sanborn Co. F. D. Hudgins, ch. engr.

Mo., Clinton—Making preliminary plans grading, curbing and paving with 7 in. concrete 5.300 ft. 3rd St., 27 ft. $26,000. Address City Engineer.

Ark., Camden — Quachita Co. making preliminary plans grading and gravel surfacing roads to Stephens and Smackover. $50,000. R. C. Limerick, 723 North Jackson St., Little Rock, engr.

Tex., Abilene—Voted $50,000 bonds paving various streets. O. K. Hobbs, city engr. Noted May 22.

Tex., Dallas—Oak Lawn Development Co., Magnolia Bldg., plans paving asphalt on concrete, sewers, etc., at Oak Lawn, $50,000. Engineer not announced.

Tex., Dallas — Southern Methodist University plans landscape work, walks, drives, etc., on campus. $25,000 plus. B. M. Pond, also McGinnis & McGinnis, 213 Haynie St., engrs.

Tex., Denison—Making plans paving 12 blocks Armstrong St., alternate on standard pavements. $36,000. C. E. Hayden, city engr.

Tex., Eagle Pass—Maverick Co. making plans hard surfacing State Highway 85, Eagle Pass to Dimmit Co. line. $242,000. J. G. Lott, Carrizo Springs, engr.

Tex., Galveston—Election July 15, $300,000 bonds paving and street improvements. C. A. Holt, Jr., city engr. Noted June 12.

FILTRATION PLANT—ALBANY, N. Y.

Following are lowest three bids opened by Bd. Contract & Supply, Albany, April 21, for improvements to filtration plant, (A) James J. Finn & Son, Albany, (awarded contract); (B) Whiting-Turner Constr. Co., 404 Stewart Bldg., Baltimore, Md.; (C) McCann Bldg. Co., Albany. The unit bids were as follows:

	A	B	C
20,000 cu.yd. general excavation	$1.62	$1.78	$0.82
4,000 cu.yd. rock excavation	5.11	5.00	4.00
6,000 cu.yd trench excavation	5.11	3.50	1.40
9,000 cu.yd. general fill	1.08	1.10	.80
24,000 cu.yd rolled embankment	1.62	3.66	.50
12,000 cu.yd. borrow	1.08	1.33	1.70
250 cu.yd. concrete for filling	9.03	13.02	13.00
2,600 cu.yd concrete in vaulting and piers	16.59	28.25	21.00
6,700 cu.yd. concrete in heavy walls and foundation floors	12.15	17.90	23.40
300 cu.yd. concrete in thin walls and floors	4.96	30.00	29.00
385,000 lb. steel reinforcing	.043	.059	.06
Steel pipe (lump sum)	50,824.00	31,462.00	47,000.00
26,000 lb. structural steel	.075	.10	.09
250 ton placing C. I. pipe and specials	80.00	26.50	78.25
Placing Gates (lump sum)	3,958.00	2,500.00	3,038.00
Placing 36 in. outlets (lump sum)	476.00	400.00	500.00
Drains (lump sum)	3,570.00	2,200.00	2,307.00
Sand-handling equipment (lump sum)	16,616.00	12,500.00	17,714.00
Moving aerator pump (lump sum)	1,615.50	800.00	1,000.00
330 cu.yd. brick masonry	55.03	53.70	60.00
30 cu.yd. cutting masonry	32.30	20.00	50.00
Gate house (lump sum)	4,174.50	5,500.00	5,900.00
Laboratory and alum house (lump sum)	9,516.00	8,200.00	8,500.00
Store house (lump sum)	5,273.00	4,200.00	3,400.00
Chlorine room (lump sum)	593.00	800.00	600.00
Aerator house (lump sum)	941.00	900.00	880.00
Appurtenances (lump sum)	17,458.00	9,500.00	16,000.00
Extended totals	$445,992	$446,591	$466,872

SEWER—OMAHA, NEB.

Following are lowest three bids opened by Dept. Pub. Impvt., May 16, for installing sewer in Sewer Dist. No. 854, Grace St. from 15th St., to Missouri River, (A) Jones Eng. & Constr. Co., 315 Courtney Bldg., (awarded contract); (B) Martin Day Co.; (C) Woods Bros. Constr. Co., 2nd and Pierce Sts. The unit bids were as follows:

	A	B	C
3,000 lin.ft. 6 in. v.c. pipe	$0.315	$0.50	$0.50
12 lin.ft. 33 in. v.c. pipe	19.67	5.00	10.00
183 lin.ft. 7x10 ft. reinforced-concrete sewer, Sect. X	64.568	65.00	84.81
20 lin.ft. 7 ft. 10 in. to 6 ft. 3 in.x11 ft. 6 in. reinforced-concrete sewer, funnel	70.25	85.00	92.56
325 lin. ft. 6 ft. 3 in.x11 ft. 6 in. reinforced-concrete sewer, Sect. Y	83.136	75.00	92.95
30 lin.ft. 6 ft. 3 in.x11 ft. 6 in. to 2-7 ft. 3 in. x9 ft. reinforced-concrete sewer, funnel	144.153	150.00	133.87
1,045.5 lin.ft. 7 ft. 3 in.x9 ft. reinforced-concrete sewer, Sect. Z-1	93.05	103.00	104.35
1,448.7 lin.ft. 7 ft. 3 in.x9 ft. reinforced-concrete sewer, Sect. Z-2	82.837	89.00	93.60
Ten 5 ft. manholes	5.875	10.00	200.00
16,500 cu.yd. stripping	1.175	1.60	.65
25,000 cu.yd. embankment	.94	.50	.35
10 cu.yd. 1:2:4 concrete	17.00	20.00	25.00
6,510 lb. c.i. manhole covers	.047	.05	.05
100 tons crushed rock	3.65	3.00	6.25
30 cu.yd. 1:3:6 foundation concrete	9.18	18.00	23.00
45 slants, 12 in.	1.92	3.50	1.00
16 slants, 15 in.	2.18	3.50	1.40
10 slants, 18 in.	2.94	3.50	1.95
410,000 ft. b.m. sheet piling	75.85	75.00	115.00
Extended totals	$341,632	$354,715	$374,140

Streets and Roads (Continued)

Tex., George West—Live Oak Co. voted $586,000 bonds, improving Live Oak County Rd. Dist. 8. Address County Commissioners, Three Rivers.

Tex., Houston — J. C. Boyles, engr., Court House, soon takes bids 30 mi. grading and paving in Nettlebrook Addition, for San Jacinto Trust Co., Humble Bldg.

Tex., Houston—W. C. Branum Co., 1708 Main St., had plans prepared paving streets in Woodleigh Addition, penetration method. $25,000. Howe & Wise, First Natl. Bank, engrs.

Tex., Jacksonville—Election June 23, $100,000 bonds permanent paving various streets. H. N. Roberts, c/o County Courthouse, Lubbock, engr.

Tex., Jasper—Jasper Co. election June 21, $250,000 bonds constructing roads in Rd. Dist. 3. C. P. Hunter, co. engr.

Tex., Kountze—Hardin Co. defeated $500,000 bonds road construction in Sour Lake Dist. G. C. Brown, co. engr. Noted May 1.

Tex., Waco—Voted $250,000 bonds street paving. V. G. Koch, city engr. Noted May 15.

Okla., Alva—Making plans improving 9 blocks 7th, 8th and 9th Sts., 9,500 sq.yd. concrete, 5,500 lin.ft. curbing, 3,000 cu.yd. earth excav. $35,000. F. E. Devlin, Bitting Bldg., Wichita, Kan., engr.

Okla., Stillwater—City and Payne Co. defeated $1,000,000 bonds for roads, new election on same probably in August. G. F. Matkin, city clk.

Calif., Los Angeles—Los Angeles Co. had plans prepared improving 1.51 mi. Central Ave. between Manchester Ave. and Watts north city limits, 10,783 cu.yd. excav., 26,491 sq.yd. concrete.

Calif., Oakland — Alameda Co. making preliminary plans widening approximately 6 mi. San Leandro-Hayward Highway, asphaltic concrete on concrete. G. A. Posey, co. surv.

Calif., Sacramento—Sacramento Co. making plans graveling about 40 mi. various roads. C. W. Deterding, Jr., co. engr.

Calif., San Luis Obispo—Making revised plans improving portions Marsh, Higueroa, Toro Sts., etc., 6 in. hydrated concrete $25,000 or more. W. B. Burch, city engr.

Calif., San Jose—Santa Clara Co. making plans grading 6 mi. Mt. View-Alviso Rd. R. Chandler, co. surv.

Calif., Santa Ana—Orange Co. had plans prepared improving 2 mi. Fairview Ave., 18 ft., paving 7 in. thick in center and 9 in. at edges (county will furnish 2,700 bbl. cement). J. L. McBride, co. rd. comr. Noted Mar. 6.

Calif., Santa Ana—Had plans prepared improving Oak, Bishop and Grant Sts., 136,334 sq.ft. grading and paving with 6 in. asphaltic concrete, 2,342 ft. concrete curb, 2,647 ft. trench, 2,041 ft. 4 in. house sewers. W. G. Knox, city mgr.

Calif., Santa Barbara — Santa Barbara Co. rejected bids paving about 25 mi. roads in Santa Ynez Valley. Noted May 22.

Calif., Santa Cruz—Santa Cruz Co. making plans paving 3 mi. Coast Rd., asphaltic macadam. L. Bowman, co. surv.

Ont., Chatham—Kent Co. plans to expend $185,000 for maintenance and improving roads, gravel, macadam and concrete, also 4 mi. concrete paving Chatham-Dover Rd. and Cemetery Rd., total $300,000. W. D. Colby, Chatham, supt.

Ont., Ford—Plans cement paving Sandwich St. and Raymo Rd. $100,000. J. F. Foster, City Hall, engr.

Ont., Seaforth—Plans cement pavements. $40,000. R. Patterson, County Bldg., Goderich, engr.

Ont., Toronto—York Twp., 40 Jarvis St., plans concrete sidewalks on Arlington Ave. $12,695, Winnett Ave. $2,197, Cambrai Ave. $1,900, Inwood Ave. $1,850, Governors Rd. $2,900 Nesbitt Dr. $1,950, Cosburn Ave. $3,400, Carlaw Ave. $1,375, Delworth Crescent $2,600, North Logan Ave. $595, and Douglas Crescent $2,750 asphalt paving Nesbitt Dr. $5,224, Douglas Crescent $8,514, and Governors Rd. $3,443; grading Ashbury Ave. $3,300, Cataract Ave. $750, and Rambert Ave. $1,130. F. B. Goldike, 40 Jarvis St., engr.

Ont., Welland—See "Contracts Awarded."

B. C., Vancouver—Making plans repairing and hard surfacing city streets. $200,000. C. Brackenridge, city engr.

BIDS DESIRED

Massachusetts — July 1, by Dept. Pub. Wks., State House, Boston, concrete paving about 4,900 ft. highway, 20 ft. in Brookfield and East Brookfield. $28,000. W. F. Williams, comr.

Massachusetts—June 24, by Dept. Pub. Wks., State House, Boston, paving 4,000 ft. highway, 20 ft., in Seekonk, bituminous macadam, $25,000. W. F. Williams, comr.

Mass., Gardner — June 24, by F. W. Proctor, supt. of streets, rein.-con. paving in 2 locations; adv. E. N.-R. June 19.

Mass., Roxbury (Boston P. O.)—June 24, by Pub. Wks. Dept., City Hall, Boston, concrete paving Centre St. from John Eliot Sq. to Columbus Ave., here. $35,000. J. A. Rourke, comr.

New York—July 7, at office F. L. Merritt, clk. Bd. Supervs., Westchester Co., Court House, White Plains, 0.96 mi. Co. Rd. 22, Lexington Ave., in Mt. Kisco, and 1.03 mi. Co. Rd. 25, Main St. in Peekskill; adv. E. N.-R. June 19.

N. Y., Buffalo — June 24, by Commissioner Pub. Wks., Municipal Bldg., paving and repaving with asphalt or brick on 6 in. concrete, Harding Rd. Goodyear and Woodlawn Aves. and various other streets. C. E. P. Babcock, Municipal Bldg., engr.

N. J., Newton — July 3, by Bd. Free holders Sussex Co., grading and graveling Tranquility Andover Rd., in Green Twp. H. Snook, Newton, co. engr.; adv. E. N.-R. June 19.

N. J., Springtown (mail Bloomsbury)—June 23, by Com. Pohatcong Twp., bituminous macadam surfacing Carpentersville Rd., Warren Co. H. W. Vetter, Belvidere, engr.; adv. E. N.-R. June 19.

Pa., Phila.—June 23, by Bureau Hys., Dept. Pub. Wks., grading Schedule A, 3,269 cu.yd. Belgrade, Miller and Schiller Sts., 2,713 cu.yd. Collins St., 14,338 cu.yd. Cottman St., 113,530 cu.yd. Erie, Torresdale and Luzerne Sts., 6,886 cu.yd. Houghton and Lauriston Sts., 1,178 cu.yd. Sedgwick St., 9,859 cu.yd. Vista, Whitaker and Pennway Sts.; asphalt paving Schedule B, 1,315 sq.yd. Belmar St., 2,166 sq.yd. Columbia St., 1,314 sq.yd. Devon St., 1,175 sq.yd. Holbrook St., 5,960 sq.yd. Hortter and Phil-Ellena Sts., 3,631 sq.yd. Limekiln Pike, 1,310 sq.yd. Magnolia St., 2,557 sq.yd. Nedro St., 879 sq.yd. Sedgwick St., 636 sq.yd. Shiller St., 970 sq.yd. Theodore St., 3,504 sq.yd. 19th St.; furnishing asphalt paving mixtures, Schedule C, 1,850 tons asphalt surface and 1,850 tons asphaltic binder. G. H. Biles, dir. Pub. Wks.

Pa., Upper Darby—June 21, by H. A. Fritschman, secy. Haverford Twp., Twp. Bldg., Oakmont (upper Darby P. O.), rein.-con. paving 8,659 lin.ft. Darby Rd. and 1,000 lin.ft. Manoa Rd.; bituminous penetration paving 6,612 lin.ft. Mill Rd. and 3,151 lin.ft. Benedick Ave., all 18 ft. wide. S. Bover, Oakmont, engr.

Md., Baltimore—June 25, by Bd. Awards, grading, paving and curbing with sheet asphalt, Contr. 260-Oa and as listed in Contr. 261-OCOANA. R. K. Compton, chn. paving comn., 214 East Lexington St.

W. Va., Williamson—July 8, by Mingo Co., grading, etc. approximately 12.3 mi. Williamson-Matewan Rd., Projects 23 and 29. W. R. Hunt, Co. road engr.

S. C., Edgefield—June 24, at office Edgefield Co. Hy. Comn., grading and surfacing 5.1 mi. State Route 21, Federal Aid Project 240-A, 25,997 cu.yd. common excav., 12,818 cu.yd. sand clay, etc. State Highway Engineer, 1626 Main St., Columbia, engr.

S. C., Greenwood—June 27, by Greenwood Co. Hy. Comn., topping 7.8 mi. Federal Aid Project 236, State Route 7, 70,000 cu.yd. common and 800 cu.yd. rock excav., 24,300 cu.yd. topsoil, etc., also 220 ft. rein.-con. bridge. E. D. Sloan, Court House, Greenville, engr.

S. C., Laurens — June 26, at office Laurens Co. Hy. Comn., grading and topping 10.1 mi. State Route 7, Federal Aid Project 237, 97,665 cu.yd. common and 2,335 cu.yd. rock excav., 31,924 cu.yd. top soil, etc., also 110 ft. rein.-con. bridge. E. D. Sloan, Court House, Greenville, engr.

Fla., Sarasota—June 23, by J. R. Brumby, comr. Pub. Wks., paving and repaving various streets, 36,175 sq.yd. asphalt block, 16,750 lin.ft. concrete curb, removing 14,080 lin.ft. old curb. $80,000.

Fla., Tampa—June 24, by City Commissioners, grading and paving Harbor and McKay Sts., 8,000 sq.yd. 3 in. asphalt on 8 in. composition lime rock, 1,800 lin.ft. granite curbing, 3,600 lin.ft. granite curbing, $30,000 each. Former bids voided and revised plans made. R. D. Martin, city engr. Noted May 15.

Fla., Tavares—June 23, by Bd. Comrs. Lake Co., grading, surfacing, etc., 8 mi. highway in Leesburg Rd. & Bridge Dist., asphalt or brick. $200,000. C. R. Horn, Tavares, engr.

Alabama—State Hy. Dept., Montgomery, taking bids graveling 6 mi. Butler-Riderwood Rd., 20 ft., Choctaw Co.; gravel and rolled clay surfacing 4 mi. Troy-Montgomery Rd., 20 ft., Pike Co. W. S. Keller, highway engr.

Alabama—July 3, by State Hy. Dept., Montgomery, constructing 1.36 mi. road between Federal Aid Project 102, Chambers Co. and Alabama-Georgia line, West Point, Ga., 4,775 cu.yd. excav., 19,125 sq.yd. one-course plain cement concrete, 1,939 lb. reinforcing, 112,402 sta.yd. overhaul, also bridge, 102 cu.yd. concrete, 3,392 lb. reinforcing, 125 cu.yd. wet excav., etc. W. S. Keller, highway engr.

Ala., Birmingham — July 15, by City Comn., paving 5 blocks 7th St. S and 2nd Ave. S., asphaltic concrete on 5 in. concrete, and sheet asphalt or bitulithic on 6 in. concrete; cement sidewalks on 10 blocks 51st St.; curbing and guttering 1 block 31st St. $48,400. A. J. Hawkins, city engr.

Louisiana—June 24, by State Hy. Dept., Reymond Bldg., Baton Rouge, constructing 3.91 mi. State Project 97, Lafayette Parish.

Louisiana—July 1, by State Hy. Dept., Reymond Bldg., Baton Rouge, grading, graveling, etc., 10.8 mi. State Highway Project 107, Vermillion Parish. J. M. Fourmy, ch. engr.

La., Bastrop—June 24, by Police Jury, Morehouse Parish, grading and gravel surfacing 15 mi. Rd. 17, Sects. A and C, also Rd. 13, Sects. A and B.

O., Bexley (Columbus P. O.)—June 23, by Jennings-Lawrence Co., engrs., Hartman Bldg., Columbus, paving 2,700 ft. Bexley Dr., 24 ft., for city.

Ind., Bluffton—June 25, by Comrs. Wells Co., 8-in. crushed stone surfacing 7,080 ft. Millington Rd., 18 ft. $26,000. C. Devenport, Bluffton, engr.

Ind., Bluffton—June 25, by Comrs. Wells Co., concrete paving 8,128 sq.yd. Frazier Rd. $28,900. C. Devenport, Bluffton, engr.

Ind., Bluffton—June 27, by Comrs. Wells Co., grading and graveling 2.7 mi. Bowman Rd., 20 ft. $28,751. C. Devenport, city engr. Noted June 12.

Ind., Brownstown—June 27, by Town Bd. of Trustees, paving 6,714 sq.yd. Walnut St., concrete. Address City Engineer. Noted June 12.

Ind., Crown Point—June 27, by Comrs. Lake Co., concrete paving 108,190 sq.yd. Simpson Rd. and 62,154 sq.yd. Gleason Rd., $280,500 and $162,000 respectively; grading and graveling 2 mi. Bothwell Rd. 20 ft., $26,700. C. K. Wallace, Crown Point, engr. Noted June 12.

Ind., Elkhart—June 25, by Bd. Pub. Wks,. hardsurfacing 0.75 mi. Kilbourn St., 30 ft. $27,500. Address City Engineer.

Ind., Marion—June 30, by Comrs. Grant Co., concrete paving 41,756 sq.yd. Schoffield Rd. $108,567. G. Steffins, Marion, engr.

Ind., Petersburg—July 8, by Comrs. Pike Co., 8 in. crushed rock surfacing, 10,500 ft. Chamness Rd., 24 ft. $27,000. E. Morton, Petersburg, engr.

Ind., South Bend—June 30, by Comrs. St. Joseph Co., concrete paving 13,928 sq.yd. Le Brehmer Rd. $36,213. P. R. Gillin, South Bend, engr.

Ind., Williamsport—June 28, by Comrs. Warren Co., concrete paving 11,268 sq.yd. Judy Rd., $26,401. J. R. Gregory, Williamsport, engr.

Wisconsin—June 24, by State Hy. Comn., and Lafayette Co. Hy. Com., at office G. H. Priestley, highway comr., Court House Darlington, relocating 11,000 ft. Five Points-Wiota Rd., Appropriation 284, 0.1 acre clearing and grubbing, 11,008 cu.yd. earth, 1,600 cu.yd. loose rock and 300 cu.yd. solid rock excav., 1,329 cu.yd. borrow, 6,700 lin. ft. intercepting ditch, etc.; 3.2 mi. Shullsburg-Monroe Rd., Federal Aid Project 374-A, 16,785 cu.yd. earth, 2,750 cu.yd. loose rock and 1,050 cu.yd. solid rock excav., 1,145 cu.yd. borrow, 12,608 lin. ft. intercepting ditch, 307 cu.yd. concrete in bridge, 503 cu.yd. channel change, etc. J. T. Donahey, acting highway engr.

Wisconsin—June 24, by State Hy. Comn., at office Div. 4, Citizens Natl. Bank Bldg., Wisconsin Rapids, concrete surfacing, etc., 40,597 sq.yd. Stevens Point-Plainfield Rd., Federal Aid Project 350, Portage Co., J. T. Donaghey, acting state highway engr.

Wisconsin—June 26, by State Hy. Comn. at office Div. 8, 1st Natl. Bank Bldg., superior, grading and gravel surfacing, etc., 2.71 mi., Canton-Bruce Rd., Federal Aid Project 174, Rusk Co.; 5.64 mi. Spooner-Minong Rd., Federal Aid Project 377-A, Washburn Co. J. T. Donaghey, acting state highway engr.

Wis., Waupun—June 27, by R. Zimmermann, city clk., improving State, Franklin, Jefferson, Brown, Mill, Forest and Drummond Sts., 22,000 lin.ft. concrete curbing and guttering, 3,000 cu.yd. excav., 760 ft. 15 in. and 100 ft. 12 in. storm sewer, 31 catchbasins. $25,000. E. B. Parsons, Jefferson, engr.

Ia., Allison—June 24, W. C. Shepard, city clk., approximately 10,000 sq.yd. various types paving. R. B. Slippy Eng. Corp., 406 Lafayette Bldg., Waterloo, engrs.

Minn., Grand Rapids—July 1, by T. Erskine, aud. Itasca Co., Job 2401 State Rd. 8, 40,950 cu.yd. earth, 2,730 cu.yd. loose rock and 1,830 cu.yd. solid rock excav., etc. $28,000. H. A. LeSueur, Grand Rapids, engr.

Kan., Osborne—July 11, by Clerk Osborne Co., improving 4.273 mi. Federal Aid Project 170-B, 9,647 sq.yd. feather edge gravel, 23,404 cu.yd. excav., 20,803 lb. reinforcing, 364 ft. 18- to 30-in. rein.-con.

Streets and Roads (Continued)

pipe, etc. E. E. Clark, co. engr. Noted June 12.

N. D., Schafer—June 30, by H. H. Johnson, aud. McKenzie Co., improving, 10.761 mi. Federal Aid Project 237, 76,679 cu.yd. earth and 7,440 cu.yd. rock excav., 16,351 cu.yd. overhaul, 2,228 lin. ft. of 18- to 36-in. corrugated metal or concrete pipe culvert; 406.06 cu.yd. Class A concrete, etc $32,000.

Wyoming—June 24, by State Hy. Comn., Cheyenne, **(F. A. P. means Federal Aid Project)**, grading and surfacing 3.4 mi. Casper Shoshoni Rd., F. A. P. 168 A, $40,500, and 8.5 mi. Casper-Rawlins Rd., F. A. P. 164 A, $95,000, both 24 ft. in Natrona Co., C. H. Lowman, Casper, engr.; grading, curbing and placing 16,600 sq.yd. one course concrete paving on 1.4 mi. Yellowstone Highway, near Thermopolis, F. A. P. 169, 32 ft., Hot Springs Co., $69,000, R. L. Silver, Basin, engr.; grading 12.9 mi. Jackson Moran Rd., F. A. P. 163 A, 24 ft., Teton Co., $64,000, R. J. Templeton, Rock Springs, engr.

Missouri—June 24, by State Hy. Bd., Jefferson City, grading 8.733 mi. 26 ft. road in Bates Co., 18.803 mi. 30 ft. road in St. Francois and Jefferson Counties; graveling 3.835 mi. 18 ft. road, Audrain Co., 2.185 mi. 16 ft. road, Mississippi Co., 16.217 mi. 12 ft. road, Cedar and Douglas Counties. B. H. Piepmeier, ch. engr.

Ark., Little Rock—June 26, by Comrs. Paving Dist. 384, at office of A. M. Lund, engr., 527 Southern Trust Bldg., 3,900 ft. new concrete curb, 2,800 ft. reset stone curb, 6,900 sq.yd. concrete gutters, 120 ft. 12 in., and 700 ft. 15 in. storm sewers, 20,400 sq.yd. asphalt on concrete or 27,300 sq.yd. concrete (alternate).

Ark., Pine Bluff—July 2, at Chamber of Commerce, reinforced or vibrolithic concrete paving, curbing, storm sewers, etc. Guest Eng. Co., 207½ Main St., engrs.; adv. E. N.-R. June 19.

Tex., Carthage—June 27, by Titus & Dillon, engrs., Carthage, grading and bridging State Highway 43-A, Rd. Dist. 1, 81,000 yd. excav., 45,000 yd. borrow, etc., for Panola Co. $110,000.

Tex., Houston—J. S. Boyles, engr., Court House, taking bids 9,500 sq.yd. concrete paving Dearborn Pl., for H. E. Tomlinson, Grand Apartments. $27,000.

Calif., Hillsborough — July 1, by City Trustees, improving various streets, 66,500 sq.ft. 5 in. concrete, 44,500 sq.ft. 1½ in. Topeka surface on macadam, 20,600 sq.ft. 4 in. macadam, etc. W. C. Hammatt, Hearst Bldg., San Francisco, consult. engr.

Calif., Martinez — July 7, by Supervs. Contra Costa Co., improving highway from Giant to San Pablo Tank Farm, 108,561 sq. ft. 4½ in. asphaltic concrete, 2,100 cu.yd. embankment; 1¾ mi. Concord-Avon Rd., 1,200 cu.yd. excav., 88,240 sq.ft. asphaltic macadam, 2,500 tons rock, 1 gal. oil to each sq.yd. of pavement. R. R. Arnold, co. surv. Noted June 5.

Calif., San Jose — July 7, by Supervs. Santa Clara Co., paving El Monte Ave., Rd. Dist. 5, 168,807 sq.ft. oil macadam; Monterey St. in Morgan Hill, 75,880 sq.ft. oil macadam, 138,000 sq.ft. resurfacing. R. Chandler, co. surv.

Ont., Waterloo—L. F. Dietrich, chn. Bd. Wks., taking bids constructing 32,000 sq. yd. asphalt pavements, and 11,000 lin.ft. curbs and gutters. $60,000. C. Moogk, City Hall, engr.

BIDS RECEIVED

Massachusetts—Dept. Pub. Wks., Div. of Highways, State House, Boston, improving highway in Reading, North Reading, and Andover, with bitulithic macadam, from R. H. Newell Co., Uxbridge, $52,933. Noted June 5.

Mass., East Boston (Boston P. O.)—Dept. Pub. Wks., Boston, granite block paving Border St., from Boston Contg. Co., Inc. Everett St., $35,069. Noted June 5.

Mass., West Roxbury (Boston P. O.)—Dept. Pub. Wks., City Hall, Boston, bitulithic paving Grove St., from Centre to Washington Sts., here, from S. J. Tomassello, 11 Cushing Terrace, Dorchester, $57,859. Noted June 5.

Mass., Wareham—Dept. of Pub. Wks., Div. Highways, State House, Boston, 16,600 ft. highway, here, from Lane Constr. Co., 37 Colony St., Meridan, Conn., $160,950.

New York—A. W. Brandt, comr. highways, Albany, **(e. e. means engrs. est.)**, constructing and reconstructing 1.43 mi. Repair Contr. 1413, State Line-Orangeburg Rd., Rockland Co., from Vanbro Constr. Corp., 24 Elizabeth St., West New Brighton, S. I., $66,789, e. e. $72,547; 0.93 mi. Repair Contr. 3081, Catskill-Athens Rd., Greene Co., from Glenbeigh Contg. Co., New York City, $38,094, e. e. $39,279; 2.34 mi. Highway 1691, Liberty-Woodbourne Rd., Sullivan Co. from Frissell & Claeys Co. Inc., Port Jervis, $109,494, e. e. $119,494; 1.69 mi. Repair Contr. 3082, Riverside-Chestertown Rd., Warren Co., from Ellis Constr. Co., Melrose, Mass., $89,350, e. e. $93,581; 8.98 mi. Highway 8180, Old Forge-Eagle Bays Rd., Herkimer Rd., from Graham & Stevenson, Inc., Albany, $386,122, e. e. $415,192; 0.44 mi. Repair Contr. 1414, Coxsackie-Ravena Rd., Greene Co., from A. A. Howard, Fairport, $16,819, e. e. $21,140; 2.75 mi. Repair Contr. 1411, Malta-Mechanicsville Rd., Saratoga Co., from J. B. Dower, Ballston Spa, $122,521, e. e. $135,201; 0.49 mi. Repair Contr. 1415, Delaware-Turnpike Rd., Albany Co., from P. H. Murray, Troy, $29,662, e. e. $29,882; 1.1 mi. Highway 1692, Mecklenburg-Ithaca Rd., Schuyler Co., from Di Pillo & Balistreri Constr. Co., Geneva, $48,805, e. e. $56,067; 5.6 mi. Repair Contr. 1412, Castle Creek Rd., Broome Co., from J. F. Paddelford, Sherburne, $238,134, e. e. $269,439; 2.37 mi. Repair Contr. 3073, Geneva-Canandaigua Rd., Ontario Co., from G. W. Chambers, Powers Bldg., Rochester, $105,245, e. e. $119,751; 4.63 mi. Highway 1689, Tully-Onondaga Castle Rd., Onondaga Co., from Mondo Constr. Co., City Bank Bldg., Syracuse, $205,093, e. e. $227,118; 3.92 mi. Highway 1684, Dundee-Hammondsport Rd., Yates Co., from Lane Constr. Corp., 37 Colony St., Meriden, Conn., $184,953, e. e. $200,713. Noted May 22.

N. Y., Brooklyn—E. Riegelmann, boro. pres. Boro. Hall, from Uvalde Asphalt Paving Co., 7 Bway., New York, repaving Bushwick Ave. $5,138, Osborn St., $13,669, Pitkin Ave. $15,193, paving and repaving Farragut Rd. $41,289, paving with Malta St. $8,040 all asphalt; from C. Bennett Contg. Co., 414 Rutland Rd., grading curbing and flagging East 17th St. $8,382; from Glacer Contg. Co., 745 Dean St., grading curbing and flagging East 15th St. $6,153, West 9th St. $2,598; from Cranford Co., 52 9th St., repaving 85th St., asphalt $9,141; from Hastings Paving Co., 25 Broad St., New York repaving Troutman St., asphalt block, $10,489; from F. J. Gallagher, 490 Park Pl., paving and repaving Marginal St., granite block $79,494. Noted June 5.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., June 10, from Asphalt Constr. Co., 208 Bway., repaving with granite block on concrete Boscobel Ave., $135,746, asphalt paving East 175th St. $22,971, repaving with granite block roadway of East 163rd St. $18,402; from Burnside Contg. Co., 270 Burnside Ave., asphalt paving East 165th St. $87,175; from Regan Towers Inc., 124 West 121st St., repaving with granite block on concrete Boston Rd. $18,983, East 175th St. $92,015; from J. V. Timeney Constr. Co., 220 East 201st St., sewers in West 230th St. $47,181, LaSalle Ave. $8,386, West 256th St. $20,525. Noted June 5.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., from W. J. Fitzgerald, 547 West 45th St., widening and repaving with sheet asphalt Madison Ave. $52,114; from Asphalt Constr. Co., 208 Bway., curbing, recurbing and sheet asphalt paving Haven Ave. $37,165, repaving with granite block 44th St. $21,323; from D. J. McCarthy, 149 East 48th St., grading, curbing and flagging West 186th St., $5,615; from T. A. Reilly Co., 48 East 41st St., altering and improving sewer in Cedar St. $7,255; from W. M. Duffy, grading Chittenden Ave. $4,102. Noted June 5.

N. J., New Brunswick—Middlesex Co., reconstructing Monmouth Junction-Kingston Rd., concrete, from A. Keyes, 130 Rahway St., Woodbridge, $26,745.

Pa., Phila.—Bureau Hys., Dept. Pub. Wks. grading, Schedule A, from J. F. Nolan & Sons, 64 Church Lane, Champlost, Fairhill, Nedro, Spencer and 3rd Sts., $11,482, from Ferrante & Cellucci, 16th and Dickinon Sts., Sheldon St. $3,341, from E. A. Mullen, Inc., 5512 Vine St., Warrington St. $1,877, from Morrissey Bros., 4345 North 7th and 13th Sts. $1,648; asphalt paving, Schedule B, from Eastern Paving Co., 402 Colonial Trust Bldg., Diamond, Grange Lippincott and Wheeler Sts., $24,807, asphalt repaving Schedule C, Ellsworth, Wharton, Gordon, Marshall and 23rd Sts., $46,864; redressed granite block repaving Schedule D, from J. Meehan & Son, 916 West Dakota St., Brown and Lehigh (track area) Sts., $22,410; repairing and resurfacing asphalt streets, Schedule E, from Barker Asphalt Co., 239 North 30th St., $156,475, from Union Paving Co., 306 Locust St., $300 065; repairing, surfacing and resurfacing country roads, Schedule F, from A. J. Henderson, 5807 Chew St., $23,056; improving League Island Park Bathing Pool, Schedule G, from E. Foy & Son, 2 South Mole St., $13,898.

Pa., Upper Darby—One course rein.-con. paving 81.000 sq.yd. Landsdoone Ave., Marshall, Garrett and Burmont Rds., from Union Paving Co., 30th and Lane Sts., Phila., $265,680, also $2 for unclassified excav. Noted May 29.

Maryland—State Rds. Comn., Baltimore, concrete paving 2.14 mi. highway in Cecil Co., Contr. Ce-46, from Broad Creek Constr. Co., Elkton, $61,080, 1.3 mi. in Kent Co., Constr. K-25, from Kaufman Constr. Co., Denton, $33,528, 1.5 mi. in Queene Annes Co., Constr. Q-28, from C. Webster Constr. Co., East New Market, $35,151, 1.17 mi. in Caroline Co., Constr. Co-35, from Holt Constr. Co., Federalsburg, $29,515; macadam resurfacing 1.04 mi. in Harford Co., Contr. H-40, from T. P. Murray, Towson, $17,708; 4.6 mi. penetration macadam resurfacing and concrete shoul-

BRIDGE—SPRINGFIELD, MASS.

Following are lowest three bids opened by City of Springfield and Town of West Springfield, March 25, for North End Bridge over Connecticut River at Springfield, Contr. No. 1, (A) P. T. Cox Contg. Co., 154 Nassau St., New York City, (awarded contract); (B) T. Stuart & Son's Co.; (C) Frederick Snare, 114 Liberty St., New York City, Contr. No. 2, (A) American Bridge Co., 71 Broadway, New York City, (awarded contract); (B) Frederick Snare; (C) Phoenix Bridge Co., Phoenixville, Pa. The unit bids were as follows:

Contract No. 1	A	B	C
Removal of existing superstructure (lump sum)	$7,600.00	$5,000.00	$6,500.00
Removal and replacing of rip-rap (lump sum)	12,500.00	5,000.00	16,000.00
1,770 cu.yd. masonry removed	4.00	15.00	6.00
2 grillages removed	1,515.00	3,000.00	2,500.00
200 foundation piles removed	10.50	10.00	11.00
2,720 cu.ud. concrete in bases of piers	35.00	37.00	45.00
1,910 cu.yd. concrete in bases of abutments	35.00	42.00	47.00
3,210 cu.yd. concrete in shafts of piers	20.00	21.00	20.00
1,510 cu.yd. concrete in abutments	20.00	30.00	26.00
620 cu.yd. concrete in retaining walls	18.40	30.00	26.00
2,500 cu.yd. excavation for abutments	2.50	1.00	4.00
29,000 lin.ft. timber piles below bases	.70	.50	.75
6,000 lin.ft. pile cut-offs	.40	.40	.35
250,000 lb. reinforcing steel	.07	.055	.06
12,000 lb. structural metal protection piles	.10	.10	.16
4,000 cu.yd. embankment west approach	1.25	1.20	1.75
Removing debris (lump sum)	1,000.00	1,000.00	2,000.00
Extended totals	$353,818	$396,870	$431,840

Contract No. 2	A	B	C
6,480,000 lb. structural metal	$0.064	$0.068	$0.0697
1,960 cu.yd concrete in slabs	27.00	31.00	28.40
250,000 lb. reinforcing steel	.0525	.05	.063
67,000 sq.ft. waterproofing	.15	.15	.168
22,000 sq.ft. waterproofing protection	.05	.20	.0525
45,000 sq.ft. concrete protection course	.11	.12	.116
2,330 lin.ft. conduit line	1.00	1.50	1.05
2,720 sq.yd. paving base on approach	2.75	2.75	2.90
1,020 lin.ft. new curbs	1.00	1.50	1.05
390 sq.yd. sidewalk slabs on approach	2.75	3.20	2.90
380 lin.ft. concrete handrails on abutments	8.50	9.00	9.50
30 combination light and trolley poles	87.50	160.00	133.00
8 light poles on abutments	309.00	100.00	370.00
2,470 lin.ft. conduits for lighting system	.75	1.50	1.00
2 bronze name plates	212.00	300.00	300.00
Removing debris (lump sum)	1,000.00	500.00	1,100.00
Extended totals	$520,371	$561,328	$567,968

Streets and Roads (Continued)

ders in Baltimore Co., Contr. B-63, from F. D. Carrozza, Notre Dame Ave., Govans, $104,606; 1.88 mi. gravel surfacing in Anne Arundel Co., Contr. AA-41, from J. J. Stehle, Annapolis, $19,375. Noted May 29.

D. C., Wash.—Dist Comrs., approximately 35,000 sq.yd. cement sidewalks in various streets, all sections of city, from G. B. Mullin Co., 1296 Upshur Ave., $2.08, alternate $2.21 per sq.yd.

Fla., Tampa — Hillsborough Co., improving Seawall Blvd., 13,000 ft. concrete handrail, 13,850 sq.yd. sidewalk, 26,000 lin.ft. concrete curb, from Erler Corp., (by B. B. Logan, agt.), Tampa, $46,000. Noted May 1 under "Unclassified."

Kentucky—State Hy. Dept., Frankfort, constructing 19.22 mi. Henderson-Madisonville Rd., 18 ft., Federal Aid Project 34 F, Webster Co., from A. J. Hoffman, North Adams, Mich., $222.879; surfacing 4.8 mi. Versailles-Lawrenceburg Rd., 14 ft., State Project 20-D, Woodford Co., from Karrick & Sable, Newton, $32,044, 6.1 mi. Elizabethtown-Leitchfield Rd., 12 ft., State Project 12-G-1, Hardin Co., from W. P. Routt, Sonora, $18,911, 3.5 mi. Emminence-Shelbyville Rd., 14 ft., Henry and Shelby Counties, from B. W. Gorham, Harp & Innes Park, Lexington, $47,309, all waterbound macadam; waterbound macadam or bank gravel surfacing 10 mi. Madisonville-Hopkinsville Rd., 14 ft., Christian Co., from F. C. Garrell, Russelville, bank gravel $97,-960, N. E. Stone & Co., Madisonville, waterbound macadam $109,368; reconstructing 3.5 mi. Danville-Stanford Rd., 16 ft., State Project 22-F, Lincoln Co., waterbound macadam, from Taylor Bros., $36,-736. Noted May 29.

O., Shaker Heights (Cleveland P. O.)—Improving **(a)** East 156th St., **(b)** Norwood Rd. **(c)** Milverton Rd., 11,175 sq.yd. asphaltic concrete, 6,550 lin. ft. stone curbing, 97,575 sq.ft. concrete base from Rieley Bros., The Arcade, Cleveland, **(a) $12,448 (b) $34,152 (c) $25,845.**

Ind., Richmond — Wayne Co., concrete paving, Henley Rd., from Mannix Bros., Greenville, O., $85,623. Engrs. est. $96,765.

Michigan — State Hy. Dept. at office Comrs. Huron Co., Bad Axe, grading and surfacing 0.496 mi. State Trunk Line Rd. 53-16, 3,989 cu.yd. excav., 10,121 sq.yd. concrete, from Schultz & Liken, Sebewaing, $25,625. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Ionia Co., Ionia, shaping and surfacing 3.34 mi. State Trunk Line Rd. 43-3, 31,675 sq.yd. gravel, from Todd & Montgomery, Sparta, $19,353. Noted May 22.

Michigan—State Hy. Dept., at office Comrs. Kalkaska Co., Kalkaska, grading and surfacing 5.32 mi. State Trunk Line Rd. 66-17, A, 73,349 cu.yd. excav., 49,956 sq.yd. gravel, from Bad Axe Constr. Co., Bad Axe, $64,423; 1.56 mi. State Trunk Line Rd. 66-17, B, 9,560 cu.yd. excav., 15,441 sq.yd. gravel from J. Davison & Sons, Farwell, $11,223. Noted May 22.

Michigan—State Hy. Dept. at office Comrs. Mason Co., Ludington, grading and surfacing 7.493 mi. State Trunk Line Rd. 11-61, A, 39,312 cu.yd. excav., 79,128 sq.yd. concrete, and 8.268 mi. State Trunk Line Rd. 11-61, B, 50,173 cu.yd. excav., 87,773 sq.yd. concrete, from Rogers & Monroe, Muskegon, $148,625 and $172,964 respectively. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Manistee Co., Ludington, grading and surfacing 0.999 mi. State Trunk Line Rd. 11-61, A, 7,701 cu.yd. excav., 10,553 sq.yd. concrete, from L. I. Goldberg, Scottville, $24,081. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Ontonagon Co., Ontonagon, grading and surfacing 8.406 mi. State Trunk Line Rd. 28-10, A, 62,688 cu.yd. excav., 29,516 tons stamp sand, from C. G. Bridges, Norway, $97,743. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Lenawee and Washtenaw Counties, Adrian, grading and surfacing 5.734 mi. Federal Aid Project 95 A, 33,039 cu.yd. excav., 58,724 sq.yd. concrete, from Lewis & Freissinger, Albion, $128,263. Noted May 22.

Michigan — State Hy. Dept. at office Comrs. Montcalm Co., Stanton, shaping and surfacing 5.523 mi. State Trunk Line Rd. 43-4, 51,923 sq.yd. gravel, from R. Sisco, Flint, $35,255. Noted May 22.

Ia., Sioux City—From Booth & Olson, 120 Virginia St., about 22,540 sq.yd. 6 in. concrete paving, 11,535 lin.ft. curbing Riverside Blvd. at $2.17 per sq.yd.

Tex., Carrizo Springs—Dimmit Co., grading and surfacing with shell and gravel, etc., 12.58 mi. State Highway 85, State Aid Project 483, 682 cu.yd. concrete, 60,265 cu.yd. roadway and 37,234 cu.yd. borrow excav., 68,195 lb. reinforcing. (18,699 cu.yd. gravel and 10,807 cu.yd. shell furnished by owner), from Evans & Greathouse, 1706 West 6th St., Austin, $59,596. Engr. est. $76,011.

Tex., Franklin—Robertson Co., grading, etc., 10.87 mi. State Highway 6, Hearne-Benchly Rd., 1,208 cu.yd. concrete, 111,-557 cu.yd. roadway and 41,967 cu.yd. borrow excav., 3,400 lin.ft. concrete piling, 156,876 lb. reinforcing, etc., from F. P. McElwrath, Corsicana, $94,637. Engrs. est. $98,000. Noted May 22.

Colo., Denver—From Allied Contractors, Omaha, Neb. **(e.e. means engrs. est.)** asphalt paving 12 blocks South Capitol Hill Paving Dist. 3, $40,127, e.e. $43,223, 12 blocks South Denver Paving Dist. 1, $74,-713, e.e. $79,652, 12 blocks South Denver Paving Dist. 4, $38,803, e.e. $42,742; from Western Paving & Constr. Co., International Trust Bldg., 12 blocks Capitol Hill Paving Dist. 6, $40,087, e.e. $42,951, 12 blocks Capitol Hill Paving Dist. 12, $37,659, e.e. $41,757, 12 blocks Capitol Hill Paving Dist. 13, $51,285, e.e. $56,476, 12 blocks Capitol Hill Paving Dist. 14, $40,246, e.e. $44,075; from New Mexico Constr. Co., Albuquerque, N. M., 12 blocks North Denver Paving Dist. 6, $47,314, e.e. $49,555, 12 blocks Capitol Hill Paving Dist. 3, $36,331, e.e. $43,223.

Wash., Seattle—Concrete paving Evanston Ave., etc., **(1)** roadway **(2)** street railway, from J. L. Smith, Pioneer Bldg., **(1)** $249,468 **(2)** $52,120; from Fiorito Bros., 3950 6th St. N. W., **(1)** $262,025 **(2)** $51,540.

Calif., Ontario—Grading, asphaltic concrete paving portion Vine St., also asphaltic concrete paving, curbs, etc., on Laurel Ave., etc., from Southwest Paving Co., Washington Bldg., Los Angeles, $64,705 and $32,215 respectively. Noted June 5.

Calif., Richmond — Improving McLaughlin, Lassen Sts., etc., 9,440 cu.yd. excav., 3,163 cu.yd. fill, 242,813 sq.ft. 8 in. Richmond standard macadam, 86,943 sq.ft. walks, 32,905 sq.ft. gutters, 16,896 ft. concrete curb, etc., from Hutchinson Co., 1706 Bway., Oakland, $78,226. Noted June 5.

Calif., San Diego—Improving Columbia and Maple Sts., from California Constr. Co., Union Bldg., 72,027 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous $0.179 per sq.ft., 184,307 sq.ft. 1½ in. asphaltic concrete on 2½ in. bituminous $0.165, 11,949 sq.ft. concrete sidewalks $0.24, 2,710 lin.ft. concrete curb $0.68, total $49,695. Noted May 1.

Calif., Sonora—Tuolumne Co. improving roads from Tuolumne to Sonora and from Columbia to Sonora, 15,801 lin.ft. subgrade, 241,200 ft. 2 in. paving, from A. J. Grier, 480 Chetwood St., Oakland, asphaltic macadam $27,712; F. L. Carson, Exposition Bldg., San Francisco, willite $40,887, asphaltic concrete $39,681; Standard Paving Co., Modesto, warrenite $45,660. Noted Sept. 27.

Calif., Suisun City — Paving various streets, asphalt, from J. A. Costello, Jr., 564 Market St., San Francisco, approximately $24,765. Noted May 29.

Calif., Vacaville — Improving various streets, 313,000 sq.ft. 2½- to 4½-in. willite surfacing, from California Constr. Co., 58 2nd St., San Francisco, approximately $80,000.

CONTRACTS AWARDED

Vt., Montpelier—Dept. Hys., paving main highways, bituminous macadam, to Chester-Earle & Murray, Rutland, $60,535.

Mass., Quincy—Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, grading, surfacing, constructing bridge, etc. on Furnace Brook Parkway from Hancock St. to Newport Ave., here, to A. G. Tomassello & Son, 68 Devonshire St., Boston, $95,847. Noted May 29.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, repaving with granite, roadway of Concord St., to F. J. Gallagher, 490 Park Pl., $13,880; repaving with asphalt DeKalb Ave., to Uvalde Asphalt Paving Co., 1 Bway., New York, $16,116, laying cement sidewalks on Havemeyer St., to Navy Constr. Co., 182 Navy St., $641; grading, curbing and flagging 15th Ave., to Grimm Contg. Co., 170 McKinley St., $3,188; repaving with asphalt 86th St., to Cranford Co., 52 9th St., $47,731. Noted June 5.

N. Y., New York — H. Bruckner, pres. Bronx Boro, Municipal Bldg., 3rd and Tremont Aves., paving where not already paved and repaving with granite blocks Prospect Ave. from East 149th to East 163rd Sts., and from 163rd St. to Boston Rd., to Leonard Paving Co., 233 Bway., $220,588 and $243,692 respectively. Noted June 5.

N. Y., St. George—J. A. Lynch, pres. Richmond Boro, Boro Hall, repaving with granite block Richmond Ave., to J. Johnson Sons, 455 Bway., West New Brighton, $91,664. Noted June 5.

N. J., Freehold—Monmouth Co., concrete paving 2.62 mi. Atlantic Highlands-Campbell's Junction Rd., to Jannarone Contg. Co., 225 Passaic Ave., Belleville, $132,060. Noted May 22.

N. J., Mt. Holly—Burlington Co. paving 21,502 sq.yd. Kings Highway, asphalt, to Union Paving Co., 30th and Locust Sts., Phila., $93,031. Noted May 22.

Pa., Meadville—Grading and brick paving 5,200 yd. on 5 in. concrete, to Keystone Constr. Co., Meadville, $3.52 per sq.yd. Noted May 22.

Pa., Wayne—Com. Radner Twp., Maguire Bldg., widening and bituminous macadam surfacing approximately 29,000 sq.yd. Bryn Maur Ave. from Lower Merion Twp. line to Radner and Chester Rds., to Good Roads Co., Commercial Bldg., Phila., $53,760.

Md., Baltimore—Concrete paving Alley Contr. 94, to J. J. Bresnan & Co., 1626 Bank St., $34,337. Noted June 5.

W. Va., Beckley—Raleigh Co., grading and tarvia paving Slab Fork-Tams Mountain Rd., to Waugh Bros., Fayetteville, $39,396, Besoco-Oak Rd., and Besoco-Amigo Rd., both asphalt, to J. Randish, Beckley, $63,251 and $95,106 respectively; grading Amigo-Egeria Rd., to J. F. Rothwell, Beckley, $39,707. Noted May 15.

S. C., Saluda—Saluda Co. topsoiling 9 mi. Federal Aid Project 52-B, to B. A. Watkins, Troy, N. C., $45,280; 2 concrete bridges on same, to Latimer & Peake, Ft. Mill, $14,102. Noted May 20.

S. C., Sumter—Sumter Co. constructing 4.41 mi. Federal Aid Project 228, sheet asphalt on concrete, to Pritchard, Raines & Hazelhurst Constr. Co., Savannah, Ga., $142,145. Noted May 25.

Fla., Bradentown—Palma Sala Corp. improving streets in Palma Sala Park, 5½ mi. 16 ft. paving with shell, concrete curb, to H. R. Curry, Bradentown, $41,000; 10 mi. concrete sidewalks, to Shirley & Mattison, Bradentown, $34,000.

Alabama—State Hy. Dept., Montgomery, to Wofford & Co., Dothan, improving approximately 12 mi. highway between Louisville and Clayton, 20 ft., grading, graveling and rolled clay, $86,189, several small bridges $4,485. Noted May 15.

Ala., Birmingham—City and Jefferson Co. asphalt paving 2 mi. Pratt City-Birmingham Rd., 30 ft., and 0.5 mi. East Thomas-Joseph St., to Morgan Hill Paving Co., Amer. Trust Bldg., $87,000. Engrs. est. $70,000.

Ala., Birmingham—Brick paving between street railway tracks 18 blocks 2nd Ave. S., 6th St. S. and Ave. C (Ensley), to Birmingham Electric Co., 4105 1st Ave., $34,385, engrs. est. $35,000; asphalt paving 4 blocks 46th St. (Ensley), 30 ft., to Morgan Hill Paving Co., Amer. Trust Bldg., $18,362, engrs. est. $20,000, 7 blocks 2nd Ave. S. and 16th St. S., 30 ft., to Dunn Constr. Co., Lincoln Bldg., $35,555, engrs. est. $36,000, 5 blocks 7th Ave. N., 30 ft., to H. N. Bowdry, Empire Bldg., $27,542, engrs. est. $28,000. Noted May 22 and 29.

Ala., Huntsville — Asphalt paving 5 blocks Randolph St., 30 ft., to Lasley Bros., Chattanooga, Tenn., $29,040. Engrs. est. $30,000. Noted Apr. 10.

Ala., Huntsville—Madison Co. concrete paving 2.25 mi. West Clinton St., to Newell Constr. Co., 3828 Ave. A, Birmingham, $58,899. Noted May 15.

La., Bastrop — Police Jury Morehouse Parish, grading, and gravel surfacing 14.2 mi. Sects. A and C Parish Rd. 7, to Tansey-Cavett Constr. Co., Box 123, Shreveport, $135,000. Noted May 15.

La., Leesville—Grading and gravel surfacing roads in Ward 3, Vernon Parish, to B. Smith, Jr., Alexandria, $160,000.

Tenn., Nashville—Will grade, oil and surface treatment Ligon, Argyle, 18th, and 19th Aves., Crawford and 1st Sts., by day labor. To exceed $25,000. W. W. Southgate, city engr.

Ky., Ashland—Bituminous macadam surfacing 2nd St., to S. L. Steel, Ashland. Engrs. est. to exceed $25,000.

Ohio—City of Columbus, relocating about 5 mi. Kelley Rd. from Girls Industrial School near Delaware north to Bellpoint (Powell P. O.), 24 ft., to J. C. MacCann, Columbus, $84,846.

Ohio—Dept. Highways and Pub. Wks., Columbus, to F. D. Francis, Columbus, paving 2.005 mi. Sect. "G-2" and 4.687 mi. Sect. "H" Cambridge-New Comerstown Rd., Guernsey Co., asphaltic macadam, $54,097 and $154,946 respectively; to P. B. Putnam, Van Wert, 3.674 mi. Sect. "A," and 2.109 mi. Sect. "F-2" Bellefontaine-Richwood Rd., Logan Co., asphaltic macadam, $80,512 and $46,619 respectively, 6.174 mi. Sects. "K" and "M" Bryan-Pioneer Rd., Williams Co., bituminous macadam, asphalt $82,637, 4.48 mi. Sect. "N" and "L" Bryan-Pioneer Rd., Williams Co., bituminous macadam, tar $59,189; to Wapakoneta Cement Block Co., Wapakoneta, 3.308 mi. Sects. "C-1" and "C-2," 1.6589 mi. Sect. "B," and 0.0647 mi. Sect. "West Milton" Dayton-Covington Rd., Miami Co., rein.-con., $96,761, $39,024 and $1,961 respectively; to J. F. Stam-

Streets and Roads (Continued)

baugh, Ada, 3.513 mi. Sect. "G" Mt. Gilead-Mt. Vernon Rd., Morrow Co., rein.-con. $122,570; to Republic Asphalt Paving Co., 801 Schwind St., Dayton, resurfacing 1.536 mi. Sect. "M" Shelby-Mansfield Rd., Richland Co., bituminous concrete, $34,612; to A. B. Shaw, Delaware, grading and structures on 9.731 mi. Sects. "N," "O" and "P" Pomeroy-Marietta Rd., Meigs Co., $124.594; to G. Keener, Madison, bridge approaches on 0.121 mi. Sects. "A" and "C" Painesville-Warren Rd., Lake Co., $19,856; to I. J. Kuhner, Jackson, Bridge "FJ," on Jackson-Pomeroy Rd., Jackson Co., $8,080. Noted May 15.

O., Cincinnati—Hamilton Co., constructing 14,690 ft. Eight Mile Rd., 16 ft., 25,000 cu.yd. grading, 70,000 gal. Grade 1 tar, etc., to J. S. Sloan, Cincinnati, $60,524. Engrs. est. $68,640. Noted June 12.

O., Cleveland—Improving Iroquois Ave., 1,670 sq.yd. brick surface, 1,400 cu.yd. excav., 1,100 lin.ft. stone curb and 4 in. drain tile gutter, to Gould & Maybach, 16311 Saranec Rd., $12,571; East 149th St., 7,090 sq.yd. brick surface, 3,000 cu.yd. excav., 4,970 lin.ft. stone curb and 4 in. drain tile gutter, to Freshwater Constr. Co., Natl. Bldg., $42,539. Noted May 29 and June 12.

O., Cleveland — Grading, curbing and paving Treadway Ave., concrete, to W. E. McHugh, West 73rd St., $22,873; East 106th and East 120th Sts., concrete, to H. G. Herring, Pavers Exchange, $26,698 and $23,116 respectively; Hope Court and Train Ave., to Roehl Bros., 7002 Denison Ave., $14,194; Gordon Court, brick, to Freshwater Constr. Co., Natl. Bldg., $,3302; Proctor Court, concrete, to Enterprise Paving & Constr. Co., 8436 Bway., $3,927; East 151st St., vitr. brick, to Bentley Bros., 3030 Euclid Ave., $80,602; Saranec Rd., asphalt, to Gould & Maybach, 16311 Saranec Rd., $52,796. Noted July 12.

O., Cleveland Heights (Warrensville P. O.)—Asphalt paving Mayfield Rd., to Cleveland Trinidad Paving Co., The Arcade, Cleveland, $58,364 Oak Ridge Rd., to Reiley Bros., The Arcade, Cleveland, $51,876. Noted June 12.

O., Columbus — W. H. Duffy, dir. Pub. Serv., to Federal Paving Co., 996 McAllister Ave., grading, laying necessary water services and sewer connections and concrete paving 296 ft. alley west Michigan Ave., 20 ft., $1,773, 227 ft. alley west 4th St., 16 ft., $1,138, 143 ft. alley north 9th Ave., 15 ft., $720, 544 ft. alley west Hamlet St., 16 ft., $2,887, 816 ft. alley north Thurman Ave., 17.8 ft., $4,230, 358 ft. alley north Reinhard Ave., 15 ft., $1,817, alley west Hamlet St., $1,868; to R. J. Dienst, 480 South 5th St., 621 ft. alley west of Harrison St., 20 ft., $3,867, 719 ft. alley north Reinhard Ave., 20 ft., $5,428; to H. A. Miller, Columbus, 3,435 ft. 8- to 24-in. combined sewer in alley north of 7th Ave., $11.170, to L. B. Wilkinson, Columbus, 1,900 ft. 6 and 8 in. sanitary sewer in Iswald Rd., $4,005. Noted May 29.

O., Steubenville—R. F. Price, dir. Pub. Serv., asphalt resurfacing High St. from Washington to Slack Sts., to Federal Asphalt Co., Main and D Sts., Hamilton, $65,446.

Ind., Anderson — Laying sidewalks on Ohio and Arrow Aves., concrete, to Strout & Lyst, Anderson, $2,799 and $2,986 respectively; paving 6th St., sheet asphalt, to Andrews Asphalt Co., Anderson, $15,324, 5th St., concrete, to Daniels & Lyst, 253 Union Bldg., $9,398.

Ind., Crown Point—Lake Co., grading and graveling 5.5 mi. Nelson Rd., 24 ft., to Calumet Constr. Co., Hammond, $62,974. Engrs. est. $63,173. Noted May 22.

Ind., Madison—Jefferson Co., grading and graveling Oliver Thornton Rd., to D. H. Fatout, 4330 Bway., Indianapolis, $26,775. Engrs. est. $30,160. Noted June 12.

Ind., Noblesville—Hamilton Co., concrete paving 24,288 sq.yd. Crum Rd., to Standard Paving Co., Anderson, $49,474. Engrs. est. $58,414. Noted June 12.

Ind., Warsaw—Kosciusko Co., concrete paving 5.66 mi. Swartz Rd., 18 ft., to C. T. Cain, Bluffton, $83,900. Engrs. est. $100,958. Noted June 12.

Michigan — State Hy. Dept., Lansing, grading and surfacing 1.1 mi. State Trunk Line Rd. 10-28, and 1.893 mi. State Trunk Line Rd. 24-27, Saginaw Co., concrete base, to T. McNally, Saginaw, $23,230 and $37,982 respectively; sheet asphalt top to Midland Contg. Co., Saginaw, $13,936 and $23,942 respectively. Noted May 15.

Michigan—State Hy. Dept. at office Pentwater Twp. Clerk, Pentwater, shaping and surfacing 3.37 mi. State Trunk Line Rd. 11-25, B, 36,969 sq.yd. concrete, and 2.62 mi. State Trunk Line Rd. 11-25, A, 15,279 cu.yd. excav., 28,923 sq.yd. concrete, both Oceana Co. (Hart) to Charlevoix Abstract & Eng. Co., Charlevoix, $39,311, and $51.378 respectively. Noted June 12.

DAM—PHILADELPHIA, PA.

Following are lowest three bids opened by Bureau of Water, Dept. Pub. Wks., for reconstruction of Fairmount Dam, Contr. No. 644, (A) Seeds & Durham, 6230 Wissahickon Ave., (awarded contract); (B) Frederick Snare Corp., 1524 Chestnut St.; (C) The Arundel Corp., Pier 2, Pratt St., Baltimore. The unit bids were as follows:

	A	B	C
12,000 cu.yd. more or less, earth excavation	$2.30	$1.50	$3.42
8,000 cu.yd. more or less, rock excavation	8.00	3.00	6.19
10,000 cu.yd. more or less, removal of timber cribbing and rock fill	4.00	5.00	4.32
200 lin.ft. more or less, gore borings	5.00	10.00	6.02
1,000 lin.ft. more or less, drilling grout holes	2.00	1.00	3.61
26,000 cu.yd. more or less, cyclopean masonry and concrete	8.00	4.70	11.10
35,000 bbl. more or less, portland cement	2.75	2.65	3.50
20,000 lb. more or less, reinforcing metal	.07	.06	.072
1,000 cu.ft. more or less grout	.25	1.00	2.23
10,000 sq.ft. more or less, gunite	.60	.50	.60
2,500 cu.yd. more or less, riprap	3.00	4.00	2.77
15,000 ft.B.M. more or less, timber	160.00	150.00	152.00
350,000 lb. more or less, sheet piling	.06	.04	.059
75,000 lbs. more or less, wrought iron and steel fixtures	.07	.08	.096
Stream control (lump sum)	115,000.00	263,000.00	48,100.00
Engineer's office, boats, etc. (lump sum)	7,000.00	10,000.00	4,810.00
Extended totals	**$604,650**	**$622,400**	**$649,307**

Michigan — State Hy. Dept. at office Comrs. Otsego Co., Gaylord, improving 4.276 mi. State Trunk Line Rd. 32-7, Sect. B, 24,794 cu.yd. excav., 40,572 sq.yd. gravel, to Yuill & Stevenson, Vanderbilt, $48,329. Noted May 15.

Michigan — State Hy. Dept. at office Comrs. Hillsdale Co., Hillsdale, grading, etc., 3.174 mi. State Trunk Line Rd. 34-2, B, C, D and E, 17,243 cu.yd. excav., 34,746 sq.yd. 7 in. concrete paving to W. H. Ryan, Jackson, $44,258.

Michigan — State Hy. Dept. at office Comrs. Schoolcraft Co., Manistique, grading and surfacing 3.488 mi. State Trunk Line Rd. 77-2, A, 17,166 cu.yd. excav., 32,698 sq.yd. gravel, to Peterson Constr. Co., 520 Globe St., Minneapolis, Minn., $32,962. Noted June 5.

Michigan — State Hy. Dept. at office Comrs. Muskegon Co., Muskegon, grading and surfacing 1.045 mi. State Trunk Line Rd. 11-19, 3,442 cu.yd. excav., 12,204 sq.yd. concrete, to J. R. Edelman, Muskegon, $27,219 (incl. cement). Noted June 5.

Michigan — State Hy. Dept. at office Comrs. Van Buren Co., Paw Paw, grading and surfacing 3.19 mi. State Trunk Line Rd. 17-14, 25,374 cu.yd. excav., 37,400 sq.yd. concrete and shaping and surfacing 2.63 mi. Federal Aid Project 101, Sect. C, 31,410 sq.yd. concrete, to Wells Constr. Co., Bluffton, Ind., $74,438 and $47,806 respectively.

Michigan — State Hy. Dept. at office Comrs. Kent Co., Grand Rapids, grading 4.836 mi. State Trunk Line Rd. 13-50 C, 56,579 cu.yd. excav., etc., to W. Maxwell, Midland, $28,664. Noted June 5.

Mich., Detroit—To Wolverine Constr. Co., 400 Penobscot Bldg., grading and paving with one course concrete Alley 1961 $10,540, Alley 1962 $5,920, Alley 1963 $5,600, Alley 1966 $4,015, Alley 1970 $8,264, Alley 1971 $4,312, Alley 1972 $3,392, Alley 1974 $2,989; to C. L. Lincoln, 8074 East Canfield St., Alley 1964 $4,319; to T. E. Currie, 909 Free Press Bldg., Alley 1965 $4,205; to Otis Cement Constr. Co., 806 Hammond Bldg., $2,268, Alley 1968 $1,555; to Building Maintenance Corp., 1620 West Lafayette Ave., Alley 1969 $681; to R. J. Powelson, 6530 Epworth Ave., Alley 1973 $2,876.

Illinois—Dept. Pub. Wks. and Buildings, Div. Highways, Springfield, grading, concrete paving, etc. Sect. 55, Route 2, Dewitt and McLean Counties, to McMahon Constr. Co., Rochester, Ind., $188,688; Sect. 13, Route 37. Williamson Co., to Montague Constr. Co., Carbondale, $29,399. Noted Mar. 27.

Ill,, Vandalia—City Council, improving 5th St., 11,432 sq.yd. concrete, 6,870 lin.ft. concrete curb and gutter, etc., to C. J. Moritz, Inc., Effingham, $38,164. Engrs. est. $44,169. Noted June 5.

Wis., Fond du Lac—Fond du Lac Co. Hy. Com., grading Mt. Calvary Dotyville Rd., Sec. A, to Muth-Knechtel Constr. Co., Manitowoc, $23,545, Sec. B, to C. F. Wussow, Milwaukee, $28,434, Fond du Lac-Oakfield-Waupun Rd. Sect. A and B, to C. H. Graham, Ripon, $11,672 and $19,318 respectively; grading and graveling Campbellsport-Kewaskum Rd., to F. J. Robus, Burlington, $9,605 and Campbellsport Bridge, to Whitewater Bridge Co., Whitewater, $7,065.

Ia., Algona—Kossuth Co. improving Primary Rd. Projects 13 and 14, hauling 18,375 cu.yd. gravel, to J. Schumacher, Bancroft, $16,133; 22,125 cu.yd. gravel, to Phillips Constr. Co., Watertown, S. D., $15,661; 4,800 cu.yd. gravel, to Sampson Bros., Algona, $5,152.

Ia., Davenport — Scott Co., grading Primary Road Project No. 124, Scott Co., 106,445 cu.yd. earth excav., to Shirley Constr. Co., Omaha, Neb., $32,998.

Ia., Des Moines—To Des Moines Asphalt Paving Co., 2nd and New York Sts., paving Euclid Ave., 29,000 sq.yd. "Class D" brick, $3.34 per sq.yd. Engrs. est. $100,000.

Ia., Keosauqua—Van Buren Co. improving Primary Rd. Project 382, involving 20,540 cu.yd. gravel, hauling and distributing gravel, to H. N. McCory, Waterloo, $20,469 and to H. B. Patterson, Ottumwa, $2,169; furnishing 4,717 cu.yd. gravel to Wapello Sand & Building Material Co., Ottumwa, $7,736.

Ia., Garner—Hancock Co. gravel surfacing 17,271 cu.yd. Primary Rd. Project 380, to Phillips Constr. Co., Watertown, S. D., $22,566; and Belmont Constr. Co., Belmond, $10,351.

Minn., Detroit—Paving about 7,500 sq.yd. streets, asphaltic concrete, to Welsh Paving Corp., 703 1st Natl.-Soo Line Bldg., Minneapolis, about $34,000. Noted May 29.

Minn., Duluth—Improving 60th Ave. W., 7,300 sq.yd. concrete, 4,950 lin.ft. 6 in. integral concrete curbing, 18,200 lin.ft. concrete sidewalk, etc., to Sali & Walnowki, 1018 North 13th Ave. E., $36,744; Central Ave., 9,740 sq.yd. concrete, 3,600 lin.ft. 6 in. integral concrete curbing, 1,240 lin.ft. concrete header, 37,323 cu.yd. earth excav., to Nelson & Shipman, 211 South 16th Ave. E., $30,443.

Kan., Iola—Grading, curbing, guttering and concrete paving Spruce, South Oak and North Elm Sts., to Fry Bros., Iola, $32,156.

Nebraska—State Highway Dept., Lincoln, paving 26,500 sq.yd. North Platte-Maywood Rd., Federal Aid Project 221-A, Lincoln Co., to Abel Constr. Co., 318 Terminal Bldg., Lincoln, $73,000. Engrs. est. $75,000. Noted May 22.

N. D., Grand Forks—Grand Forks Co. **(a)** grading **(b)** concrete work **(1)** Federal Aid Project 217 Sect. A **(2)** Federal Aid Project 217, Sect. B **(3)** 9 mi. Federal Aid Project 230B, to Steig & Olson, Esmond, **(a1)** $18,102 **(a3)** $28,417; to J. A. Jardine Co. Fargo **(b1)** $2,296, **(b3)** $5,994; to W. Schulze, Fergus Falls, Minn. **(a2)** $17,346; to F. W. Rasmussen, La Moure **(b2)** $1,059. Noted May 29.

South Dakota—State Hy. Comn., Pierre. **(F. A. P. means Federal Aid Project)** grading 13.65 mi. F. A. P. 175, Hand Co., 99,109 cu.yd. common excav., to Dowd Bros., & Schreiber, Watertown, $32,536; 10.12 mi. F. A. P. 170A, Brookings and Kingsbury Counties, 120,480 cu.yd. common excav., etc., and 13.02 mi. F. A. P. 170B, Lake Co., 80,105 yd. common excav., to W. R. Larson, 519 Secy. Natl. Bank Bldg., Sioux Falls, $36,898 and $34,070 respectively; 3.77 mi. F. A. P. 146B and 180B, Corson Co., 81,378 yd. common excav., to H. J. Hawley, Trail City, $23,804; 11.21 mi. F. A. P. 162A Haakon Co., 110,889 yd. common excav., to Olson & Davis, Sturgis, $44,716; 21.69 mi. F. A. P. 185A, Jones Co., 93,651 yd. common excav., to Hackett & Bladholm, Marshall, Minn., $58,746. Noted June 5.

Mo., Independence — Jackson Co., brick paving 2 mi. Independence Rd., 9 ft. rein.-con. on each side and bituminous macadam paving 2½ mi. road, to Halpin Boyle Constr. Co., 709 Ry. Exch. Bldg., Kansas City, $48,066 and $45,182 respectively; bituminous macadam paving 5½ mi. road, to W. A. Ross Constr. Co., 1921 South Bway., Kansas City, $97,417.

Ark., Atkins — F. A. Williams, Dist. Atty., Bank of Atkins Bldg., improving Road Dist. No. 4, Pope Co., 55,000 sq.yd. 7 in. compact gravel, 72,300 cu.yd. grading, 1,395 lin.ft. 12- to 24-in. concrete sewers, to W. P. McGeorge, Pine Bluff, $72,346. Noted May 22.

Ark., Hot Springs — Comrs., c/o C. J. Horner, grading and concrete surfacing 22,400 sq.yd. Street Impvt. Dist. 70, to P. Connelly Constr. Co., South Trust Bldg., Little Rock. Noted May 8.

Ark., North Little Rock (branch of Little Rock)—Improving Baring Cross Subdivision Paving Dist., 28, Curb 27, 26,000 sq.yd.

Streets and Roads (Continued)

concrete paving, curbing and guttering, to J. H. Brown, 419 West 4th St., $78,372. Noted May 22.

Tex., Abilene—To West Texas Constr. Co., Cotton Exch. Bldg., Ft. Worth, grading, curbing, guttering and paving with 2 in. warrenite bitulithic on 5 in. concrete, Oak St. $107,794, Chestnut St. $28,661, Sealey St. $12,574, Sales St. $11,797, South 9th St. $3,129. Noted May 22.

Tex., Alpine—Brewster Co., caliche surfacing 13.88 mi. State Highway 3, 18 ft., to Baudy-Crowder-Williams Co., El Paso, $59,540. Noted June 12.

Tex., Austin—Travis Co. grading Sect. A, and grading and bridging Sect. C Austin-Webberville Rd. to H. J. Evans 500 West 15th St., $13,887 and $24,422 respectively; rein.-con. drainage structures Sect. A, to Evans & Greathouse, 1706 West 6th St., $16,237; grading and bridging Sect. B, to W. E. Dozier, Austin Natl. Bank Bldg., $18,074. Noted June 5.

Tex., Cameron—Milam Co. grading and bridging, 4.09 mi. State Highway 43, Federal Aid Project 394-B, 18 ft., to H. Popejoy, Rosebud, $25,545. Noted May 8.

Tex., Georgetown—Williamson Co., grading, etc., 8.48 mi. State Highway 29, Liberty Hill-Leander Rd., 24 ft., to J. R. Hawkins & Sons, Granger, $39,042. Engrs. est. $40,750. Noted June 12.

Tex., Lynchburg—State, c/o San Jacinto Battle Grounds, W. C. Day, supt. Lynchburg, 3,700 ft. concrete paving, 18 ft. wide, to F. L. Scott, West Bldg., Houston, $29,206.

Okla., Oklahoma City — Approaches to East Reno Bridge, etc., on Sect. 9 of State Road, to Green-Beckman Constr. Co., Oklahoma City, $43,764.

Wash., Chehalis—Concrete paving 23,000 sq.yd. Alfred St. et al., to Philbrick & Nicholson, Tacoma, $81,753. Engrs. est. $87,000. Noted May 15.

Wash., Colfax—Whitman Co., surfacing 13.5 mi. Permanent Highway 20, from Palouse to Pullman, 30,000 cu.yd. crushed rock, to Campbell & Deer, Deer Park, $59,957; grading and surfacing Permanent Highway 21 from Oakesdale to Inland Empire Highway, 27,000 cu.yd. crushed rock, 55,000 cu.yd. excav., to W. A. Byers & Co., Spokane, $71,197.

Wash., Everett—Snohomish Co., constructing 6.5 mi. Woodinville Cutoff Rd., 52,262 cu.yd. earth excav., 8,072 cu.yd. gravel, 125 sq.yd. 6 in. concrete, to Wangsmo Bros. & Co., Arlington, $64,946. Engrs. est. $65,000. Noted June 5.

Wash., Seattle—Paving 22nd Ave. N. E., to J. L. Smith, Pioneer Bldg., $165,025. Engrs. est. $200,000.

Wash., Tacoma—Concrete paving South 66th St. from Adams to Taylor Sts., to Albertson, Cornell Bros. & Walsh, 1113½ A St., Tacoma, $31,369. Engrs. est. $32,042.

Calif., Inglewood—Improving Hawthorne St., etc., to W. D. McCray, Amer. Bank Bldg., Los Angeles, 240,739 sq.ft. grading $0.325, curb $0.60, walks $0.20, 12,870 sq.ft. 5 in. macadam paving $0.15, 99,550 sq.ft. 6 in. concrete paving $0.218, 18,810 sq.ft. Class A oiling $0.045, etc. Total about $36,650.

Calif., San Jose—Santa Clara Co., paving Santa Clara-Los Gatos Rd., Sect. 1, 381,956 sq.ft. asphaltic concrete, to Raisch Impvt. Co., 46 Kearny St., San Francisco, $59,890.

Calif., Sunnyvale—Improving Washington, Taafe, Sunnyvale Ave., etc., 137,879 sq.ft. 1½ in. warrenite-bitulithic on 2½ in. asphaltic concrete, 10,710 ft. concrete curb and gutter, to San Jose Paving Co., San Carlos and Dupont Sts., San Jose, approximately $55,030. Noted June 5.

Que., St. Jerome—City will repair 52,000 sq.yd. various streets, tar or asphalt, by day labor, $70,000. A. Latour, St. Jerome, engr.

Ontario — Dept. Provincial Highways, Toronto, 2½ mi. road between Perth and Carleton Pl., to D. A. Beus and J. D. Wilkinson, Port Hope, $30,000.

Ont., Cornwall—Constructing roads in Dundas and Glengarry Counties, 6 mi. to F. Milligan, Iroquois, 4½ mi. to F. M. Eagleson, Winchester, 4½ mi. to J. B. Wilkenson, Port Hope, 9½ mi. to McLean & Stidwell, Cornwall, 3 mi. to E. Irvine, Alexander, 4 mi. to O. Major, Williamson, 3½ mi. to N. A. MacDonald & Co., Dalhousie, Sta., Que.

Ont., Toronto—To Kilmer & Barber, 10 Adelaide St. E., brick block paving Hillside Ave. $3,631, asphalt paving Bowmore Rd. $4,078, Robins Ave. $9,049; to Dufferin Constr. Co., 210 Victoria St., asphalt and brick block paving, $29,815.

Ont., Toronto — Toronto & York Rd. Comn., 57 Adelaide St. E., paving with bituminous macadam on Scarlett Rd., to Constr. & Paving Co., Confederation Life Bldg.; macadam on Kennedy Rd. and Browns Lane to A. E. Jupp Constr. Co., 170 Berkeley St.; macadam on York Rd., to Law Constr. Co., 107 Hillsdale Ave.; bitulithic on Sutton Rd. to Warren Bituminous Paving Co., 54 University Ave.; macadam on Weston Rd., to E. S. Dagg, Nashville.

Ont., Toronto—To Kilmer & Barber, 10 Adelaide St. E., concrete curbs on Bowmore Rd. and 8th Ave., $0.71 per lin.ft., Hemlock Ave. and Maughan Crescent $0.70, to Godson Contg. Co., Manning Chambers, Cairns Ave. $0.70, to Warren Bituminous Paving Co., 54 University Ave., Hingham and Robina Aves. $0.70, to City Works Dept., by day labor, Clifton Rd. $0.70, 3rd and Cummings Sts., Cannon, Pullen, 8th, and Norwood Aves., $0.71, to Constr. & Paving Co., Confederation Life Bldg., Chandos Ave. $0.70; to Natl. Contg. Co., 9 Garnock Ave., concrete sidewalks on Imperial St. $1.10, Duplex Ave. $2.21, to Murphy Constr. Co., Wychwood Ave., Beresford Ave. $1.05, to Grant Contg. Co., 50 Front St. E., 8th Ave. $0.95, Sears Ave. $1.60, 7th Ave. $1.65, to F. Angotti, 819 St. Clarens Ave., Geary Ave. and Shaw St. $1.93; to P. Licastro, 1423 Dufferin St., Regal Rd. $1.30, to A. E. Jupp Constr. Co., 70 Berkeley St., Riverdale Ave. $1.90, Simpson Ave. $1.85, to L. P. Acri, 102 Markham St., Spadina Rd. $1.90, to Dept. Pub. Wks., by day labor Adelaide St. W., $4.1075, Kendal Ave. $2.05, Marlborough Pl. $1.905.

Ont., Toronto — To Warren Bituminous Paving Co., 54 University Ave., paving with bitulithic on concrete Conrad Ave. $5,479, Algergrove Ave. $5,011, Bingham Ave. $6,078, Beresford Ave. $1,730, Durie St. $1,520, Nelles Ave. $4,972, Robina Ave. $2,654, St. Johns Rd. $2,068, Weatherell Ave. $6,973; to Asphaltic Concrete Co., Excelsior Life Bldg., bitulithic on concrete Nasmith Ave. $6,201, concrete on Hillsdale Ave. $17,145, brick block on 8th Ave. $7,492; to Dept. Pub. Wks., by day labor, bitulithic on concrete Gifford Ave. $6,112, Hastings Ave. $7,781, Riverdale Ave. $9,185, concrete on lane west of Markham St. $3,442, brick block on Woodbine Ave. Contr. B, $28,712, asphalt on Dean St. $2,191, Front St. $8,684, Cummings St. $4,117, Lexie St. $5,109, Montcrest Blvd. $3,812, Sellers Ave. $946, asphaltic concrete on Harriett St. $1,488; to Ramsay Contg. Co., 39 Indian Crescent, concrete on Ranleigh Ave. $11,696; to Grant Contg. Co., 50 Front St. E., concrete on Millwood Rd. $10,036, brick block on Belhaven Rd. $12,868; to Dufferin Constr. Co., 210 Victoria St., brick block on Woodbine Ave. Contr. A, $29,815, asphalt on Blackburn Ave. $5,890, Hugo St. $2,052, Munro St. $8,624, Cannon Ave. $2,415, Clifton Rd. $2,864, Heath St. $4,013, Norwood Rd. $6,932, Sawden Rd. $3,601, 3rd St. $1,864, asphalt surfacing Front St. $7,449, Elm and Hawthorne Aves., Castle Frank and Glen Rds., $6,171; to Kilmer & Barber, 10 Adelaide St. E., asphalt on Maughan Crescent $10,504, 2nd St. $4,094, and 8th Ave. $16,004; to Constr. & Paving Co., Federation Life Bldg., asphalt on Eden Pl. $2,630, Mulock Ave. $19,262, Nanton Ave. $7,861, Bodwin Ave. $1,953; to Godson Contg. Co., Manning Chambers, asphalt on Cairns Ave. $5,504, Cannon Ave. $13,393, Pullen Ave. $6,873, asphalt surfacing Front St. $12,945; to Shenton & Cronin, 29 Annette St., grading Cavendish St. $2,361, Winthorpe Rd. $4,832; to Britnell Contg. Co., 903 Yonge St., grading Nelels Ave. $223, Weatherell Ave. $279, Harriett St. $322; to Bounivere & Co., 697 Lansdowne Ave., grading Banfield Crescent $594, lane north of Danforth Ave. $185.

Ont., Welland—Welland Co. voted $160,000 for roads, $110,000 for maintenance and $50,000 new concrete and macadam roads. Maintenance of gravel, clay and macadam roads will be done by day labor. W. W. Brookfield, Box 1334, supt.

B. C., Vancouver—About 9,300 sq.yd. 1 course concrete pavement, 7 in. centre to 9 in. edge, on parts of Prior and Station Sts., Northern and Terminal Aves., to C. D. Collard, 103 London Bldg. $28,000.

B. C., Vancouver—To Columbia Bitulithic Co., 402 Pender St. W., 10,000 yd. 2 in. Warrenite bitulithic on 6 in. block, approaches to Union and Canadian Natl. Ry. depots, $30,900. Noted Apr. 17.

Industrial Works

PROPOSED WORK

R. I., Providence—Plant and Wharf—Atlantic Refining Co., 430 Hospital Trust Bldg., plans refining plant and wharf. $150,000-$300,000.

Conn., New Britain—Boiler House and Coal Pocket—State Bd. Educ. Hartford, having plans prepared by W. F. Brooks, Gold and Lewis Sts., Hartford, 1 story, 15 x 40 x 40 ft., rein.-con. and brick for State Normal School, here. $40,000. A. Kellogg, 89 Franklin St., Boston, engr.

Conn., Westport—Heating Plant—Westport Sanitarium, having preliminary plans prepared by A. Kellogg, engr. and archt., 89 Franklin St., Boston, constructing central heating plant. $40,000.

N. Y., Altmar—Transformer Station—Niagara, Lockport & Ontario Power Co., Lafayette Bldg., plans transformer station, here. $600,000.

N. Y., Green Island (Troy P. O.)—Factory—Ford Motor Co., Highland Park, (Detroit P. O.) Mich., having prepared 1 or 2 story, 200 x 1 300 ft. rein.-con., brick and steel, here. $1,800,000. Private plans.

Pa., Berwick—Mill—Berwick Lumber & Supply Co. plans rebuilding mill recently destroyed by fire. $160,000-$175,000.

Pa., Hawley — Hydro-Electric Plant — Pennsylvania Power & Light Co., 25-31 East Boardman St., Youngstown, O., plans hydro-electric plant on Wallinpaupack Creek, near here. Work includes 1,150 ft. concrete dam, 50 ft. high, approximately 3 mi. 14 ft. pipe line, power house on Lackawaxen River, about 50,000 hp. capacity, and reservoir, 9,000,000,000 cu.ft. capacity.

La., Lafayette—Heating Plant, Laundry, etc.—See "Buildings."

Ind., Alexandria—Factory—Alexandria Canning Co., plans rebuilding 3 story, brick, West Washington St., wrecked by windstorm. $50,000.

Mich., Detroit—Foundry—Detroit Gray Iron Fdry. Co., 6403 Wight St., having plans prepared by Mildner & Eisen, 924 Hammond Bldg., 2 story, 50 x 80 ft., brick and steel addition, plain foundation, Iron St. $40,000.

Ill., Springfield — Plant — Illinois State Journal, 313 South 6th St., having preliminary plans prepared newspaper plant. $200,000. Private plans.

Wis., Friendship—Power Plant—Friendship Electric Light & Power Co., G. Polvicka, mgr., having plans prepared by L. A. De Guere, Wisconsin Rapids, 50 x 95 ft., rein.-con., brick and steel, plain foundation. $50,000.

Wis., Shorewood (Milwaukee P. O.)—Shop—School Dist. No. 4, H. Kuechenmeister, clk., having preliminary plans prepared by Herbst & Kuenzli, 130 Grand Ave., Milwaukee, 1 or 2 story, brick and concrete manual training shop, Atwater St., plain foundation. $45,000.

Kan., Abilene—Power Plants—See Unclassified under Kansas.

Mo., Poplar Bluff—Mill, etc.—Bimel Ashcraft Mfg. Co., J. Ashcroft, pres. plans rebuilding 1 and 2 story, brick and concrete recently destroyed by fire. $65,000. Private plans.

Calif., Beverly Hills—Laundry—Beverly Hills Laundry Co., K. F. Lee, 341 South Harvard St., Los Angeles, interested, plans laundry, here. $100,000 or more.

Ark., Fayetteville—Factory—J. F. Moore, secy. Chamber of Commerce, soon takes bids 2 and 3 story, 60 x 140 ft., concrete and brick, $40,000. Ely-Walker Co., 1520 Washington St., St. Louis, Mo., lessee.

Calif., Eureka—Sawmill, etc.—Humboldt Lumber & Building Co., 233 G St., making plans, saw and planing mill, dry kilns, etc., capacity 50,000 ft. per day, Lawrence Creek. D. H. McFarlan, mgr. Private plans.

Calif., Fresno—Plant—Garcia & Maggini, 246 Drumm St., San Francisco, plans rebuilding packing plant recently destroyed by fire, here. $75,000.

Calif., Huntington Park (Branch of Los Angeles)—Factory, etc.—U. S. Steel Products Co., 156 North Central Ave., Los Angeles, plans factory and warehouse on 7 acre site, here. To exceed $40,000.

Calif., Merced — Power House — See "Dams."

Calif., San Francisco—Factory—Riesener Chocolate Co., 415 8th St., had plans prepared by T. H. Keil, Call Bldg., 4 story, brick and steel, Hayward St. To exceed $40,000.

BIDS DESIRED

Conn., Waterbury—Factory—Plume & Atwood Mfg. Co., 470 Bank St., taking bids, 4 story, 25,400 sq.ft. floor space, also 5 story, brick and concrete stair and elevator tower. Westcott & Mapes, Inc., 139 Orange St., New Haven, designing engrs. Noted May 22.

Ind., Batesville—Factory—Union Furniture Co., taking bids 4 story and basement, 18 x 72 ft., brick and steel. $50,000. M. Fisher, Brighton Bank Bldg., Cincinnati, O., engr. Noted June 12.

Mich., Detroit — Printing — June 22, by A. K. Kahn, archt., 1000 Marquette Bldg., 14 story an basement, 130 x 212 ft., with 7 story, 54 x 130 ft. tower, rein.-con., brick and steel, plain foundation, Lafayette Blvd., for Detroit Free Press, Free Press Bldg.

Mich., Detroit—Power Station—June 26, by J. S. Foley, secy. Pub. Lighting Comn., rein.-con. and concrete substructure for power station to contain 3 turbo genera-

Industrial Works (Continued)

tor units. Smith, Hinchman & Grylls, 800 Marquette Bldg., engrs.

BIDS RECEIVED

Wash., **Tacoma**—Power House—City, power house for Lake Cushman project, from J. B. Murphy, Arcade Bldg., $199,212. Engrs. est., $250,000. Noted June 12.

CONTRACTS AWARDED

Vt., Graniteville—Machine Shop—Boutwell, Milne & Varnum Co., Barre, 2 story, 50x160 ft., brick and stone plain foundation, to Roy Constr. Co., Woodville, N. H. Archts. est. $70,000.

Mass., Dorchester (Boston, P. O.)—Plant—Nat'l. Can. Co., 36 Washington St. N., 1 story, 120 x 160 ft., Locust St., to B. Steinberg, 200 Columbia St., Cambridge. Archts. est. $90,000.

Mass., Norton—Power House—Wheaton College, 2 story power house, to E. F. Miner Building Co., 25 Foster St., Worcester. Archts. est. $80,000.

Conn., Stratford (Bridgeport P. O.)—Factory—Bridgeport Safety Emery Wheel Co., 82 Knowlton St., Bridgeport, 1 story, 90 x 240 ft., brick and steel, plain foundation Stratford Ave., here, to W. R. Murihead, 648 main St., Bridgeport. Noted Apr. 3.

Pa., Williamsport—Printing—Ballinger Co., archts. and engrs., 12th and Chestnut St., Phila., 1 story, 168 x 208 ft., brick and steel, plain foundation, to Central Constr. Co., 17th and Chestnut St., Harrisburg, for Smith Printing Co. Inc., 3rd and Basin Sts. Archts. est. $200,000.

Fla., Clearwater—Gas Plant—City, water gas plant, 175,000 cu.ft. per 24 hr., complete with gas lines, to Amer. Gas Constr. Co., Newton, Ia., $79,915. Noted Mar. 27.

Tenn., Nashville—Plant—Swift & Co., 76 West Monroe St., Chicago, Ill., 4 story, rein.-con. and brick, 800 4th Ave. N., general contract to Foster-Creighton & Co., 4th and 1st Natl. Bank Bldg., $100,000. Noted June 12.

O., Cleveland—Boiler House and Laundry—See "Buildings."

O., Cleveland—Factory—Grennan Cake Corp., 1941 East 66th St., 1 story, 59 x 106 ft., brick and steel addition, to Paul Bros., Fidelity Mortgage Bldg. Archts. est. $40,000.

O., Cleveland—Substation—Cleveland Electric Illuminating Co., c/o E. J. Cook, Illuminating Bldg., 2 story, 56 x 62 ft., brick, steel and concrete, Oak Bd., to S. W. Emerson Co., 1836 Euclid Ave. Archts. est. $60,000.

Ill., Urbana—Dairy—University of Illinois, general contract 3 story and basement, 31 x 50 ft. with two 32 x 118 ft. wings, rein.-con., brick and stone, on campus, to A. W. Stollman, 1001 South 3rd St., Champaign. Noted Apr. 24.

Wis., Milwaukee—Factory—Display Fixture Mfg. Co., 1627 St. Paul Ave., 1 story, 52 x 120 ft., brick and timber, plain foundation, to L. V. Constr. Co., 1120 6th St. Archts. est. $40,000.

Wis., New Richmond—Mill—New Richmond Roller Mills, W. Grover, mgr., will build 1 and 2 story, 35 x 40 ft., feed mill, rein.-con. and brick, plain foundation, by day labor. $40,000. Private plans. Noted May 15.

Ia., Marshalltown—Factory—Fisher Supply Co., general contract 2 story and part basement, 60 x 125 ft., rein.-con. and brick, to Tapager Constr. Co., Albert Lea, Minn., $40.352. Noted Mar. 27.

Minn., Minneapolis—Factory—Electric Mchy. Mfg. Co., 1331 Tyler St. N. E., will build 2 story and basement, 134 x 182 ft., brick addition, by day labor. $72,000. R. J. Kvalheim, 2631 Central Ave., archt.

Minn., Willmar—Power House, etc.—City, general contract for power house, to Standard Constr. Co., 1111 Plymouth Bldg., Minneapolis, $67,430; plumbing, heating and machinery, to B. Benson, Willmar, $74,650. Noted Jan. 17.

Mo., St. Louis—Depot—Highland Dairy Farms Co., 4816 Delmar Blvd., general contract 2 story and basement, rein.-con., brick, stone, terra cotta and tile, etc., Chouteau Ave., to Kremer & Voirol, Century Bldg. Archts. est. $150,000.

Tex., Ft. Worth—Mill—Worth Mills Co., c/o L. H. McKee and associates, 1819 Jones St., 3 story, 145 x 220 ft., brick and steel, to T. S. Byrne, First Natl. Bank Bldg., Ft. Worth, $200,000.

Tex., Ft. Worth—Mill—Bewley Mills Co., 1101 East 9th St., concrete addition to flour mill and elevator, to C. T. Hogue, Keene Bldg. Engrs. est. $40,000.

Calif., San Bernardino—Shops—Atchison, Topeka & Santa Fe Ry. Co., Kerchkoff Bldg., Los Angeles, 100 x 193 ft. sheet metal plant, and 45 x 180 ft. flue shop, steel and corrugated iron, here, to Lynch Constr. Co., Central Bldg., Los Angeles, $60,000.

Ont., Jordan—Factory—Canadian Grape Products Ltd., factory addition to Wills & Mitchell, St. Catherines. Archts. est. $50,000.

Ont., Kitchener—Factory—J. M. Schneider Packing Co., 148 Queen St. S., 3 story and basement, 70 x 150 ft., rein.-con. and steel addition, to J. V. Gray Constr. Co., Bank of Toronto, London, $130,000. Noted May 22.

Ont., Welland—Brewery—Welland Brewing & Malting Co., 4th St., constructing brewery, to Gardner Constr. Co., Welland, $100,000.

Buildings

PROPOSED WORK

Vt., Burlington—High School—City having preliminary plans prepared by F. L. Austin, 240 College St., junior high school. $350,000. A. Kellogg, 89 Franklin St., Boston, Mass., engr.

Mass. Boston—Club—University Club, 270 Beacon St., having sketches made by Monks & Johnson, 99 Chauncey St., new club house, Trinity Pl., $600,000. Noted Feb. 21.

Mass., Cambridge—Warehouse and Office—Shepard and Sterns, 65 Franklin St., Boston, had plans prepared by Haskell-Adams Co., 5 Commercial St., Boston, 2 story and basement, 110 x 190 ft., Henry St., here. $200,000. Noted Apr. 24.

Mass., Dorchester (Boston P. O.)—Apartment—Corporation, c/o M. E. Levy, engr. and archt., 7 Water St., Boston, having plans prepared 6 story and basement, 153 x 164 ft., brick and stone, near Franklin Park, here. $800,000.

Mass., Lynn—High School—City having plans prepared by G. A. Cornet, archt., 10 Central St., rebuilding 4 and 5 story, 55 x 125 ft. and 85 x 165 ft., rein.-con., brick and stone, Essex and Liberty Sts. $600,000.

Mass., North Reading—Inn—De Pesa & Lavaggi, Wayland, having plans prepared by F. A. Norcross, 46 Cornhill St., Boston, 2 story, 85 x 200 ft., brick, known as Palais Royal Motor Inn here. $150,000.

Mass., Roxbury (Boston P. O.)—School, etc. New England School of Theology, 17 Rockville Park, having plans prepared, 3 story and basement, 50 x 60 ft. school and 30 x 40 ft., dormitory additions, rein.-con., brick and stone. $150,000. S. A. Dannah, chn. building comn. Private plans.

Mass., Springfield—Store—T. E. King, State St., is interested in syndicate which plans to construct department store to house wholesale and retail clothing business, Main and Court Sts. $500,000-$700,000.

Mass., Waltham—Church—Waltham Congregational Church Society, plans new church. $150,000. J. W. Beal & Son, 62 Summer St., Boston, archts.

Mass., Waltham—School—School Comn., plans school, Lake St. $160,000. Engineer and architect not selected. G. R. Beal, 49 School St., chn.

Mass., Westfield—High School—R. M. Sizer, archt., Bartlett Ave., made sketches for high school, brick, for School Bd. $420,000.

Mass., Westfield—Theater, Store and Office—J. S. Silverstein and M. Sheketoff, both Windsor Ave., and A. Simmons, Main St., Hartford, Conn., plan new theater, store and office building, Elm St., here. $150,000-$175,000. Engineer and architect not selected.

R. I., Pawtucket—Club—Pawtucket Elks Realty Co., 260 Central St., having plans prepared by R. C. N. Monahan, 255 Main St., 3 story, Montgomery and Exchange Sts. $185,000.

Conn., Bridgeport—Church—Building Com. United Congregational Church, having plans prepared by Allen & Collens, 75 Newbury St., Boston, Mass., 1 story and basement, brick and timber, State St. and Park Ave. $350,000.

Conn., Bridgeport—Garage and Showroom—D. W. Flint, Inc., Allens Ave., Providence, R. I., having plans prepared by Fletcher-Thompson Co., archts. and engrs., 542 Fairfield Ave., 2 story, 130 x 160 ft., rein.-con., brick and steel, plain foundation, West and State Sts., here. $150,000.

Conn., Hartford—Hotel and Store—L. Libman, Savoy Hotel, having plans prepared by F. C. Walz, Turnbull St., 5 story and basement, 65 x 65 ft., brick and stone, Chapel St. $170,000.

Conn., Hartford—Library—Hartford Theological Seminary, Broad St., having plans prepared by Allen & Collens, 75 Newbury St., Boston, Mass., brick library and recitation hall, Broad St. $250,000.

Conn., Hartford—Store—W. T. Grant, 28 West 23rd St., New York City, having plans prepared 4 story, 100 x 200 ft., brick and steel, plain foundation, 26 State St., here. $200,000. Private plans.

Conn., New Britain—School—Sacred Heart of Jesus Church, Gold St., plans 2 story and basement, 75 x 175 ft., brick addition, plain foundation, $300,000. G. P. B. Alderman, Holyoke, Mass., archt.

Conn., New Haven—Church—St. Anne's Roman Catholic Church plans 1 story and basement, 45 x 110 ft., brick and timber, plain foundation, Dixwell and Arch Sts. $150,000. F. Rubino, 593 Howard Ave., archt.

Conn., Norwalk—High School—School Bd. having revised plans prepared by J. A. Jackson, 185 Church St., New Haven, 2 story and basement, 95 x 125 ft., rein.-con. and brick, Main St. $150,000. Noted June 5.

Conn., Thompsonville—School—Enfield Twp., having plans prepared by F. I. Cooper Corp., 983 Main St., Hartford, 2 story and basement, brick, plain foundation. $250,000. A. Higgins, supt.

N. Y., New York—Art Center—City, City Hall, having plans prepared by Arnold W. Brunner, 101 Park Ave., 200 x 600 ft., 58th St. and 7th Ave. $15,000,000.

N. Y., Carthage—Club—Building Com. Rotary Club, and A. F. Mills, mgr. W. Branaugh Estate, plan memorial club building. $150,000-$160,000. Address A. F. Mills, Carthage.

N. Y., Rome—High School—Bd. Educ., having plans prepared by Tooker & Marsh, 101 Park Ave., New York City, for new high school, Turin St. $400,000. Address F. W. Marks, chn. building com.

N. J., Atlantic City—Clubhouse—Elks Lodge 276 having revised plans prepared by V. B. Smith, Guarantee Trust Bldg., 4 and 5 story, 75 x 150 ft., brick and steel, South Virginia Ave. Former bids rejected. Noted May 22.

Md., Baltimore—Bank and Office—Old Town Natl. Bank, Gay and Exeter Sts., having plans prepared by F. A. Fletcher, 407 North Charles St., [illegible] story, 81 x 81 ft., brick and stone, pla[illegible]ndation, Gay and Fallsway Sts. $[illegible]0,000. Noted May 22.

N. C., Raleigh—Hotel—Sir Walter Hotel Co., 400 Fayetteville St., plans brick and limestone addition. $200,000.

S. C., Greenville—Office—Chamber Commerce takes bids about June 24, 10 story, brick and steel, Main St. $225,000. Beacham & Le Grand, Finley Bldg., archts.

La., Lafayette—College—House and Senate of General Assembly, Baton Rouge, recommend adoption of House Concurrent Resolution 7, making provision for following improvements to Southwestern Institute, here: dining hall $75,000, gymnasium and athletic stadium $100,000, central heating and power plant with laundry, etc., $75,000, training school for practice teaching $100,000, dormitory for men $100,000, dormitory for women $200,000, infirmary $25,000, equipment $25,000.

Ky., Lebanon—Church, etc.—Nevin, Wischmeyer & Morgan, archts., Starks Bldg., Louisville, open bids about July 7 (extended date), church and Sunday school, here, for United Presbyterian Church. $150,000. Noted Apr. 24.

Ky., Louisville—Theatre, Club and Office—J. G. Brown, of Brown Lumber Co., takes bids about June 28, 10 story, 150 x 180 ft., Bway. $1,500,000. J. P. Bradshaw, International Life Bldg., St. Louis, Mo., engr. Noted Apr. 24.

O., Canton—Lodge—Eagles Lodge, 335 Tuscarawas St., W., soon takes bids 3 story and basement, 92 x 100 ft., Market Ave. S., $250,000. Thayer & Johnson, 5716 Euclid Ave., Cleveland, archts. Noted Aug. 16.

O., Cleveland—Warehouse—Malbin Realty Co., c/o S. Malbin, 2741 East 34th St., had plans prepared by A. A. Soffen, Engineers Bldg., 6 story and basement, 80 x 100 ft., brick, Croton Ave. $200,000.

O., Columbus—Animal Husbandry—Bd. Trustees Ohio State University having plans prepared by J. N. Bradford, c/o Ohio State University, 2 and 3 story and basement, 140 x 180 ft., rein.-con., brick and steel, on campus. $200,000.

Mich., Bay City—Mercantile—Jennison Hardware Co., having plans prepared by A. Kahn, archt., 1000 Marquette Bldg., Detroit, plans 5 story and basement, 95 x 100 ft., rein.-con., plain foundation, 5th and Water Sts. $150,000.

Mich., Detroit—Apartment—Owner, c/o A. E. Harley, archt., 316 McKerchey Bldg., having plans prepared 6 story and basement, 100 x 150 ft., rein.-con. and brick, plain foundation, North Woodward St. $300,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., had plans prepared by Malcolmson & Higginbotham, 1217 Griswold St., 2 story and basement, rein.-con., brick and steel, plain foundation, Cameron Ave. $300,000.

Mich., Kalamazoo—Dormitory—Kalamazoo College, having plans prepared by A.

Buildings (Continued)

Kahn, 1000 Marquette Bldg., Detroit, 3 story and basement, rein.-con., brick and steel, plain foundation, on campus. $150,000.

Mich., Marquette—Jail—F. G. Jenks, clk. Marquette Co., having plans prepared by D. Hubert, Menominee, 3 story, 40 x 82 ft., concrete and stone, plain foundation. $150,000.

Mich., Redford—School—School Dist. 1, having plans prepared by Verner, Wilhelm & Molby, 602 Book Bldg., Detroit, 1 story and part basement, 24 room, rein.-con., brick and steel, plain foundation.

Wis., Beloit—School—F. H. Kemp, archt., Beloit, soon takes bids, 2 story and basement, 84 x 144 ft., brick and tile, plain foundation, for St. Jude Congregation. J. Hanz, 747 Hackett St., pastor. $150,000. Noted May 15.

Wis., Fond du Lac—School—Bd. Educ., J. Hohensee, secy., having plans prepared by Perkins, Fellows & Hamilton, 814 Tower Court, Chicago, Ill., 2 story, concrete, brick and tile addition to Roosevelt Junior High School and Senior High School, plain foundations. $400,000.

Wis., Green Bay—Office—Wisconsin Pub. Serv. Co., 559 Marshall St., Milwaukee, having preliminary plans prepared by Oppenhamer & Obel, Bellin Bldg., 6 or 7 story, brick and concrete, plain foundation, South Washington St. Will exceed $150,000.

Wis., Milwaukee—Church—Holy Angels Congregation, G. Meyer, pastor, 1665 11th St., having plans prepared by Riesch & Hess, 302 West Water St., 2 story, brick and tile, plain foundation, 11th St. $150,000.

Kan., Winfield—Hospital—City having preliminary plans prepared by H. F. Haynes, Winfield, 3 story and basement, rein.-con., brick and stone. To exceed $150,000.

Mo., St. Louis—Garage—St. Louis Police Dept., 112 South 12th Blvd., will build 2 story, 154 x 154 ft., rein.-con. and brick, by separate contracts under supervision of H. G. Clymer, archt., Wainwright Bldg. $150,000.

Mo., St. Louis—Office—P. Brown, c/o P. Brown & Co., Pierce Bldg., purchased 8 story building from Olive & 9th Realty Co., c/o I. T. Cook & Co., Arcade Bldg., soon takes bids 6 story top addition, Olive and 9th St. To exceed $600,000. Noted Feb. 14.

Mo., St. Louis—School—Bd. Educ. soon takes bids 2 story and basement, rein.-con., brick and stone. $210,000. R. M. Milligan, 911 Locust St., engr. and archt.

Tex., Abilene — Dormitory — McMurray College had plans prepared by David Castle & Co., Abilene, 3 story, brick and concrete, on campus. $150,000.

Tex., Abilene—Schools—Voted $150,000 bonds for schools. O. K. Hobbs, city engr. Noted May 22.

Tex., Dallas—Science—Southern Methodist University plans brick and concrete science building on campus. $150,000. C. C. Selecmann, pres. Engineer and architect not selected.

Tex., Ft. Worth—Exchange—Southwestern Bell Telephone Co., 211 West 10th St., plans 5 or 6 story and basement, brick and concrete, Throckmorton and 10th Sts. $500,000. Also plans one or more smaller exchanges. $150,000 each minimum.

Tex., Houston—Rail Terminal—See "Unclassified."

Tex., Sherman—Warehouse—Everheart Wholesale Grocery Co., having plans prepared by Clyce & Rolfe, engr. and archt., Commercial Bank Bldg., 3 story and basement, 140 x 145 ft., brick and concrete, East Lamar St. $150,000.

Okla., Holdenville—Temple—H. R. Allen, secy. Masonic Building Assn., soon takes bids 5 story and basement, rein.-con., brick and stone. $150,000. Private plans.

Ariz., Phoenix—Office and Lodge—B. P. O. E., Phoenix Lodge 335, plans 5 story, fireproof, Adams St. To exceed $150,000. Engineer and architect not announced.

Wash., Bellingham—Schools—School Bd. election June 21, $425,000 bonds for converting 3 grade schools into junior high schools.

Calif., Berkeley — Exchange — Pacific Telephone & Telegraph Co., 333 Grant Ave., San Francisco, having plans prepared by E. V. Cobby, Shreve Bldg., San Francisco, 4 story and basement, Class A rein.-con., Bancroft Way, here. $300,000.

Calif., Berkeley — Hotel — Hutchison & Mills, 1214 Webster St., Oakland, having plans prepared by L. R. Wilson, 2216 Blake St., 5 story and basement, rein.-con., to contain 150 rooms, Dwight Way, here. $150,000.

Calif., Berkeley—Schools—City having preliminary plans prepared by W. H. Ratcliff, Jr., 1st Natl. Bank Bldg., and J. W. Plachek, 2014 Shattuck Ave., 2 fireproof schools. $150,000 each. Noted June 5.

Calif., Cupertino—High School—Western Union High School Dist., plans election, $250,000 bonds, group of high school buildings.

Calif., Hayward—School—Hayward High School Dist. having plans prepared by H. C. Smith, Humboldt Bank Bldg., San Francisco, 2 story and basement, to contain 24 classrooms and auditorium, concrete. $300,000.

Calif., Hollywood—Apartment and Store—F. L. Wilkie, c/o Walker & Eisen, archts., Great Republic Life Bldg., Los Angeles, having plans prepared, 6 story and basement, Class A, fireproof, North Highland Ave., here. To exceed $300,000.

Calif., Hollywood — Sanitarium — F. M. Crosby, Bell, representing owner, having plans prepared by J. T. Zeller, Currier Bldg., Los Angeles, 7 story and basement, 125 x 140 ft., brick, rein.-con. and steel, here. To exceed $400,000.

Calif., Los Angeles—Church—Wilshire Congregational Church, c/o Allison & Allison, archts., Hibernian Bldg., having plans prepared rein.-con., main auditorium to seat 1,200, Plymouth and Wilshire Blvds. $175,000.

Calif., Los Angeles — Garage — R. R. Meads, 418 East 8th St., representing owner, having plans prepared by Noerenberg & Johnson, Railway Bldg., 8 story and basement, 80 x 175 ft., rein.-con., Hope St.

Calif., Los Angeles—Memorial—Los Angeles Co. had plans prepared by Allied Architects Assn., 424 South Spring St., Class A, brick, rein.-con. and steel, Figueroa St. To exceed $350,000. Noted Dec. 27, 1923.

Calif., Los Angeles—Schools—Voted $34,640,000 bonds for new schools, additions and alterations to present schools. Noted Mar. 13.

Calif., Los Angeles—Store and Apartment—Business Dist. Development Co., Merchants Natl. Bank Bldg., plans about 10 story, fireproof, Cahuegna Ave. To exceed $350,000.

Calif., Los Angeles—Store and Loft—Klein-Norton Co., 253 South Los Angeles St., having plans prepared by J. M. Cooper, Marsh-Strong Bldg., 10 story and basement, 60 x 150 ft., rein.-con., Los Angeles St.

Calif., Oakland—Hospital—Peralta Hospital Assn., c/o C. W. Dickie, archt., Actico Bldg., having sketches made, fireproof, to accommodate from 130 to 150 patients. $300,000.

Calif., Pasadena — Dormitory — Natl. Benevolent Assn., c/o R. H. Orr, archt., Corporation Bldg., Los Angeles, having plans prepared 2 story and basement, frame and plaster, Santa Anita Ave., here. $150,000.

Calif., San Diego —Bank and Office—San Diego Savings Bank, 5th and E Sts., plans 10 story fireproof, Bway. and 6th Sts.

Calif., San Diego — Club — Minnewana Ranch Club, c/o W. L. Wollett, archt., Pacific Mutual Bldg., Los Angeles, had plans prepared frame and plaster, here. $150,000 or more.

Calif., San Francisco—Apartment—E. V. Lacey, 180 Jessie St., having plans prepared by J. C. Hladik, Monadnock Bldg., 5 story and basement, rein.-con. Eddy St. $175,000.

Calif., San Francisco — High School — City and San Francisco Co., having plans prepared by J. Reid, Jr., 1st Natl. Bank Bldg., fireproof, Junior high school, to contain approximately 40 classrooms, old Exposition grounds.

Calif., San Francisco—Schools—City and San Francisco Co., having plans prepared by J. G. Howard and associates 1st Natl. Bank Bldg., Miller & Pflueger, Lick Bldg., G. A. Lansburgh, 140 Montgomery St., and Bakewell & Brown, 251 Kearny St., 4 fireproof schools. $400,000 bonds voted for each.

Calif., Talmage — Hospital — Mendocino State Hospital rejected bids fireproof receiving building. G. B. McDougall, Forum Bldg., Sacramento, state archt. Noted Jan. 17.

California—Memorial Clubhouses—Butte Co., Oroville, plans memorial clubhouses, at Oroville, Gridley and Chico. $185,000. C. F. Belding, co. clk.

Que., Montreal—Arena—J. S. Archibald, archt., 326 Beaver Hall Hill preparing plans 2 story, 300 x 355 ft., rein.-con. and steel, St. Catherine St. Owner's name withheld.

Que., Outremont — Convent — Sisters of Holy Name of Jesus and Mary, having plans prepared by Viau & Venne, 99 St. James St., Montreal, 5 story, 200 x 440 ft., brick, Bernard St. $1,200,000.

Ont., Toronto — Church — St. Clements Angelican Church having plans prepared by Page & Warrington, Confederation Life Bldg., 1 story and basement, 60 x 120 ft., rein.-con., brick and steel, $150,000.

BIDS DESIRED

Mass., Revere — High School — School Com., taking new bids Junior High School, 2 story, 113 x 170 ft., brick and stone, Ward 2. $150,000. Former bids rejected. E. J. Wilson, 109 State St., Boston, archt.

Conn., Manchester—Theatre—S. Campner and D. Pouzzner, 129 Church St., New Haven, taking bids 2 story and basement, 75 x 110 x 195 ft., brick, plain foundation, Main and Bissell Sts., here. $200,000. J. A. Tuck, Boston, Mass., and J. Weinstein, Metropolitan Bldg., New Haven, archts. Noted May 1.

N. Y., Lowville—School—June 23, (extended date) by Bd. Educ., new school. $500,000. Address S. B. Richardson, chmn. bldg. com. Noted June 12.

N. J., Union—High School—June 23, by Bd. Educ., Union Twp., Stuyvesant Ave., 2 story and part basement, 126 x 180 ft. high school, Morris Ave. F. A. Elsasser, 85 Broad St., Newark, archt.

Pa., Pocono Manor—Inn—June 20, by W. Smedley, archt., St. Girard Bldg., Phila., addition, here, for Pocono Manor Inn.

Tenn., Knoxville—Dormitory—June 28, T. M. Morris, secy. and treas., University of Tennessee, brick and stone, known as "Sophoronia Strong" on campus. Miller, Fullenwider & Bowling, 646 North Michigan Ave., Chicago, archts.

Tenn., Nashville—Chapel and Memorial Hall—June 23, by H. C. Hibbs, archt., 4th and 1st Natl. Bank Bldg., 3 story, concrete, brick and stone chapel and memorial hall, on campus, for Vanderbilt University, $100,000 and $150,000 respectively. Noted Jan. 3.

Mich., Flint—School—June 24, by H. M. Comins, secy. Bd. Trustees Union School Dist., Roosevelt School, 2 and 3 story and basement, 110 x 240 ft., rein.-con., brick and steel, River Rd. Malcolmson & Higginbotham, 1217 Griswold St., Detroit, archts. Noted May 22.

Ill., Rogers Park (Chicago P. O.)—High School—E. Brielmaier & Sons, archts., 432 Bway., Milwaukee, Wis., taking bids masonry and concrete work 3 story and basement, brick and concrete, Ridge Blvd., here, for St. Scholastica Academy, 7430 Ride Blvd. $400,000. Noted May 15 under "Excavation, Drainage and Irrigation."

Wis., Kenosha—Clubhouse—June 21 (extended date), by C. O. Augustine, archt., 1063 Howland Ave., 2 story and basement, brick and concrete, addition, plain foundation, for F. O. E. No. 1055, c/o C. Ryan, chn. com., Public Service Bldg. 150,000. Noted June 5.

Neb., Columbus—High School—July 2, by Fiske & Meginnis, archts., 533 Bankers Life Bldg., Lincoln, 2 story and basement, rein.-con., brick and stone, for Bd. of Educ. Noted Jan. 24.

Tex., Ft. Worth—June 27, by Methodist Sanitarium, c/o W. E. Williams, Texas State Bank Bldg., 8 story and basement, brick and concrete, 6th and Cannon Sts. $1,000,000. W. G. Clarkson, First Natl. Bank, archt.

BIDS RECEIVED

N. Y., Brooklyn—Municipal—City, Boro Hall, municipal, Court and Joralemon Sts., general contract from Cauldwell & Wingate Co., 381 4th Ave., New York City, $4,274,800 plus $1,033,790; plumbing, from E. O'Brien, Inc., 6311 5th Ave., $163,764; heating from Gillis & Gheoghegan, Inc., 537 West Bway., New York City, $222,340 Noted May 22.

Calif., San Rafael — High School — San Rafael High School Dist., general contract 1 story, rein.-con., to contain 25 classrooms and auditorium, from Barenchi & Paganni, 327 Georgia St., Vallejo, $186,513. Noted Mar. 20.

CONTRACTS AWARDED

Me., Portland—Apartment—Chestnut St. Methodist Episcopal Church, 6 story and basement, 65 x 95 ft., brick and timber, Chestnut St., to F. A. Rumery Co., 537 Congress St. Archts. est. $150,000.

N. H., Merrimack— Library — Lowell Memorial Library, constructing library, to Davison & Swanburg, 57 Amherst St., Manchester. Archts. est. $150,000.

Mass., Boston—Bank and Office—State St. Exchange Building, G. N. DeBlois and A. N. Maddison, trustees, 11 Pemberton Sq., altering bank and office building, to L. D. Willcutt & Sons, 146 Summer St. Archts est. $300,000.

Mass., Brockton — Garage — Goodman Bros., 24 Pleasant St., will build 1 story, 100 x 400 ft., brick and concrete, North Main St., by day labor, $150,000. Private plans.

Mass., Brookline (Boston P. O.)—School—School House Dept., 2 story and basement, 33,000 cu.ft. floor space, brick. 345 Harvard St., to B. W. Neal, 293 Boylston St., $200,000. Noted Feb. 14.

Buildings (Continued)

Mass., Fall River—Church—St. Jean Baptiste Church, constructing church, Field St., to C. H. Hodgate, 370 Bedford St. Archts. est. $200,000.

Conn., South Manchester—Church, etc.—South Manchester Methodist Episcopal Church, Manchester, church and parish house, here, to Manchester Constr. Co., South Manchester. Archt. est. $150,000. Noted June 7, 1923.

N. Y., Mt. Pleasant—Nurses Home, etc.—F. L. Merrill, clk. Bd. Superv. Westchester Co., Court House, White Plains, nurses home and employees dormitory, at Grasslands Hospital, here, to Butler-Reisdorff Co., 120 East 41st St., New York City. Noted May 22.

N. Y., New York—Bank Franklin Savings Bank, 8th Ave. and 42nd St., 2 story, 50 x 100 ft. addition, to Marc Eidlitz, 30 East 42nd St. Archts. est. $500,000.

N. Y., New York—Schools—Bd. Educ., 500 Park Ave., P. S. 73, Anderson Ave., and P. S. 19, Katonah Ave., both Bronx Boro., to Carleton Co., 151 West 42nd St., $805,875 and $395,635 respectively. Noted May 22.

Pa., Upper Darby (Phila. P. O.)—Motor—Mackenzie & Wiley, archts., Bankers Trust Bldg., Phila., 2 story and basement, 100 x 196 ft., brick and steel, plain foundation, Brief Ave. and 69th St., to Bowden Constr. Co., 1935 Chestnut St., Phila., for G. Wilcox, Land Title Bldg., Phila. Archts. est. $175,000.

Pa., Phila.—Apartment—C. E. Oelschlager, archt., 1615 Walnut St., 10 story and basement, 135 x 215 ft., brick and steel, plain foundation, 43rd and Walnut Sts., to Armstrong & Latta Co., 1926 Sansom St. Archts. est. $1,250,000. Owners name withheld. Noted Jan. 10.

N. C., Greensboro — City Hall — For 4 story, brick, concrete and steel, to Ingle & Moser, Greensboro, $312,500.

N. C., Sanford—Hotel—Wilkins & Richs Co., 6 story, rein.-con. and brick, to J. W. Stout & Co., Sanford, $200,000.

Fla., St. Petersburg — Coliseum — St. Petersburg Coliseum Corp., C. F. Cullen, pres., coliseum, 4th Ave., North between 5th and 6th Sts., to W. J. Taylor, St. Petersburg, $300,000 plus. Noted Mar. 27.

Fla., Tampa — Hotel — Wynn-Claughton Corp., E. M. Claughton, secy., Atlanta, Ga., 10 story, 145 x 367 ft., Howard St. and Bay Shore Blvd., here, to Gude & Co., 64 Poplar St., Atlanta, Ga. Archts. est. $700,000. Noted May 29.

Miss., Meridan—High School—Bd. Educ., Junior High School, 2 story, rein.-con., brick stone, etc. to F. W. Leard, McComb, $162,000. Noted May 22.

La., Shreveport — Court House — Police Jury Ouachita Parish, new courthouse to Caldwell Bros., 816 Howard Ave., New Orleans, $427,705.

Ky., Louisville — Cottages — Kentucky Childrens Home Society, St. Matthews St., two buildings for childrens home, to H. Frank & Co., Middleton. Archts. est. $150,000.

O., Canton—Temple—Masonic Assn., general contract temple, Market Ave. N., to R. H. Evans Co., Daily News Bldg., $400,000.

O., Cleveland—Commercial and Office—Hayden Investment Co., c/o H. A. Kangesser, 3 story and basement, 55 x 125 ft., brick, steel and concrete, 2921 Prospect Ave., to Boldt Constr. Co., 1969 East 70th St. Archts. est. $150,000.

O., Cleveland—Orphanage—G. S. Rider & Co., archts., Century Bldg., group of buildings, incl. **60 x 67 ft. cottages, 3 story and basement, 58 x 80 ft. boiler house and laundry, 155 x 229 ft. school, 54 x 170 ft. dining hall, State and Bean Rds., to J. Gill & Sons, Bulkley Bldg., for Catholic Charities Corp., Century Bldg. Archts. est. $2,000,000. Noted May 15.**

O., Columbus—Agricultural, Laboratory, etc.—C. E. Steeb, secy., Bd. Trustees Ohio State University, 2 story, 60 x 120 ft. agricultural and engineering building, rein.-con., brick and steel, on campus, to Taylor & Owens, Coshocton, $90,000; 2 story, 80 x 140 ft., rein.-con., brick and tile laboratory, to D. W. McGrath, 255 East Broad St., about $83,000. Noted May 8 and 22.

Ill., Alton—Bank and Office—Alton Natl. Bank, general contract 6 story and basement, rein.-con., brick and stone, 3rd and Belle Sts., to J. Stewart & Co., Inc., 408 Pine St., St. Louis, Mo., $165,000; interior work, etc., to St. Louis Bank Equipment Co., 811 Walnut St., St. Louis, Mo., $54,000.

Ill., Chicago — Office and Storage — P. Gerhardt, archt., 64 West Randolph St., 6 story and basement, 100 x 194 ft., brick and concrete, plain foundation, Washington Blvd., here, to Great Lakes Constr. Co., 38 South Wabash Ave., for A. J. Lindemann-Hoverson Co., 1st and Cleveland Aves., Milwaukee, Wis. Noted May 8.

Ill., River Forest—Church, etc.—First Presbyterian Church, general contract 1 and 2 story, 61 x 112 ft., and 85 x 95 ft., to Guy & McClintock, 7234 Circle Ave., Forest Park. Noted May 1.

Wis., Madison—Church, Chapel and Apartment—German Methodist Congregation, W. Schwering, pastor, 110 South Congress St., Kenosha, 4 story, 61 x 90 ft., concrete, brick and steel, plain foundation, to Bailey-Kasson Co., 139 North Clark St., Chicago, Ill. Archts. est. $150,000. Noted Dec. 27.

Wis., Milwaukee—Apartment—Franklin Realty Co., 85 Mason St., 3 story, 47 x 56 ft., concrete, brick and tile, plain foundation, Franklin St., to Bentley Bros., 8085 Pierce St. Archts. est. $160,000. Noted May 15.

Wis., West Allis—Exhibition—E. G. Schroeder Exhibitors Co., 405 Bway., Milwaukee, 1 story, 250 x 300 ft., brick and steel, plain foundation, State Fair Park, here, to T. Stark & Co., 130 Muskego Ave., Milwaukee. Archts. est. $150,000. Noted May 1.

Ia., Clarinda—Hospital—State Bd. Control, A. W. McCall, chn., general contract 2 story and basement, 45 x 228 ft., rein.-con., brick and stone, to R. C. Alcorn Constr. Co., 841 South 24th St., Omaha, Neb., $145,110.

Ia., Des Moines—Store—L. Oransky & Sons, 313 Walnut St., 2 story and basement, 130 x 150 ft., rein.-con., brick and stone, 3rd and Walnut Sts., to C. Weitz & Sons, 713 Mulberry St., $150,000. Noted Mar. 27.

Minn., Minneapolis—Hotel—W. Weisman Holding Co., Los Angeles, Calif., general contract 5 story and basement, 55 x 156 ft., rein.-con., brick and tile, 2nd Ave. S. and Washington Ave., to H. N. Leighton Co., 127 South 10th St. Noted June 30, 1921.

Ark., Little Rock—Apartment—Rackensack Apartment Corp., Memphis, Tenn., general contract 7 story and basement, 125 x 150 ft., rein.-con., brick, stone and terra cotta, 4th and Hill streets, here, to Gauger-Korsmo Constr. Co., Memphis, Tenn., $195,000. Noted Apr. 3.

Tex., Cleburne—Hotel—R. A. Johnson, Liberty Hotel, Jacksonville, general contract 4 story, brick and concrete, here, to H. D. McCoy, 404 Prairie St., $100,000. Noted Dec. 27.

Tex., Corsicana—Hotel—Corsicana Hotel Co., 203 Magnolia Bldg., Dallas, 5 story and basement, 84 x 100 ft., brick, steel and concrete, to Sibley & Thigpen, 5012 Abbott St., Dallas, $300,000.

Tex., Ft. Worth—Warehouse, etc.—Montgomery Ward & Co., 801 Grove St., will build additions and improvements to warehouse and department store, by day labor. $150,000.

Tex., Galveston—Schools—8rustees Pub. Free Schools, general contracts additions to Central High School and San Jacinto School, brick and concrete, etc., to M. C. Bowden, 18th and Mechanics Sts. Archts. total est. $232,000. Noted May 15.

Tex., Houston—Theatre—H. C. House, Union Natl. Bank Bldg., terra cotta, steel and concrete, Capitol Ave., to J. B. Townsend, West Bldg., $200,000.

Okla., Guthrie—High School—Bd. Educ., 3 story, basement and wing, 95 x 185 ft. concrete, brick and stone, to A. E. Skouby, Guthrie, $145,000. Noted May 1.

Calif., Los Angeles—Exchange—Southern California Telephone Co., 740 South Olive St., 9 story and basement, 120 x 127 ft., steel, brick and rein.-con., Olive St., to Mathis Constr. Co., 753 South San Pedro St., about $800,000 (contract covers all work except steel). Noted May 29.

Calif., Los Angeles—Store, Apartment and Garage—B. Nesa, 1831 Westmoreland St., 3 story and basement (garage section 1 story), brick and concrete, Pico and Berenda Sts., to Pozzo Constr. Co., 421 Macy St., $155,000.

Wash., Seattle—Medical and Dental—Bradner Building Co., 18 story, 41 x 64 x 100 x 230 ft., rein.-con., fireproof, 5th and Westlake Sts., to A. W. Quist & Co., Hoge Bldg. Archts. est. $2,500,000.

Federal Government Work

BIDS DESIRED

R. I., Newport—Roof—Spec. 4994—June 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., roof on steamship building at Naval Training Station, here.

N. Y., New York—Building—Spec. 4970—June 25, by Bureau Yards & Docks, Navy Dept., Wash., D. C., remodeling building here.

D. C., Wash. — Repairs to Pier — Spec. 4983—June 23, by Bureau Yards & Docks, Navy Dept., repairs to wooden pier.

D. C., Wash.—Equipment Repairs—June 23, by Treas. Dept. at office Supervising Archt., repairing mechanical equipment in U. S. Treasury, Treasury Annex 1, Auditors and Liberty Loan buildings, here; adv. E. N.-R. June 19.

Va., Norfolk—Alterations—Spec. 4951—June 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., alterations to building, here.

Va., Norfolk—Roads and Walks—Spec. 4996—June 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., roads and walks, here.

Ill., Springfield—Alterations, etc.—June 20, by Treas. Dept. at office Superv. Architect, Wash., D. C., altering and constructing 18 x 50 ft., non-fireproof mezzanine floor, to Court House, and U. S. Post Office, here.

New Mexico—Road—July 1, by E. S. Wheeler, dist. engr. Bureau Pub. Rds. U. S. Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., constructing or improving 4.173 mi. San Ildefonso-Frijoles Rd., Sect. 5, on Natl. Forest Rd., Sante Fe Co., 28,518 cu.yd. rock, 12,831 cu.yd. common and 23,078 cu.yd. borrow excav., 3,600 cu.yd. surface, etc.

Arizona — Road — June 25, by E. S. Wheeler, dist. engr., Bureau Pub. Rds., U. S. Dept. Agriculture, 242 West Washington St., Phoenix, constructing or improving Clifton-Springerville relocation Uatl. Forest Rd., in Apache Natl. Forest, Greenlee Co.

Arizona — Road — July 1, by E. S. Wheeler, dist. engr. Bureau Pub. Rds., U. S. Dept. Agriculture, 242 West Washington St., Phoenix, constructing or improving 23.436 mi. Flagstaff-Angel Natl. Forest Rd., in Coconino Natl. Forest, Coconino Co., 11,560 cu.yd. rock and 116,275 cu.yd. common excav., 65,100 lin.ft. protection ditches, 23,014 cu.yd. paving, etc.

New Mexico—Road—July 9, by E. S. Wheeler, dist. engr. Bureau Pub. Rds., U. S. Dept. Agriculture, 242 West Washington St., Phoenix, Ariz., constructing or improving 3.57 mi. Cimarron-Taos Natl. Forest Rd. in Carson Natl. Forest, Taos Co., 4,665 cu.yd. rock, 15,894 cu.yd. common and 15,810 cu.yd. borrow excav., 4,000 cu.yd. semi-gravel surface.

BIDS RECEIVED

Ky., Louisville—Pumps—U. S. Engineer, P. O. Box 72, furnishing three rope driven 15 in. centrifugal pumps, from Farrar Pump & Mchy. Corp., Granite Bldg., St. Louis, Mo., $1,650.

Mich., Detroit—Dredging—U. S. Engineer, Old Federal Bldg., Detroit, dredging channel at Russell Island Shoal, St. Clair River, 172,000 cu.yd. excav., from Dunbar & Sullivan Dredging Co., 2212 Dime Bank Bldg., $61,404. Noted May 8.

Colorado—Road—Bureau Pub. Rds., Denver, grading 4.43 mi. Arapahoe Glacier Natl. Forest Rd. Project, Boulder Co., from Sims & Boston, 3300 Adams St., Denver, $37,791.

California—Roads—U. S. Engineer, Bureau Roads, Main St., San Francisco, (a) Fredalbe extension (b) Pine Knot extension (c) both projects under one contract, of Big Bear Valley Natl. Forest Rd., San Bernardino Co., from C. L. Robinson, 700 Swall Ave., Sherman, (a) $37,936 (b) $64,590 (c) $102,477.

CONTRACTS AWARDED

O., Cincinnati—Cottages—U. S. Engineer, 405 Custom House, lockkeepers' cottages at Dams 34, 35 and 38, Ohio River, to G. Griffiths & Sons, Central Natl. Bank Bldg., St. Louis, Mo., $21,500. Noted May 15.

Oregon—Road—U. S. Bureau Pub. Rds., Post Office Bldg., Portland, corrugated pipe rubble headwalls in 6.2 mi. Mt. Hood Sect. of Mt. Hood Natl. Forest Rd., Clackamas and Wasco Counties, to J. F. Clarkson, Yeon Bldg., Portland, $121,710.

Unclassified

PROPOSED WORK

Wharf—Providence, R. I.—See "Industrial Works."

Sea Wall, etc.—Belleair Heights, Fla.—Plans election to vote on $40,000 bonds, seawall and boulevard 1¼ mi. long. E. E. Carley, mayor.

Parks, Docks, etc.—Palatka, Fla.—Election July 1, $60,000 bonds constructing parks; $60,000, docks, wharves and warehouses. H. A. Davis, Mayor.

Transmission Line—Alabama—Alabama Power Co., B. M. Bldg., plans 12.5 mi. transmission line from Carbon Hill-Brilliant line to Winfield, and Quinn; line from Cherokee Bluffs to Electric, Elmore Co., with distribution system at Electric; line from Roanoke-North Auburn to Five Points, Chambers Co., with distribution system at Five Points.

Unclassified (Continued)

Transmission Line—Friendship, Wis.—See "Dams."

Transmission Lines, etc.—Kansas—United Power & Light Corp., Abilene, soon takes bids 25 mi. transmission line from Abilene to Junction City, $40,000, 25 mi. line from Abilene to Salina, $50,000, 53 mi. line from Salina to Inman, $107,000, 37 mi. line from Hays to Russell and branch lines, $40,000, each 33,000 volt; substations and tap lines, $80,000; Victoria, Walker and Gorham distribution systems, $25,000; Hays plant improvements, $150,000-$300,000. Y. Y. Young, Abilene, engr.

Park Improvements—St. Cloud, Minn.—Making plans park improvements at Lake George, incl. drive and playgrounds, etc. $75,000. M. B. Lang, city engr.

Transmission Line, etc.—Texas—Texas Light & Power Co., Palestine, purchased plant at Oakwood and plans to construct line Oakwood to Palestine, enlarge power plant, etc. $40,000.

Wharf—Beaumont, Tex.—Had plans prepared Wharf 5, timber and concrete, Neches River. $100,000. Terrell Bartlett, Calcasieu Bldg., San Antonio, engrs. W. L. Fulweiler, city engr.

Breakwater—Corpus Christi, Tex.—City and Nueces Co. Navigation Dist. 1, takes bids about Sept. 1, breakwater near ship channel. $200,000. R. J. Cummins, 727 Bankers Mortgage Bldg., Houston, engr. Noted Feb. 21.

Telephone System—Ft. Worth, Tex.—Southwestern Bell Telephone Co., 10th and Throckmorton Sts., plans extension of system and new equipment. $500,000.

Wharves, etc.—Houston, Tex.—Southern Pacific R.R. Co., Southern Pacific Bldg., had plans prepared wharves, cotton sheds, rail terminals, etc., Clinton St. on Buffalo Bayou. $1,000,000. J. M. Hull, Southern Pacific Bldg., ch. engr.

Gas Distribution System—Vernon, Tex.—D. M. Church plans gas distribution system. $25,000-$30,000.

Power Development—Oregon—The Columbia Valley Power Co., North West Bank Bldg., Portland, plans hydro-electric power developments on the Deschutes River, at Pelton, incl. dam 165 ft. high to develop 51,000 hp., also at Metolius, later, incl. dam, approximately 330 ft.

Street Lighting System — Los Angeles, Calif. — Had plans prepared ornamental street lighting system in Alvarado St. between 6th and Hoover Sts., 102 pressed steel standards. To exceed $25,000. J. A. Griffin, city engr.

Shed, etc.—San Diego, Calif.—Common Council plans election probably late in August, $225,000 bonds, shed, tracks, etc., on municipal pier 2. F. A. Rhodes, city engr.

Lighting System—Ford, Ont.—Plans extending electric lighting system on Sandwich St. and Drouillard Rd. $25,000. J. F. Foster, City Hall, engr.

BIDS DESIRED

Heating System—Brighton (Boston P. O.), Mass.—June 25, by School House Dept., City Hall, Boston, new heating system in Hobart St. school, here. T. P. Glynn, chn.

Heating System—South Boston (Boston P. O.), Mass.—June 20, by School House Dept., City Hall, Boston, new heating system in Parkman school, Bway., here. T. P. Glynn, chn.

Transmission Line—Cookeville, Tenn.—See "Waterworks."

Pier Shore Protection—Racine, Wis.—June 17, by Lakeshore Protection Comn., L. Sorenson, chn., Route 1 Sturtevant, 825 lin.ft. pile pier shore protection along shore of Lake Michigan, Caledonia Twp., for Racine Co. To exceed $25,000.

BIDS RECEIVED

Heating and Plumbing—Brooklyn, N. Y.—See Buildings.

Fences, etc.—New York—Bd. Water Supply, Municipal Bldg., New York, fences, etc., at various localities along the Catskill Acqueduct, Shandaken Tunnel and Schoharie Reservoir, from J. I. Burke Corp., 51 West 66th St., New York City, 3,395 cu.yd. earth excav. and refilling $2, 302 cu.yd. rock excav. and refilling $8.75, 2,600 bbl. cement $4, 1,070 cu.yd. concrete masonry $10, 1,583 rein.-con. end, corner and straining posts $3.18, 6,313 rein.-con. line posts and gate stops $1.50, 133,270 lbs. wire fencing $0.20, 86,950 lbs. reinforcing $0.075, 63,100 lbs. miscellaneous steel and iron $0.32, caring for and hanging 61 gates on hand $18.75, total $100,228.

Plumbing System, etc.—New York, N. Y.—Dept. Educ. at office W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, June 10, plumbing system in James Monroe High School, Boynton Ave. from East 172nd to 173rd Sts., Bronx Boro., from Wells & Newton, Ave. B and 17th St., $163,682. Noted June 5.

Bathing Pool—Phila., Pa.—See "Streets and Roads."

Sea Wall, etc. — Tampa, Fla. — Hillsborough Co., 2½ mi. sea wall, 11,750 cu.yd. concrete and 51,000 lin.ft. timber piling, from Erler Corp., (by B. B. Logan, agt.), Tampa, $298,000. Noted May 1.

Ornamental Lighting System—Los Angeles, Calif.—Ornamental lighting system in Whittier Blvd., from Electric Lighting Supply Co., 214 West 3rd St., $71,908; Central Ave., from C. W. Sparks, Henne Bldg., $83,632; Santa Monica Blvd., from R. A. Wattson, 4907 Melrose Ave., $66,712; Anaheim St., from F. Ziebarth, Los Angeles, $53,861. Noted June 5.

CONTRACTS AWARDED

Underpass Approaches—Hartford, Conn.—Bd. Contr. & Supply, Municipal Bldg., constructing approaches, excavating, entire masonry work and paving Capitol Ave. underpass and Commerce St., to A. Di Marko, 61 East Main St., Plainville, $52,489. Noted May 6.

Drip Pans—Brooklyn, N. Y.—Dept. Plant & Structures, Municipal Bldg., New York, drip pans under Williamsburgh Bridge, to Vulcan Rail & Constr. Co., 35 Meserole St., Brooklyn, $45,995. Noted June 5.

Heating and Ventilating Apparatus — Brooklyn, N. Y. — Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in P. S. 197 and P. S. 201, to D. J. Rice, 405 Lexington Ave., New York, $97,694 and $97,832 respectively; also in addition to Erasmus High School, Bedford Ave., to Austin Eng. Co., 121 West 42nd St., New York, $152,475.

Heating and Ventilating Apparatus, etc. —New York, N. Y.—Bd. Educ., 500 Park Ave., heating and ventilating apparatus in addition to P. S. 36, Black Rock Ave. to W. J. Olvaney Inc., 100 Charles St., $48,913; in P. S. 80, East Mosholu Parkway N. and Van Cortlandt Ave., to N. P. Lorenzo, 430 Pearl St., $46,200, plumbing in P. S. 80 to J. H. D. Goldblatt, 345 Madison Ave., $90,000.

Steel—New York, N. Y.—Transit Comn., 49 Lafayette St., furnishing and erecting structural steel for inspection shed No. 18 at 239th St. Yard, Bronx Boro., to Levering & Garrigues, 552 W. 23rd St., $81,970.

Coal Trestle, etc.—Phila., Pa.—S. Margolis Co., 3100 Germantown Ave., 192 ft. rein.-con. and steel coal trestle, and rein.-con. bins, to Armstrong & Latta, 1926 Sansom St.

Sea Wall and Fill—Bradentown, Fla.—Palma Sala Corp., 5,000 lin.ft. concrete and pile sea wall, 180,000 cu.yd. fill, to Thompson & Mosely, Inc., Healey Bldg., Atlanta, Ga., approximately $45,000.

Waterfront Improvements—Daytona, Fla.—City, waterfront improvements, incl. new sea wall, etc., to Barnhardt Constr. Co., Daytona, $202,000. Noted May 1.

Fill—Miami, Fla.—Fill and mounds for Bay Front Park, 1,080,000 cu.yd. fill, to Clark Dredging Co., Miami, $0.154 per cu.yd. Noted Apr. 17.

Paving Materials, etc.—St. Paul, Minn.—Paving materials for paving Selby Ave., between Nina Ave. and St. Albans St., 990 bbl. portland cement, to Thompson Yards, 2694 University Ave., $2.58 per bbl. delivered on street, 30 tons asphalt, to Standard Oil Co. of Indiana, 1937 4th St. Southeast, Minneapolis, $20 per ton, bulk, tank cars ;48.6 tons reinforcing for Water Dept., to Concrete Steel Co., 958 Barry Ave., $2,780, 148 ft. 60 in. inside diam. steel pipe, to St. Paul Fdry. Co., Como Ave. and Mackubin St., $2,713. Noted May 29.

Plumbing, Heating, etc.—Willmar, Minn.—See "Industrial Works."

Material and Equipment

PROPOSED WORK

Steam Roller—Binghamton, N. Y.—Common Council and Bd. Pub. Wks. plans to purchase steam roller. $7,500. B. Winsor, comr.

Fire Equipment—Beckley, W. Va.—Election June 24, $12,000 bonds for fire equipment. B. H. Ashworth, city recorder.

BIDS DESIRED

C. I. Pipe, etc.—Baltimore, Md.—June 25, by Bd. Awards, c.i. pipe, special castings and flanged special castings, 300,000 lbs. manhole, sewer inlet and similar iron castings. B. L. Crozier, City Hall, highway engr.

Concrete Mixer—Columbus, O.—A. W. Burns Constr. Co., 1400 North Grant Ave., in market for concrete mixer, medium size.

Cement, Sand, Gravel, etc. — Oshkosh, Wis.—C. R. Meyer & Sons Co., 50 State St., in market for sand, gravel, cement and 500,000 ft. lumber.

Steel Castings, etc.—St. Louis, Mo.—June 27, by G. E. Scott, purch. agt. Missouri-Kansas-Texas R.R., 1420 Ry. Exch. Bldg., 150 tons miscellaneous castings for locomotives and cars excluding couplers, bolsters and side frames, and 87 tons locomotive and car bolsters and side frames to be used during third quarter of 1924 as needed.

Road Oil—Merced, Calif.—Merced Co. in market 4,200 bbl. road oil.

Pump — Yreka, Calif. — City in market pump for well 110 ft. deep. U. F. Brown, city clk.

BIDS RECEIVED

Castings, Asphaltic Cement, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro. Municipal Bldg., steel castings from Erie Forge & Steel Co., 50 Church St., $4,455; 6,000 gal. asphaltic cement from Warner Quinlan Co., 79 Wall St., $28,650; 8,000 cu.yd. binder stone, from Calvin Tomkins Co., 30 Church St., $15,440. Noted June 12.

Posts and Brackets—Milwaukee, Wis.—Central Bd. Purchases, City Hall, 628 concrete posts and brackets for street lighting system, from Massey Concrete Products Co., Port Washington Rd., $21,987. Noted June 5.

Crushed Rock and Sand—Minneapolis, Minn.—For 5,000 cu.yd. crushed rock or gravel, from Anoka Crushed Stone Co., 1125 Plymouth Bldg., $2.20 per cu.yd. delivered; 2,500 cu.yd. sand, from Landers-Morrison-Christenson Co., 800 Builders Exch., and J. Wunder Co., Bway. and K St. N. E., each $0.35 per cu.yd. at pit.

Cement—Merced, Calif.—Merced Irrigation Dist., cement, from Cowell Lime & Cement Co., 2 Market St., San Francisco, $3.29, bulk; from Santa Cruz Portland Cement Co., Crocker Bldg., San Francisco, $3.69 sacks (allowance for returned sacks $0.10 each, discount for cash 10 days $0.05 bbl.). Noted May 22.

CONTRACTS AWARDED

Snow and Street Sweepers—Buffalo, N. Y.—W. F. Schwartz, comr. Pub. Wks., Municipal Bldg., furnishing 5 combination rotary snow and street swepers, to Pierce Arrow Sales Co., 754 Main St., $54,025; four swivel head snow and street sweepers and one combination snow and street sweeper, to Fox Rotary Snow Broom Co., 2 Lombardy St., Newark, N. J., $31,500 and $10,200 respectively; 2 snow loaders and 2 side discharge snow trailers, to Barber-Greene Co., Aurora, Ill., $10,970 and $4,470 respectively. Noted Mar. 27.

Castings—New York, N. Y.—J. Miller, pres. Manhattan Boro, Municipal Bldg., c.i. castings, to Flockhard Fdry. Co., 60 Polk St., Newark, N. J., $46,586.

Cement—New York, N. Y.—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., 3,000 bags portland cement, to D. J. McCarthy, 88 Audubon Ave., $2,040 (10c. returned on each bag). Noted May 22.

Lignin Binder—Trenton, N. J.—State Hy. Comn., 559,380 gal. lignin binder, to M. R. Young, 3 Fisher Pl., $49,604.

Road Oil—Nashville, Tenn.—For 250,000 to 500,000 gal. road oil, to Southern Oil & Tar Co., Clay and Fulton Sts., Louisville, Ky., $0.1775 per gal.

Road Oil—St. Paul, Minn.—State Hy. Dept., 1246 University Ave., 110,000 gal. road oil, to Standard Oil Co. of Indiana, 1937 4th St. S. E., Minneapolis, $0.0599 per gal. Noted May 1.

Asphalt, Cement, etc.—Brantford, Ont.—Furnishing asphalt and road oil to Imperial Oil Co., Ltd., Imperial Oil Bldg., Toronto, $24 ton and $8.45 per gal. respectively; cement to S. Rogers Co., 85 Bay St., Toronto, $3.32 per bbl. less $0.20 each for sacks, limestone dust to Bolander Bros., Brantford, $8.60 per ton.

Cement and Steel—Toronto, Ont.—Dept. Provincial Highways, Parliament Bldg., 100,000 bbl. cement to Canada Cement Co., Canada Cement Bldg., Montreal, Que., $350,000, 100,000 bbl., to A. Rogers Co., 85 Bay St., $350,000, 50,000 bbl., to Hanover Cement Co., Hanover, $175,000; Steel reinforcing to Trussed Concrete Steel Co., Ltd., Walkerville, $50,000.

Sand, Cement, etc. — Toronto, Ont. — Roger Miller & Son, Ltd., Harbor Comn. Bldg., furnishing sand and crushed stone, to Rogers Supply Co., 357 Bay St.; cement to J. Maloney, Ltd., 343 Dufferin St., and F. Ryan, 1319 Bloor St. W.; super cement to Super Cement Co., 86 Adelaide St. E.; and rubble, to F. Ryan, 1319 Bloor St. W.

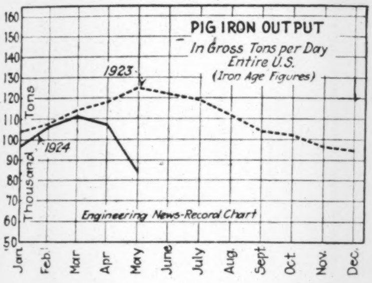
CONSTRUCTION NEWS

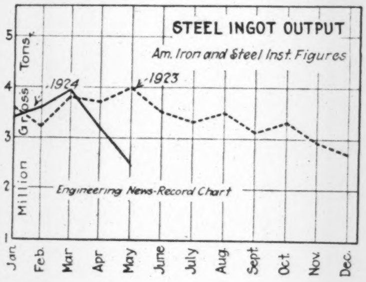
Engineering News-Record, June 26, 1924

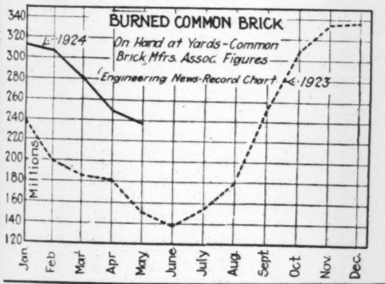
The Construction Barometer

Output and Demand Increased in Lumber, Cement, Brick and Other Building Materials—Iron and Steel Slower—Decline in Contract Letting During Past Three Weeks

A SLIGHT gain in private construction, particularly buildings, during the week ended June 19, was not sufficiently heavy to break the gradual downward trend in contract letting evident since the first of the month. New York City, however, offers an exception to other sections of the country in its consistent gains in volume of building permits. The present depression in iron and steel production and demand is depicted in the accompanying charts. In contrast with the declines in these basic materials is shown the increased demand for brick and steady gains in cement and lumber output. Demand and production of other building materials such as, lime, plaster, glass, hardware and concreting materials are also on the upgrade. Prices have remained fairly steady during the past three weeks with the exception of slight weakenings in lumber and steel.







Engineering News-Record Statistics

Minimum on water-works and excavations, $15,000; other public work, $25,000; industrial buildings, $40,000; commercial buildings, $150,000.

VALUE OF LARGE CONTRACTS LET IN THE UNITED STATES

Week Ended	Public Work	Private Work	Total Contracts
June 5	$27,725,000	$19,189,000	$46,914,000
June 12	19,883,000	13,002,000	32,885,000
June 19	15,360,000	14,283,000	29,643,000
3 Weeks	$62,968,000	$46,474,000	$109,442,000

LARGE BUILDING CONTRACTS—NUMBER AND VALUE

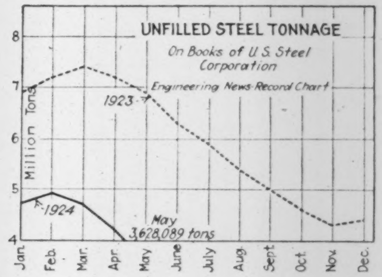
Week Ended	No.	Public Work	No.	Private Work
June 5	8	$4,801,000	47	$13,899,000
June 12	12	3,558,000	22	11,355,000
June 19	11	3,150,000	32	12,604,000
3 Weeks	31	$11,509,000	101	$37,858,000

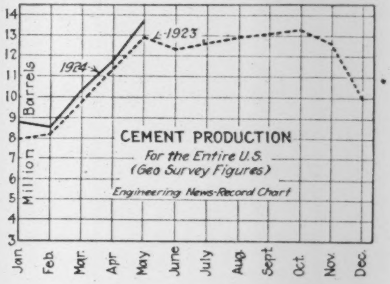
NUMBER OF LARGE JOBS NOW OUT FOR BIDS

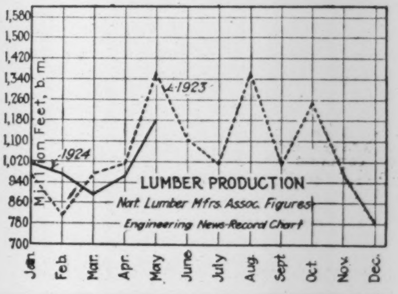
			Public		
Week Ended	Private	All Buildings	Streets and Roads	Waterworks and Sewers	All Public
June 5	35	53	95	55	250
June 12	27	48	99	41	236
June 19	12	25	84	29	191

DROP IN PINE LUMBER DURING WEEK

	Quoted on June 26 at	Price was	On
Structurals, Pittsburgh, 100 lb.	$2.10 @2.25	$2.10 @2.30	June 5
Cement, Chi., net bbl.	2.20	2.10	Jan. 24
Pine, N. Y., M. ft.	58.00	60.00	June 19
Fir, San Fran., M.ft.	36.00	38.00	Jan. 24
Common labor, hr...	.56	.55	Apr. 24







Waterworks

PROPOSED WORK

N. H., Berlin—Berlin Water Co., having preliminary plans prepared filtration plant. To exceed $40,000. Weston & Sampson, 14 Beacon St., Boston, Mass., archts.

N. Y., Saranac Lake—Election soon to vote on 22,500 bonds extending water supply system. D. S. Foster, village pres.

N. J., East Paterson — Making plans water and sewer supply systems. H. J. Harder, 129 Market St., Paterson, engr.

Va., Strasburg—See "Sewers."

Ky., Bowling Green—City retained J. W. Hill & Sons, engrs., 45-46 Bodmann Bldg., Cincinnati, O., to investigate better fire protection for High Level Dist. and improvement to water system. $45,000.

Ky., Paintsville—Takes bids about July 20, filtration plant, high service reservoir, pumping station, etc., $70,000. J. N. Chester Engineers., Union Bank Bldg., Pittsburgh, Pa., engrs. Noted May 29.

O., Westerville — July 17, by Village Comn., at office R. Biehl, city mgr., pumping station, etc.; adv. E. N.-R. June 26.

Mich., Flat Rock—Had plans prepared distribution system, 2,440 lin. ft. 8 in. and 18,240 lin.ft. 6 in. c.i. pipe. L. D. Beckley, 811 Owen Bldg., Detroit, engr.

Minn., Hibbing—Plans about 9,000 lin. ft. main extensions between Brooklyn and Kittzville Sts. $20,000. J. H. Murphy, city clk.

Mo., Morehouse — Making preliminary plans waterworks and distribution system, etc. $50,000. F. L. Wilcox, Chemical Bldg., St. Louis, engr.

Ark., Gurdon—Making preliminary plans waterworks, distribution system, and sanitary sewers. $100,000. W. H. Trevillion, mayor.

Tex., Crawford — Election soon $60,000 bonds extensions and improvements to present waterworks and electric systems.

Tex., Dallas—See "Streets and Roads."

Tex., Lufkin—Election soon $55,000 bonds improving present system, extending mains, larger pumping house and new pumping equipment. L. Dunn, city secy.

Tex., San Antonio—Making plans mains and laterals in Peach St. from Goliad St. to river, $90,000; Highland Park from Highland Park to creek at Presa and School Sts., $90,000; from Agrita and San Pedro Aves. to San Pedro Creek, $45,000; South Medina St. from Commerce to Vera Cruz Sts., $30,000; from Ave. D to San Antonio River, 25,000. I. Ewig, city engr.

Tex., Waco—See "Sewers."

Okla., Muskogee — Making surveys new rapid sand mechanical filtration plant. $100,000. J. R. March, City Hall, engr.

Okla., Texola—Voted $47,000 bonds new

Waterworks (Continued)

water system and electric light plant. Gant Baker Co., 1116 West Main St., Oklahoma City, engrs. Noted Apr. 17.

Que., Montreal — Executive Com. soon takes bids mains in 18 streets. $90,262.

Que., Valleyfield—Plans 2 bed filtration plant (rapid type). $90,000. A. Sullivan, town engr.

Ont., Belleville—Plans to install 3½ to 4 m.g. three stage against approximately 300 ft. head centrifugal gasoline driven pump. C. D. Campbell, city engr.

Ont., Ft. William—Soon takes bids 18,000 ft. 24 in. c.i. mains. $125,000. C. B. Symes, city engr.

Ont., Hamilton—Plans 12 in. mains in King St. and Kenilworth Ave. $36,000. Prices wanted on material. W. L. McFaul, city engr.

Ont., North Bay—Soon takes bids extending mains, 1,800 gal. pump, etc. $40,000. F. G. Mackie, town engr.

Ont., Oakville—Plans 20,000 ft. 6 in. c.i. mains, hydrants, valves, etc. $80,000. R. Smith, city engr.

Ont., Oshawa—Plans to install 1,200 gal. 3 stage electric pump in pumping station. W. C. Smith, city engr.

Ont., Sudbury—Making plans 10,000 ft. 6 in. c.i. mains, hydrants, etc. 30,000. F. C. Lane, Town Hall, engr.

BIDS DESIRED

N. Y., Brooklyn — June 27, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Foster, Lexington and Willoughby Aves., here.

N. Y., New York — June 30, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in McDonough Pl., Williamsbridge Rd., Crotona Parkway, East 172nd, McClellan, Whittier, Worthen, East 162nd and West 174th Sts., Compton, Cornell, Gillespie, Haight, Hobart, Lurting, Manor, Pugsley, Throgmorton, Waterbury, Anthony, College, Fowler, Mt. Eden and Randall Aves.

N. Y., New York — July 1, by N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., mains in Brandt and Timpson Places, Jerome, Netherland, Oxford, Palisade, Sheridan, Sylvan, Townsend and Walton Aves., Avenue, John, McClellan, East 174th, East 182nd, West 232nd, West 255th and West 256th Sts.

N. Y., Victor — July 7, by Village Trustees, additional water supply system, etc. Hopkins & Field, 349 Cutler Bldg., Rochester, engrs.; adv. E. N.-R. June 26.

N. J., Park Ridge — July 7, by Mayor and Boro Council, drilling artesian well, furnishing and installing pumping machinery and constructing pumping station. H. J. Harder, 129 Market St., Paterson, engr.

La., Shreveport — July 10, extending waterworks and sewerage systems, 2 mi. pipe, 3 mi. water conduit, 7,000 cu.yd. concrete. J. N. Chester Co., Union Bank Bldg., Pittsburgh, Pa., engrs.

Ind., Evansville—June 27, by Bd. City Trustees, 8,000 ft., 2 in. and 15,000 ft. 1 in. wrought iron galvanized water pipe. W. A. Bosse, secy.

S. D., Sioux Falls—July 7, by W. C. Leyse, city aud., improving waterworks, raise side walls, new fireproof roof, trackage for crane, 73 x 95 ft. waterworks building, 38 ft. high. $30,000. J. Schwartz, 404 Minnehehe Blk., archt.

Tex., Mart—July 1, by T. H. Lumpkin, mayor, 4 mi. pipe, earth dam, concrete spillway. Koch & Fowler, Central Bank Bldg., Dallas, engrs. Noted Apr. 17.

Tex., Wortham—Taking bids filter plant. $15,000. Koch & Fowler, Central Bank Bldg., Dallas, engrs.

Wash., Tacoma — June 7, by Bd. Pub. Wks., replacing parts of Green River gravity pipe line, 2,500 ft. 60 in. and 1,100 ft. 48 in. c.i. pipe, from Steel Tank & Gravity Co., Berkeley, Calif., $41,689.

Ont., Windsor—July 17, by Essex Border Utilities Comn., Heintzman Bldg., 10,000 ft. 24 and 36 in. steel or rein.-con. pipe line. J. C. Keith, ch. engr. Gore, Nasmith & Storrie, 625 Confederation Life Bldg., Toronto, consult. engrs.; adv. E. N.-R. June 26.

BIDS RECEIVED

Mass., East Boston (Boston P. O.)—Dept. Pub. Wks., City Hall, Boston, mains and sewers in Ashley St., here, from A. Boniffieldi Co., 52 Powder House Blvd., Somerville, $26,969. Noted June 5.

New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, gate, valves, hydrants, etc., for Williamsburg Conduit of Catskill aqueduct, Contr. 217, from Michigan Valve & Fdry. Co., 3631 Park St., Detroit, Mich., $153,280. Noted June 5.

O., Cleveland—Cleveland Water Dept., filtration equipment for Baldwin Filtration Plant, Contr. 51, from M. L. Bayard & Co. Inc., 20th St. and Indiana Ave., Phila., Pa., $291,525. Noted May 15.

O., Kent—M. P. Tucker, supt. Water Wks., Akron, 2 m.g. extention to coagulation basins, Contr. 235, here, from H. C. Felver, 7016 Euclid Ave., Cleveland, $84,885. Noted June 5.

Colo., Denver—Bd. Water Comrs. City and Denver Co., 1509 Cleveland Pl., intake from Marsten Lake to filter plant, Contr. B, from J. E. Young Constr. Service, Denver, $389,851. Noted May 15.

Calif., Yuba City — Reclamation Dist. 1660, Sacramento, rein.-con. pumping station, discharge conduit, six 24 in. pumps and motors, starters, valves and pressure systems, near here, general contract. from Davison & Nicholsen, 324 West Lafayette St., Stockton, approximately $30,000; electric work, from Butte Electric Equipment Co., 530 Folsom St., San Francisco, approximately $3,000; installing equipment, from Byron-Jackson Co., 55 New Montgomery St., San Francisco.

CONTRACTS AWARDED

N. Y., Brooklyn—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Fort Hamilton Parkway, Delamere Pl., Howard, Sutter, 9th, 15th, 16th, M, N and O Aves., 52nd, 54th 56th, 70th, 81st, East 8th, East 9th, East 27th, East 46th, East 52nd, East 54, East 55th,, East 56th, East 98th, West 1st and West 23rd Sts., to W. Norton, 510 West 149th St., $12,740. Noted June 19.

N. Y., Long Island City—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., New York, mains in Manley, Elmhurst and Lewis Sts., to S. Gallucci, 33 Railroad Ave., Corona, $5,795, mains in Foster, Skillman and Carolin Aves., to Paladino Contg. Co., 437 East 120th St., New York, 9,684. Noted June 12.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., to C. De Blasio, 339 7th Ave., Mt. Vernon, mains in Delafield, Newton and Sedgewick Aves., $16,685, in Barnes, Kingsland, and Monticello Aves. $7,490; to Draganetti Constr. Co., 1123 Clinton Ave., mains in Andrews, Liebig and Netherland Aves., $8,890; to Beaver Eng. & Constr. Co., 57 Chambers St., in Chittenden and 5th Aves., $16,100, transferring and rearranging connections in 10th Ave., Allen and Hudson Sts., $11,438. Noted June 12.

N. Y., New York—N. J. Hayes, comr. Water Supply, Gas & Electricity, Municipal Bldg., to Norton Eng. & Contg. Co., 510 West 149th St., mains in Gildersleeve, Hudson, Ludlow, Olmstead, Pugsley and Waterbury Aves., Barrette, Belton, Purdy, and East 172nd Sts., $11,300; White Plains Rd., Bryant, Bowler, Gleason, Leland, Noble and Wallace Aves., $8,300; to Melrose Constr. Co., 230 East 162nd St., Morris Lane, Balcom, Brinsmade, Butterick, Calhoun, Emerson, Graff, Harding, Hosmer, Huntington, Lawton, McDowell, Miles, Quincy and Robinson Aves., $12,828. Noted June 12.

N. Y., St. George—N. J. Hayes, comr. Water Supply, Gas & Electriicty, Municipal Bldg., New York, mains in Austin, Cedar and Carlton Aves., etc., to Knight & Demicco Inc., 448 East Tremont Ave., New York, $27,400. Noted June 12.

Pa., Phila.—Bureau Waterworks, 16 in. main in Margaret St., Contr. 673, to J. J. McHugh, 1617 Race St., $32,358; 8 soot blowers, Contr. 678, to Vulcan Soot Blower Co., 1104 Commonwealth Bldg., $3,952; 12,220 ft. c.i. laterals, Contr. 684, to M. Ware Cast Iron Pipe Co., 209 Crozier Bldg., $25,418; 500 kw. generators, Contr. 685, to Genl. Electric Co., Witherspoon Bldg., $22,738. Noted June 19.

Md., Baltimore—Trench excav. for Water Dept., to M. L. Quinn, 5308 York Rd., $23,570. Noted June 12.

O., Columbus—See "Streets and Roads."

O., Toledo—Lucas Co., (**e. e. means engrs. est.**), to S. L. Cothrel, Jefferson Ave., mains in Water Supply Line 69, $38,905 e. e. $42,278, 74, $23,406 e. e. $26,490, 80, $17,093 e. e. $18,391, 81, $16,076 e. e. $17,084; to J. L. Skeldon, Eng. Co., Nicholas Bldg., in 50, $18,388 e. e. $20,732, 73, $5,948 e. e. $6,703. Noted May 29.

Mich., Detroit — Bd. Water Comrs., to U. S. Cast Iron Pipe Co., East Burlington Ave., Burlington, N. J., 2,000 tons 48 in. pipe $50.95 per ton, 550 tons 36 in. and 250 tons 30 in., $51.95; to Amer. Cast Iron Pipe Co., Acipco St., Birmingham, Ala., 1,500 tons 24 in. pipe $51.55; to Lynchburg Fdry. Co., Peoples Natl. Bank Bldg., Lynchburg Fdry. Co., Peoples Natl. Bank Bldg., Lynchburg, Va., 1,005 tons 24 in. pipe $51.55, all f.o.b. Detroit.

Mich., Detroit—Bd. Water Comrs., G. H. Fenkell, genl. mgr., will lay 4,053 ft. 8 in. c.i. mains in Bella Vista, Fenelon, Gratiot and Washburn Aves., also 6,598 ft. 6 in. c.i. mains in Pinehurst Blvd., Ellsworth, Mendota, Crudder and Welland Aves., by day labor.

Wis., Racine—Racine Co., artesian well, 1,600 ft .deep, at county asylum, to W. H. Gray & Bro., 810 North Clark St., Chicago, Ill., at $4.50 per ft.

Minn., Minneapolis—Two 1 ton trucks for water dept., to W. H. Kuhlmann & Co., 605 Bway., 545 each. Noted May 22.

Minn., Rochester—Constructing 2,000 gal. concrete tank on 90 ft. tower, to Bland Eng. Co., L and Kennedy Sts. N. E., Minneapolis, $33,100. Noted Feb. 7.

Minn., Waconia—To Bruce-Bickelhaupt Des Moines, Ia., mains and pumping equipment, $30,216; to Chicago Bridge & Iron Works, 608 South Dearborn St., Chicago, Ill., tank and tower, $7,000. Noted May 29.

Mo., Hannibal—For 676 tons c.i. pipe and specials, to Natl. Cast Iron Pipe Co., Tarrant City, Birmingham, Ala.; 9 motor driven centrifugal pumps and switchboards, etc., to Dayton-Dowd Pump Co., Quincy, Ill.; general contract river station, force line and distribution system, to Merkle Mchy. & Contg. Co., 1733 Walnut St., Kansas City. Noted June 5.

Tex., Marshall — To Chicago Bridge & Iron Wks., Praetorian Bldg., Dallas, 300,000 gal. steel tank and tower $10,800; to Eddy Valve Co., Praetorian Bldg., Dallas, 25 hydrants $1,139; to N. O. Nelson, 915 McKinney St., Dallas, 55 valves and cocks $994, curb cocks $1,394, corporation cocks $1,029; to Texarkana Pipe Wks., Texarkana, sewer pipe $5,254; to Natl. Cast Iron Pipe Co., Great Southwestern Life Bldg., Dallas, c.i. pipe 281 tons 10 in. $16,790, 177 tons 8 in. $10,753, 41 tons 6 in. $2,491, 17 tons fittings $3,074. Noted May 15.

Colo., Denver—Bd. Water Comrs. City and Denver Co., 1509 Cleveland Pl., 64 m.g. rapid filter on north side Marston Lake, Contr. A, to Dutton & Kendall, 2104 Bway., approximately $1,250,000. Noted May 15.

Wash., Kalama—New water system, 5,000 ft. new gravity pipe line, to Cascade Pipe & Flume Co., 3839 West Florida St., $75,000. Noted Mar. 20.

Sewers

PROPOSED WORK

N. Y., Lackawanna — Common Council plans additions and improvements to disposal plant. $50,000-$60,000.

N. Y., Saranac Lake—Election soon to vote on $30,000 bonds extending storm and sanitary sewers. D. S. Foster, village pres.

Va., Strasburg — Plans election $40,000 bonds extending sewers and water mains. C. W. Heater, mayor.

W. Va., Princeton — See "Streets and Roads."

Mich., Port Huron—Had plans prepared 1¾ mi. trunk sewers 30-72 in. diam., concrete and vitr. pipe at depths from 10- to 20-ft., also 1½ mi. lateral sewers. 10- to 24-in. vitr., or concrete pipe. E. R. Whitmore, city engr.

Mont., Shelby—See "Streets and Roads."

Mo., Higginsville — Making preliminary plans new waterworks, distribution system and sewers in various streets. $90,000. E. T. Archer & Co., 609 New England Bldg., Kansas City, engrs.

Ark., Gurdon—See "Waterworks."

Tex., Dallas—See "Streets and Roads."

Tex., Houston — Voted $150,000 bonds storm and $350,000 bonds sanitary sewers. J. C. McVea, city engr. Noted May 22.

Tex., Lufkin — Election soon $70,000 bonds, extensions to sewerage system, mains, laterals, etc. L. Dunn, city secy.

Tex., Marshall—See "Unclassified."

Tex., Waco — Making plans disposal plants, incl. 2 pumping plants, grit chambers, 8 Imhoff tanks, 4 double sludge tanks, sprinklers, c.i. pipe, vitr. pipe, etc. $350,000. Terrell Bartlett Engrs., Calcasieu Bldg., San Antonio, engrs.

Calif., Alhambra—Defeated $30,000 bonds storm drains, etc. T. B. Downer, city engr. Noted June 5.

Calif., Compton—See Streets and Roads.

Calif., Los Angeles—See Streets and Roads.

Ont., Guelph—Plans 16,500 ft. 9 in. or more vitr. sewers, etc. $65,000. N. S. Nicklin, city engr.

Ont., Merritton—Plans 10,000 to 15,000 ft. 9 in. or more vitr. tile sewers. $100,000. R. Clark, city clk.

Ont., Oshawa—Making plans 20,000 ft. 9 and 15 in. vitr. storm and sanitary sewers. $45,000. W. C. Smith, city engr.

BIDS DESIRED

Massachusetts—See "Waterworks."

Mass., Newton—June 30, by G. E. Stuart, Street Commissioner, City Hall, West **Newton**, rein.-con. culvert for Newtonville **Drain**, Adams St. and Tarleton Rd. **$250,000.**

Sewers (Continued)

New Jersey—July 14, by Mayor and Boro Councils of Bergenfield and Dumont, Council Chamber, Dumont, sewage treatment works and appurtenances. T. F. Bowe, 110 William St., New York City, consult. engr.; adv. E. N.-R. June 26.

N. J., Dumont—July 14, by Mayor and Boro. Council, sewerage system. T. F. Bowe, 110 William St., New York City, consult. engr.; adv. E. N.-R. June 26.

N. J., Hasbrouck Heights (branch of Hackensack)—July 21, by Mayor and Boro. Council, Municipal Hall, sewers and disposal works. City Wastes Disposal Co., 45 7th Ave., New York City, engrs.; adv. E. N.-R. June 26.

Pa., Huntingdon—July 1, by Boro Council, one course rein.-con. paving and curbing 2,500 lin.ft. Moore, Mifflin, 17th and 18th Sts., 24, 27 and 35 ft. $30,000. J. W. Oates, Huntingdon, engr.

Pa., Phila.—July 2, by G. H. Biles, dir. Pub. Wks., outfall pier of Northeast Sewage Treatment Wks., Contr. 1, pier, incl. buildings, bulkhead and sheet piling fence, Contr. 2, mechanical equipment, Contr. 3, electrical equipment, Contr. 4, plumbing equipment, Contr. 5, heating equipment.

W. Va., Fairmont—July 18, by L. N. Satterfield, clk. Marion Co., grading and paving 5 mi. Buffalo Rd., 1 mi. Warrior Fork Rd., 2.7 mi. Bartholomew Fork Rd., Projects 1, 2 and 3, 1.2 mi. Whetstone Rd., Project 4, 5 mi. Whetstone Rd., Project 5, 2.4 mi. Dents Run Rd., Project 6, 1.4 mi. Campbells Run Rd., 1 mi. State Fork Rd., 0.5 mi. Mud Liex Run Rd., Projects 7, 8 and 12, 1.4 mi. Flat Run Rd., Project 9, 0.5 mi. Salt Lick Run Rd., 3.3 mi. Mannington-Clarksburg Turn pike, Projects 10 and 11, all in Mannington Dist. B. H. Palmer, co. engr. Noted Apr. 1.

La., Shreveport—See "Waterworks."

Ky., Poor Fork—See "Streets and Roads."

Mich., Grand Rapids—June 30, by F. H. Locke, city mgr., City Hall, 1st St. Relief Sewer, 3,700 ft. 10 ft. 6 in. by 8 ft. 5 in. special section rein.-con. sewer in open cut, also 1,550 ft. 60 in. circular sewer pre-cast rein.-con. pipe, rein.-con. in open cut, or concrete, segment block or brick in tunnel, etc. C. A. Paige, city engr.

Mich., Jackson—July 9, by City Clerk, rein.-con., brick and steel sewage pumping station. J. E. Whittaker, city mgr.; adv. E. N.-R. June 26.

Wis., Beloit—July 2, by Bd. Pub. Wks., 5,550 ft. 8 and 24 in. sanitary sewers in Public Ave., Broad and Pleasant Sts. Contr. 4; 3,765 ft. 24- to 60-in. storm sewers in Pleasant St., Public and East Grand Aves., Contr. 5 $80,000-$90,000. Former bids rejected. G. E. Helbink, City Hall, engr.

Ark., Pine Bluff — See "Streets and Roads."

Okla., Tulsa—July 31, by City, sanitary out-fall sewers and 2 disposal plants. $450,000. C. Schultz, city engr.; adv. E. N.-R. June 26.

BIDS RECEIVED

Massachusetts—Metropolitan Dist. Comn. 1 Ashburton Pl., Boston, in Mill Brook Valley sewer, Div. North Metropolitan sewer, in Medford, from General Contg. Co., Bath, Me., $117,356.

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, **(e. e. means engineers estimate)**, from B. Peconi & Son, Inc., 570 18th St., sewers in 55th St. 89% (e. e. $5,586), East 43rd St. 89% (e. e. $2,186); from Nazzerro & Querriero, West 9th St. 83.39% (e. e. $4,908), East 34th St. 92.82% (e. e. $4,782), East 27th St. 83.98% (e. e. $4,574), 77th St. 93.41% (e. e. $1,279); from Tomassetti & Co., Inc., 1133 60th St., Minna St. 86.86% (e. e. $3,573); from C. F. Vacharas, Inc., 645 40th St., East 13th St. 75.75% (e. e. $400). Noted June 12.

Pa., Phila.—Bureau Surveys, June 19, from J. Lombardi Co., Lincoln Bldg., sewers in J St. $142,963; from P. & J. Ellis, 3342 North 11th St., Tyson St. $71,668, Cranford Ave. $162,964 Benner St. $77,828; from H. Roberts Electric Supply Co., 1101 Race St., electric testing instruments $845; sedimentation units, North East Sewage Treatment Works, from W. T. Pangborne & Co., 1927 West Montgomery Ave. $2,296, from Roberts Filter Co., Darby, Contr. 1 $74,450, Contr. 3 $100,000, Contr. 4 $100,000.

Md., Baltimore—Mayor and City Council, 14,641 lin.ft. 8 and 10 in. vitr. sewers, etc., in Dists. 1-B, 33-C and 47-D, Contr. 212, from P. Marocco, 609 South Decker Ave., $46,478. Noted June 5.

Wis., Athens — A. A. Kreutzer, village clk., disposal plant and sewers in various streets, from C. Axelson, Athens, $23,529. Noted May 29 under "Waterworks."

Wis., Milwaukee—Dept. Pub. Wks., June 13, 8-24 in. vitrified clay sewers in Falling Heath Pl., Delaware, Holt, Illinois, Kinnickinnic, New York, Ohio and Pennsylvania Aves., from Wenzel & Henoch Co., 498 27th St., $37,963; 8- to 15-in. vitrified sewer in Indiana Ave., from W. T. Werner, 675 Hi-Mount Blvd., $10,032.

Calif., Stockton — City, College of the Pacific, Sewer, from W. J. Tobin, 527 Santa Ray Ave., vitr. pipe $31,167, concrete pipe $27,997.

CONTRACTS AWARDED

R. I., Providence—Concrete sewer in Manton Ave., to Bruno & Petitti, 18 Tremont St., Boston, Mass., $149,299. Engrs. est. $150,000. Noted Apr. 8.

N. Y., Brooklyn—E. Riegelmann, boro. pres., Boro Hall, to Booth & Flinn, Ltd., Green and Tompkins Aves., repairing relief sewers in Greene, Lewis and Marcy Aves., etc., $198,180; to Manmill Constr. Co., 2035 Douglas St., sewers in 65th St. 83.5% (e.e. $13,876) 68th St. 85.8% ($5,394) 7th Ave. 92.5% ($1,328) to S. Coenzo, 678 Glenmore Ave., East 32nd St. 84.75% ($11,779); to Tomasetti & Co., Inc., 1133 60th St., Colonial Rd. 83% ($7,038); to C. F. Vacharas, 645 40th St., 9th Ave., 111% ($1,852); to R. Iovine, 678 Glenmore Ave., Mansfield Pl. 75% ($1,400). Noted June 12.

N. J., Orange—G. C. Bergen, purch. agt. Essex Co., Court House, Newark, 5,710 ft. 12- to 24-in. rein.-con. storm sewers in Scotland St., here, to Luce & Tozzi, 321 Central Ave., $25,448. Noted May 29.

O., Cleveland—Cuyahoga Co., 11,500 ft. 8- to 36-in. tile sewers in Impvt. Dist. 59, to Langahan Constr. Co., Marshall Bldg., $55,410. Noted June 19.

O., Cleveland—Cuyahoga Co., 11,500 ft. 8- to 36-in. tile sewers in Impvt. Dist. 54, to D. Zullo, 10614 Frank Ave., $117,795. Noted June 5.

O., Cleveland—For 6,120 ft. 12- to 24-in. tile sewer in Broadview Rd., Denby Ave. and West 116th St., to Hadded & Kairal Constr. Co., 415 Eagle Ave., 36,477; Grand Division Ave., to W. McDowell & Son, 10319 Miles Ave., $17,215; 9,976 ft. 12- to 24-in. vitr. tile sewer East Blvd., Lacota Ave. and East 146th St., to Sprague & Burkhart, 11811 Browning Ave., $23,096; 2,500 ft. 12- to 24-in. vitr. tile sewer in East 143rd St., to E. Cesa & Son, 2624 Baldwin Rd., $11,450.

O., Columbus—See "Streets and Roads."

O., Garfield Heights (Cleveland P. O.) — Vitr. clay sewers in 5 streets, to A. Lanese Co., 15820 Kinsman Rd., Cleveland, $38,000.

O., Toledo — W. T. Jackson, dir. Pub. Serv., for Relief Sewer 1432, 10,527 lin.ft. 30- to 96-in. concrete segmental block pipe, to Anderson & Campbell, 81 Peterboro St., Detroit, Mich., $264,396.

O., Wadsworth—Sewage treatment plant, 2,456 ft. 6- to 12-in. tile pipe, 1,400 cu.yd. concrete, etc., to Lodi Concrete Co., Lodi, $87,327.

Mich., Detroit—Dept. Pub. Wks., to A. Rossi, 1338 Brady St., Easton Ave. Arm Sewer West of Livernois Ave. Sewer, $36,668; to J. Rossi, 4148 Seneca Ave., Easton Ave. Arm East of Wyoming Ave. Sewer, $38,651; Mack Ave. Arm West of Ashland Ave. Sewer, $27,324; to J. A. Mercier, 616 Hammond Bldg.; Harper Ave. Arm West of Bedford Ave. Sewer, $17,640; to C. R. Lennane & Co., 2631 Woodward Ave., Tireman Ave. Arm East of Wyoming Ave. Sewer; to Michigan Constr. Co., Detroit, Sewer 4126, $6,320; to Detroit Drainage Constr. Co., 5099 LeMay Ave., Sewer 4128 $19,227; to J. Leo, 1762 Puritan St., Sewer 4125 $1,450, Sewer 4138 $725; to Central Constr. & Eng. Co., Detroit, Sewer 4139 $4,841; to Western Constr. Co., 1208 Ford Bldg., Sewer 4141 $2,290; to Cousino-Mercier Co., 13183 Wark St., Sewer 4127 $1,542.

Wis., Kenosha—C. M. Osborn, city mgr., 48 and 30 in. rein.-con. and 12- to 24-in. vitr. sanitary and storm sewers in Clarion Court, Butcher, Salem, Park and Sheridan Aves., Wood and Garfield Sts., etc., to M. Thomsen, 1020 Salem Ave., $82,937. Noted May 22.

Wis., Milwaukee—Metropolitan Sewerage Comn., 508 Market St., 6,267 lin.ft. 18 and 21 in. terra cotta pipe and 335 lin.ft. 12 in. storm sewers in National Ave. extension, to Wenzel & Henoch, 498 27th St., $90,671.

Ia., Ames—For 12,600 lin. ft. 8 in. vitr. sewers, 35 manholes, 3,350 lin. ft. 10- to 15-in. storm sewers, 22 catch basins 8 manholes, to Blakemore, Haugsted & Armstrong, Nevada, Ia. To exceed $25,000. Noted June 6.

Minn., Duluth—See "Streets and Roads."

Kan., Burlington—Disposal plant, 1,600 ft. 12 in. vitrified sewers, etc., to C. J. McCoy Constr. Co., Emporia, $38,529. Engrs. est. $30,000. Noted Oct. 4.

Mo., St. Louis—Sect. B, North Baden Public Sewer, 3,525 ft. 11 ft. 2½ in. x 14 ft., rein.-con. horseshoe, to G. G. Prendergast & Co., 6157 Wagner Ave., $174,769, engrs. est. $208,000; Sect. A, Ohio-Montrose Public Relief, 4,077 ft. 7 x 7 ft. horseshoe concrete lined in tunnel, 1,943 ft. 5 x 5 ft. horseshoe, seven shafts to tunnel, 200 ft. 7 x 7 ft. horseshoe rein.-con. in open cut, also 2,100 ft. 8- to 66-in. sewers, to United Constr. Co., Pontiac Bldg., $301,861, engrs. est. $305,000. Noted June 12.

Tex., Marshall—See "Waterworks."

Calif., Glendale — See "Streets and Roads."

Calif., Niles—Niles Sanitary Dist., disposal system, to Deuble & Garden, 386 15th St., Oakland, $39,975. Noted June 12.

Calif., Suisun—See "Streets and Roads."

Que., Montreal—To Toussaint Bros., 2353 St. Denis St., 740 ft. 12 in. tile sewer in Gouin Blvd. $5,594, 594 ft. 2 x 3 brick sewer in Lafond St. $10,851, 642 ft. 2 x 3 brick in 12th Ave. from Masson St. to Rosemount Blvd. $11,450, and 1,320 ft. in 12th Ave. from Rosemount Blvd. to Belanger St. $25,744, 581 ft. 14th Ave. $11,106, 633 ft. 13th Ave. $11,907. Noted June 5.

Que., St. Jerome — Will lay 20,000 ft. clay pipe sewers in Parant, Laviolette, St. Adele, St. Georges, St. Sauveur, St. Jovite and St. Alexander Sts., by day labor. $80,000. A. Latour, city engr.

Ont., Chippawa—For 30,000 ft. 9 in. up vitr. sewers, to F. F. Fry Ltd., 43 Scott St., Toronto. Engrs. est. $70,000. Noted May 22.

Ont., Toronto—For 2 mi. South Parkdale and Exhibition brick trunk interceptor sewer, to J. H. McKnight Constr. Co., 88 St. Davids St., $80,045. Engrs. est. $80,000.

Bridges

PROPOSED WORK

Massachusetts — Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, plans Arsenal St. bridge over Charles River between Boston and Watertown. **$175,000.** J. R. Rablin, comr.

N. Y., Ebenezer—Election June 27, $35,000 bonds for rein.-con. bridge over Cazenovia Creek.

N. J., Salem—Bd. Freeholders Salem Co., plans bridge over Penns Neck. $100,000. H. B. Keasbey, Salem, engr.

Ind., Evansville—States of Indiana, Indianapolis, and Kentucky, Frankfort, plan bridge over Ohio River, near here. To exceed $1,000,000.

Tex., San Antonio—Making plans bridges rein.-con. and steel, 4th St. $25,000; Martin St. $25,000; Market St. $30,000; South Prest St. between Villita and Market Sts. and South Prest St. between College and Crockett Sts., $25,000 and $50,000 respectively. I. Ewig, city engr.

Ont., Hamilton—Making plans rebuilding Garth St. Bridge, cement and steel. $25,000. W. L. McFaul, city engr.

BIDS DESIRED

New Hampshire — See "Streets and Roads."

Massachusetts—July 3, by Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, altering, strengthening, repaving and repairing, etc., Harvard Bridge over Charles River, between Boston and Cambridge. $600,000. R. J. Rablin, comr. Noted May 22.

Mass., Holyoke—July 1, by Bd. Pub. Wks., City Hall, 3 span 110 ft. steel deck bridge, 60 ft. across second level canal on Cabot St. $40,000. F. E. Pond, City Hall, engrs. Noted May 1.

Pa., Phila.—July 16, by Delaware River Bridge Joint Comn., 806 Widener Bldg., for superstructures of Philadelphia and Camden, N. J., approaches of bridge over Delaware River, Contrs. 17 and 18. G. Pinchot, chn.; adv. E. N.-R. June 26.

Pa., Norristown—July 15, by W. C. Irvin, controller Montgomery Co., rein.-con. bridge No. 278 over Perkiomen Creek at Schwenksville, Perkiomen Twp.; adv. E. N.-R. June 26.

Georgia—July 2, by State Hy. Dept., East Point, steel and concrete bridges in Clay, Telfair, Jefferson, Whitfield, Bryan, Effingham, Jackson, Walker, Raburn, and Franklin Counties. W. R. Neel, highway engr.

Florida—July 23, at office of Bay Biscayne Impvt. Co., 105-107 Northeast 2nd Ave., Miami, for 12 rein.-con. bridges, 2 double-leaf Bascule type steel draw bridges across Biscayne Bay, between Miami and Miami Beach, Dade Co. H. Stanley, Ft. Landerdale, consult. engr.; adv. E. N.-R. June 26.

Fla., Key West—July 7, by J. O. Kuchheiner, chn., Bd. Comrs. Monroe Co., steel draw-bridge, piers, abutments, operating machinery, fender system, etc., at North End of Key Largo, over Barnes Sound. $75,000. Noted May 8.

Louisiana—July 2, by State Hy. Dept., Reymond Bldg., Baton Rouge, 53 creosoted pile trestle bridges on Hammond-New Orleans Highway, in Tangipahoa and St.

Bridges (Continued)

John the Baptists Parishes, 628,000 ft. creosoted pine lumber, 616,000 ft. untreated lumber and 74,000 creosoted piling. J. M. Fourmy, state highway engr.

Kentucky—July 15, by State Hy. Dept., Frankfort, one 100 ft. steel span bridge, concrete substructure, over Georges Creek, Sta. 634-90, Lawrence Co.; two 162 ft. and three 50 ft. steel span bridges, concrete abutments, over Salt River, Sta. 966-25. Bullitt and Spencer Counties. J. S. Boggs, highway engr.

Ill., Chicago — July 9, by South Park Comrs., 57th St. and Cottage Grove Ave., rein.-con., super-structure and pile foundations for South Park Boulevard viaduct. Condron Co., consult. engrs.; adv. E. N.-R. June 26.

Ia., Marengo—July 1, by Auditor Iowa Co., 7 concrete box culverts, one 90 ft. truss span, one 3 span through truss bridge 343 ft. long. $25,000. F. A. Peterson, co. engr.

Tex., Austin — Travis Co. taking bids concrete bridges and metal culverts on Pflugerville - Cameron - Dessan - Merrilltown Rds., 790 cu.yd. concrete, 58,277 lb. reinforcing, 2,237 cu.yd. structural excav., etc. O. Leonard, co. engr.

BIDS RECEIVED

Massachusetts—Metropolitan Dist. Comn., 1 Ashburton Pl., Boston, Western Ave. bridge, over Charles River from Brighton to Cambridge, from T. Stuart Sons, Newton, $269,212.

Pennsylvania—See "Streets and Roads."

Ohio—Dept. Hys. & Pub. Wks., Columbus, June 13, bridge and approaches on Sect. "G-1" Akron-Canfield Rd., Mahoning Co., from N. R. Porterfield, Youngstown, $15,965; concrete girder bridge Sect. "G" Marion-Galion Rd., Morrow Co., from C. A. Mauer, Sidney, $3,995; new abutments Sect. "L" Mt. Gilead-Mansfield Rd., Morrow Co., from Coharis & Gerkins, Toledo, $8,372; bridge approaches Sect. "D-1" Portsmouth-Columbus Rd., Pike Co., from Ogonea Bridge Co., Lebanon, $16,210. Noted June 5.

Ohio—See "Streets and Roads."

Missouri — State Hy. Dept., Jefferson City, June 10, two 10 ft. rein.-con. slab spans, etc., over stream, St. Clair Co., from C. F. Johnson, Warrensburg, $1,701; two 16 ft. rein.-con. slab spans, etc., over Dry Branch, St. Francois Co., from J. T. Moss, Webster Groves, $2,132; two 10 ft. rein.-con. slab spans, etc., over creek, Henry Co., from A. T. Cook, Ottowa, Kan., $2,737; one 40 ft. rein.-con. deck girder span over stream, Warren Co., from C. P. O'Reilly & Co., Wainwright Bldg., St. Louis, $6,772; two 10 ft. rein.-con. slab spans, etc., over creek, St. Louis Co., from Public Wks. Constr. Co., Wainwright Bldg., St. Louis, $2,774; one 80 steel truss span, etc., over Cooper Creek, Henry Co., from M. E. Gillioz, Monett, $9,504; two 20 ft. concrete slab spans, etc., over Wet Fork Creek and two 20 ft. rein.-con. slab spans over Wolf Creek, both Wayne Co., from C. T. Fogle Constr. Co., Jefferson City, $5,421 and $6,610 respectively; twenty-two 25 ft. I beam spans, etc., over overflow of Grand River and Shoal Creek, Livingston Co., from Pittsburg-Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia., $26,864; one 25 ft. rein.-con. deck girder, etc., over North View Branch, and one 80 ft. steel truss span, etc., over Niaugua Creek, both Webster Co., from C. F. Johnson & Sons, Buffalo, $2,632 and $8,831 respectively; one 40 ft. rein.-con. deck girder over Little Honey Creek, and one 40 ft. rein.-con. deck girder over Honey Creek, both Lawrence Co., from Eastly Bros. & Hartly, Aurora, $6,480 and $6,510 respectively. Noted June 5.

Calif., Los Angeles — See "Streets and Roads."

CONTRACTS AWARDED

Pa., Phila.—Delaware River Bridge Joint Comn. at Room 806, Widener Bldg., completion of anchorage bridge over Delaware River between here and Camden, N. J., Contr. 15, to Keystone State Constr. Co., 210 South 13th St., $2,977,450. Noted May 22.

O., Milford—Hamilton Co. (Cincinnati) substructure for 260 ft. steel truss bridge, to E. M. Scully, 1431 Eastwood Ave., Columbus, $64,860, engrs. est. $70,500; superstructure for same incl. 800 cu.yd. 1:2:4 concrete, 1,000 ft. 20 in. concrete piling, etc., to D. P. Foley, 3209 Boudinot Ave., Cincinnati, $25,860, engrs. est. $28,300. Noted June 12.

Ind., Lawrenceburg — Dearborn Co., Wilmington Bridge, concrete arch, to C. Runck, Jr., 1st Natl. Bank Bldg., Cincinnati, O. $69,983. Engrs. est. $75,000. Noted June 19.

Idaho — Bureau of Highways, Boise, 3 bridges on North and South Highway, Potlatch Hy. Dist., Latah Co., to F. W. Straw, Lewiston, $4,172, $6,994 and $29,439 respectively.

Oregon—State Hy. Comn., Salem, 3 span, rein.-con. bridge, in Natl. Forest, Josephine Co., to J. Varner, Grants Pass, $29,225.

Ore., Harrisburg—State Hy. Dept., Salem, steel and concrete bridge, three 180 ft. spans and 1,675 ft. trestle, over Willamette River, here, to Portland Bridge Co., Yeon Bldg., Portland, $183,200. Engrs. est. $225,000. Noted May 15.

California — State Hy. Comn., Sacramento, reflooring and painting nine 80 ft. steel span bridge type B wearing surface, over Dry Creek, near Galt, Sacramento and San Joaquin Counties, to M. B. White, Stockton, $15,252. Engrs. est. $24,438. Noted June 12.

Dam

PROPOSED WORK

Que., Ulverton—See "Unclassified."

Railways

PROPOSED WORK

Massachusetts—City of Boston plans extending Boston Elevated Railway of Rapid Transit Line from Welles Ave., Dorchester to Ashmont Station, Ashmont. E. R. Stringer, Transit Dept., 1 Beacon St., Boston, ch. engr.

Washington—T. R. Beeman, engr. King Co., Seattle, preparing plans track undercrossing beneath Chicago, Milwaukee & St. Paul Ry. Company's lines west of Renton on Pacific Highway, to shorten route from East Valley. $40,000. King Co. will pay 60% and railroad 40% of cost.

BIDS DESIRED

Michigan—Calumet & Hecla Consolidated Copper Co., Calumet, taking bids 9.3 mi. single track railroad, near Calumet, Houghton Co.; adv. E. N.-R. June 26.

CONTRACTS AWARDED

Quebec—Montreal Tramways Co., Craig St. W., Montreal, will construct new tracks on concrete slab foundation, standard 6 x 8 wooden ties, 2 ft. centers and steel tie rods 6 ft. centers, electric welded joints, in 1.606 mi. Cote Des Neiges Rd. 63,000, 0.585 in Mt. Royal Ave. $47,000, 1.314 mi. Girouard Ave. $60,000, 0.125 mi. St. James St. $20,000, 0.535 mi. Notre Dame St. from Inspector to McGill Sts. $43,000, 0.178 mi. Notre Dame St. from Fort to Colborne Sts., $14,500, 1.14 mi. Frontenac St. $68,000, 0.216 mi. Craig and Little Craig Sts. $99,000, 0.375 mi. Dorchester St. $30,000, 0.482 mi. Greene Ave. $29.000, 0.242 mi. Guy St. $19,500, 0.227 mi. Wellington St. $18,000, 0.615 mi. St. Denis St. $50,000, 0.254 mi. Viau St. $51,000, 1.139 mi. Iberville St. $45,000, and 2 mi. Cartierville line double track and bridge under Canadian Pacific Ry. tracks, $70,000, all by day labor. P. A. N. Seurot, ch. engr.

Excavation, Drainage, Irrigation

PROPOSED WORK

Tex., El Paso—Hudspeth Co. Conservation & Reclamation Dist. 1, soon takes bids 40 mi. open drains, 2,000,000 yd. excav., 30 mi. main canal, 800,000 yds. excav. $150,000. C. M. Ainsworth, Ft. Hancock, engr.

Calif., Tracy—Banta-Carbona Irrigation Dist. plans election to vote on $705,000 bonds, pumping plants, pipe line canal, bridges, railroad crossings, 135,000 cu.yd. excav., in laterals, dredging intakes, etc. W. D. Harrington, Tracy, engr.

BIDS DESIRED

La., Shrewsbury—July 1, by Bd. Comrs. 4th Jefferson D. D., 50 mi. drainage canals and 16 mi. protection levee in Dist. 3. $1,250,000. A. T. Dusenbury, 409 Marine Bank Bldg., New Orleans, consult. engr. Noted Apr. 24.

CONTRACTS AWARDED

Miss., Clarkedale—Yazoo-Mississippi Delta D. D., 6,900 ft. levee, 15.3 ft. average height, at Polks Landing, 230,000 cu.yd. levee, 38,000 cu.yd. banquette, 13,000 cu.yd. muck ditch, to J. W. Noble, Fayette, $0.256 per cu.yd., total $71,936. Noted June 6.

Wis., Milwaukee — J. H. Fowles, secy. Sewerage Comn., 508 Market St., backfilling around sewage disposal plant, Jones Island, to W. H. Gillen, 902 Summit Ave., 80,000 cu.yd. dredging at $0.875 per cu.yd. and 450 tons riprap at $10 per ton. Noted June 19.

Tex., Dallas—First Baptist Church, Magnolia Bldg., excavation for 6 story and basement, 131 x 131 ft. church, St. Paul & San Jacinto Sts., to R. J. Estep & Co., Wilson Bldg., $25,000. Noted Jan. 17 under "Buildings."

Okla., Oklahoma City—Enlarging drainage ditch at west side of reservoir, grading and bank protection, 300,000 cu.yd. excav., to A. A. Davis & Co., Grain Exch. Bldg., $74,133. Engrs. est. $80,000.

Streets and Roads

PROPOSED WORK

Massachusetts—Dept. Pub. Wks., State House, Boston, plans rebuilding Hingham St., in Rockland. $30,000. W. F. Williams, comr.

Mass., Boston—City Planning Bd., City Hall, plans widening Chauncy St. between Summer and Bedford Sts. $70,000. F. H. Fay, chn.

Mass., Brighton (Boston P. O.)—Dept. Pub. Wks., City Hall, Boston, plans reconstructing and improving Richards St., here. $25,000. J. A. Rourke, comr.

Mass., Natick — Bd. Pub. Wks., plans reconstructing East and West Pond Sts. $30,000.

Mass., Springfield — City Planning Bd., City Hall, plans 80 ft. boulevard from Locust St., to Columbus Ave. $125,000. F. C. Parker, chn. Bd. Pub. Wks.

N. Y., Little Falls—Common Council and J. J. Kearns, mayor, making plans paving various streets. $100,000. Address City Eng. Dept., engrs.

N. Y., Syracuse—Bd. Pub. Wks. takes bids about July 1, paving various streets. $250,000-$300,000. Address J. L. Schmeider, comr.

Pa., Rankin—Election July 24, $175,000 bonds street improvement.

W. Va., Princeton—Voted $100,000 bonds for road and sewer improvements. W. A. Cooper, Princeton, engr. Noted Apr. 10.

W. Va., Sutton — Voted $52,000 bonds paving Pike and other streets. J. Blackwood, town clk.

Miss., Philadelphia—Neshoba Co. voted $250,000 bonds for roads and bridges.

Miss., Quitman—Clark Co. election July 1, $100,000 bonds about 30 mi. gravel roads.

La., New Orleans — A. Black, comr. Dept. Pub. Property, submitted tentative program for paving work during 1925 to Comn. Council, incl. 20 streets newly paved, and extensions and connections on 5 streets.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, takes bids about July 16. grading and surfacing, probably concrete, 12 mi. Columbia-Mt. Pleasant Rd., 18 ft., Maury Co. J. G. Creveling, highway comr. Noted May 22.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, making surveys improving approximately 15 mi. Knoxville-Grainger Co. line Rd., on Memphis-Bristol Trunk Route, Knox Co. G. J. Creveling, highway comr.

Ky., Henderson — Making surveys and plans paving Main, 1st, 2nd, 3rd and Letcher Sts. $45,000. S. H. Kimmel, city engr. Noted June 12.

Ky., Murray—Plans improving 7 blocks Main St., 17,000 sq.yd. concrete, 6,600 lin. ft. curbing, 6,000 cu.yd. excav. $55,000. H. C. Doran, Murray, engr.

Ohio—Dept. Hys. & Pub. Wks., Columbus, cancelled bids June 13, grading, bridging and paving 3.331 mi. Sect. "G" Columbus-Cincinnati Rd., Butler Co., Sect. "B-1" Kenton-Upper Sandusky Rd., Wyandot Co., both with bituminous macadam, asphalt or tar; grading 1.598 mi. Sect. "D-2" Woodsfield-Clarington Rd., Monroe Co. Noted June 5.

O., Zanesville — Muskingum Co., plans surfacing 4 mi. Marysville Pike, tar bound macadam on limestone, $70,000; 4 mi. South River Rd., brick or cement, $90,000, both 20 ft. wide.

Ind., Anderson—Plans concrete paving and cement curbing 9th and Rocky Sts. $57,000. M. H. Donney, City Hall, engr.

Ind., Frankfort—Clinton Co. plans grading and graveling 2.6 mi. Grace Smith Rd., 24 ft. $27,049. L. Fisher, Frankfort, engr.

Ind., Goshen—Elkhart Co. plans grading and graveling 17,807 ft. Husband Rd., 18 ft., $26,853. C. L. Kinney, Goshen, engr.

Ill., Belleville—Plans grading, curbing and surfacing in Twelve Oaks addition, 6,400 ft. rein.-con., brick on concrete or asphaltic concrete, $63,000. C. A. Heinzelmann, City Hall, engr.

Wis., Juneau—Making plans new pavements on Maple Ave., Mill, South Main, Center, West, North and Depot Sts. To exceed $25,000. O. A. Schumacher, city clk. Engineer not selected.

Ia., Eddyville — Plans paving about 8 blocks Walnut St. $30,000. Brown & Cook, Ottumwa, engrs.

Ia., Marshalltown—Plans paving North 3rd Ave., about 20,005 sq.yd. 8 in. rein.-con., and rebuilding 1,600 lin.ft. curbing. $45,000. O. C. Herm, city engr.

Kan., Goodland—Sherman Co. soon takes bids grading 8.523 mi. Federal Aid Project 202-A, 28 ft. H. R. Johnson, co. engr.

Kan., Madison—Plans improving 7 blocks West Main, 3rd and 7ts Sts., etc., 15,000

Streets and Roads (Continued)

sq.yd. vertical fibre brick paving, 4,200 lin. ft. curbing, 4,500 cu.yd. earth and 300 cu. yd. rock excav. $60,000. V. V. Long & Co., 1300 Colcord Bldg., Oklahoma City, engrs.

S. D., Sioux Falls—Plans paving, etc., about 11,773 sq.yd. Dakota Ave. between 3rd and Russell Sts. $30,000. S. B. Howe, city engr.

Mo., St. Louis—Bd. Pub. Serv., 208 City Hall, making plans grading and paving with asphalt, willite, warrenite, asphaltic concrete, vitr. brick, Kentucky rock asphalt or concrete, Dewey Ave. 8,500-$10,400, Elias Ave. $26,200-$29,100, Ester Ave. $8,100-$9,402; grading, curbing and paving with concrete, vitr. brick, warrenite, asphalt, willite or asphaltic concrete, Famous Ave. $16,200-$18,700, Pennsylvania Ave. $5,100-$5,700, Leola Ave. $14,600-$16,600, Robert Ave. $20,400-$23,500, Thekla Ave. $9,800-$10,900, West Park $10,000-$11,600, Wilson Ave. $14,000-$14,900; grading, adjusting or replacing curb and paving with warrenite or willite, Westminster Pl., $31,000-$31,500. W. W. Horner, 300 City Hall, engr.

Tex., Anahuac — Chambers Co. voted $100,000 bonds roads in Precinct 1. H. J. Walger, Anahuac, engr. Noted May 8.

Tex., Anderson — Grimes Co. making plans constructing various roads. $50,000. Quarels, Adams & Gaines, Anderson, engrs.

Tex., Bellville—Austin Co. plans grading and rein.-con. paving, etc., 17.5 mi. State Highway 36, 18 ft. $625,000. H. Schroeter, Wallis, co. engr.

Tex., Centerville—Leon Co. voted $140,000 bonds improving Teague-Navasota Rd. and San Antonio Rd. between Leon and Madison Counties, Normangee Precinct. W. D. Lacy, co. judge. Engineer not selected.

Tex., Colorado — Mitchell Co. defeated $325,000 bonds improving various roads. F. F. Du Bose, co. engr. Noted May 1.

Tex., Dallas—S. G. Hines & Co., Magnolia Bldg., making plans paving, water extensions, sewers, etc., in Park Estates. $75,000. Koch & Fowler, Central Bank Bldg., engrs.

Tex., Fairfield — Freestone Co. making plans grading and rein.-con. paving 6.85 mi. State Highway 7, 18 ft. $250,800. J. E. Johnson, co. engr.

Tex., Groveton — Trinity Co. election July 12, $60,000 bonds for roads in Rd. Dist. 1. F. J. Berry, co. judge.

Tex., Houston — Voted 200,000 bonds graveling and $500,000 bonds permanent paving various streets. J. C. McVea, city engr.

Tex., Houston—Making plans permanent paving various streets. City to pay for intersections only with recent bond issue of $500,000. Total $2,500,000. J. C. McVea, city engr.

Tex., Karnes City—Karnes Co. election June 28, $125,000 bonds 9 mi. road in Rd. Dist. 5. O. N. Powell, Kenedy, co. engr.

Tex., Lufkin—Angelina Co., soon takes bids grading and gravel surfacing, etc., 15.64 mi. State Highway 63, 16 ft. $190,000. G. R. Abney, co. engr. Noted Apr. 24.

Tex., Marshall—See "Unclassified."

Tex., Refugio—Refugio Co. voted $375,000 bonds roads in Austwell Rd. Dist. J. F. Vance, co. judge.

Tex., Vernon — Wilbarger Co. making plans grading, rein.-con. paving, etc., 5.25 mi. State Highway 5, 18 ft. $190,800. J. B. Nabors, co. engr.

Idaho — Bureau of Highways, Boise, **(F. A. P. means Federal Aid Project)**, rejected bids paving, surfacing, etc., F. A. P. 73-A, Sta. 13-280, and F. A. P. 64-B and 73-A between Sta. 280 and Wallace, both from Kellogg to Wallace, also F. A. P. 73-B between Stations 239 and 311 plus 49, from Wallace to Mullan, all Coeur d'Alene-Yellowstone Trail, Shoshone Co. Noted May 8.

Wash., Seattle—Comrs. King Co., take bids about July 14, paving 4 mi. Renton-Maple Valley Rd., from Renton East. $125,000. T. R. Beeman, Seattle, engr.

Calif., Alhambra — Defeated $240,000 bonds paving Valley Blvd. and Main St. T. B. Downer, city engr. Noted June 5.

Calif., Compton — Plans paving and sewers portions of Chester, Bway., Pearl Sts., etc. To exceed $25,000.

Calif., Los Angeles — Made plans and soon takes bids, improving Sate Ave. between Ventura Blvd. and San Luis Ave., 47,250 cu.yd. cut, 8,670 cu.yd. fill, 23,145 ft. light curb, 3,932 ft. heavy curb, 69,859 sq.ft. walks, storm drain and ornamental lighting system. J. A. Griffin, city engr.

Calif., San Diego—Made plans improving El Cajon Ave., 245,828 sq.ft. 2 in. asphaltic concrete on 3 in. bituminous, 285,085 sq.ft. 1½ in. asphaltic concrete on 4 in. concrete, 33,243 sq.ft. concrete sidewalk, etc. F. A. Rhodes, city engr.

Calif., Seal Beach—Plans paving Ocean Ave. To exceed $25,000.

Calif., Sonora—Tuolumne Co. rejected bids improving roads from Tuolumne to Sonora and from Columbia to Sonora, etc. Will revise plans and take bids on new types paving. Noted June 19.

Que., Valleyfield — Plans 25,000 sq.yd. tarvia or asphalt pavement. $50,000. A. Sullivan, town engr.

Ont., Agincourt—Toronto & York Rds. Comn., 57 Adelaide St., E., Toronto, plans 15,000 sq.yd. bituminous macadam pavement here. $30,000. E. A. James, 57 Adelaide St. E., Toronto, engr.

Ont., Belleville—Plans 6,500 sq.yd. asphalt and concrete pavements on various streets. $30,000. C. D. Campbell, city engr.

Ont., Cornwall—Stormont, Leeds & Glengarry Counties, plan to expend $400,000 new macadam roads, pavements and bridges. J. G. Cameron, County Bldg., engr.

Ont., Ft. William—Soon takes bids improving 2 mi. roads, gravel $18,000, and bituminous macadam $30,000. C. B. Symes, city engr.

Ont., Galt — Making plans 8,000 sq.yd. asphalt or concrete pavements on various streets. $40,000. D. T. Black, city engr.

Ont., Hamilton—Making plans concrete curbing, guttering and paving 100,000 sq. yd. various streets, asphalt and concrete. $435,000. W. L. McFaul, city engr.

Ont., Hamilton—Plans 32,000 sq.yd. asphalt paving on Park Row, Gibson and Roxboro Aves., Agnes, Queen, Cannon, Edgevale, Whitfield, Paisley, Justine, Edgar and Graham Sts. 150,000. W. L. McFaul, city engr.

Ont., Kingston — Making plans laying concrete sidewalks and paving 25,000 sq. yd. various streets, asphalt and concrete. $110,000. H. S. Dick, city engr.

Ont., Kingston — Plans asphalt paving Earl St. $11,200, Barrie St. $16,400, William St. $3,200, Frontenac St. $44,700, Johnston St. $3,700, Ordnance St. $15,500, Sydenham St. $10,200. H. S Dick, city engr.

Ont., Merritton—Plans 20,000 sq.yd. concrete pavements. $80,000. Engineer not appointed.

Ont., Ottawa—Making plans 25,000 lin.ft. concrete sidewalks. $90,000. A. F. Macallum, city engr.

Ont., Toronto—Soon takes bids widening and paving 1½ mi. St. Clair Ave. from Bathurst to Dufferin Sts., 20,000 sq.yd. asphalt. $150,000. R. C. Harris, city engr.

Ont., Toronto — Plans asphalt paving Coxwell Ave. $38,655, Day Ave. $2,993, Sellers Ave. $3,646, Gunnas Rd. $17,113, Weston Rd. $21,707, lane west of Yonge St. $9,763, bituminous concrete paving Bayfield Crescent $12,668, concrete curbing Bayfield Crescent $648, Golfview Ave. $262, concrete sidewalks on Golfview Ave. $1,749, Bastedo Ave. $847, Duplex Ave. $1,446, Edith Dr. $3,689, Euston Ave. $1,446, Glenview Ave. $1,665, Leeds St. $1,100, Moberly Ave. $1,417, Ainslee St. $1,634, Fairview Ave. $760, Heather St. $3,379, Newmarket Ave. $1,749. R. C. Harris, city engr.

Ont. Wharton — Plans concrete paving Berford Rd. $40,000.

BIDS DESIRED

New Hampshire—June 27, by State Highway Dept., Concord, bituminous macadam paving, 0.92 mi. road in Center Harbor, 0.75 mi. in Moultonboro, 0.78 mi. in Bethlehem; 9 x 9 ft. rein.-con. box culvert in Rochester; 80 ft. span concrete bridge and 1,000 ft. rein.-con. approaches in Lebanon; 80 ft. steel bridge, rein.-con. substructure, and 0.27 mi. gravel approaches, in Ossipee. F. E. Everett, highway comr.

Massachusetts — July 1, by Dept. Pub. Wks., Div. Highways, State House, Boston, bituminous macadam, 11,200 ft. highway 18 to 20 ft. in Pembroke, to exceed $25,000; 23,617 ft. highway in Provincetown, 18 to 20 ft., to exceed $50,000. W. F. Williams, comr.

Mass., Boston—June 30, by Pub. Wks. Dept., City Hall, Boston, artificial stone sidewalks on various streets. $25,000. J. A. Rourke, comr.

Mass., Boston — July 2, by Pub. Wks. Dept., City Hall, Boston, concrete paving various streets. $50,000. J. A. Rourke, comr.

Mass., Brookline (Boston P. O.)—June 30, by Bd. Selectmen, Town Hall, asphalt paving 3,000 ft. Harvard St., 80 ft. E. A. McEttrick, secy.

Mass., Dedham—July 2, by Bd. Selectmen, Town Hall, constructing Hillside and Schiller Rds. $25.000. J. R. Burgess, chn.

Conn., Wallingford—July 8, by Court of Burgesses, curbing, guttering and paving various streets. W. A. MacKenzie, boro engr.; adv. E. N.-R. June 26.

N. Y., Cold Spring—July 12, by Village President and Trustees, improving streets and storm sewers. H. E. Breed, 507 5th Ave., New York City, engr.; adv. E. N.-R. June 26.

N. Y., Long Island City—June 30, by M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., grading, etc., Court St.; paving Maurice Ave., Opdyke, Siboutsen and 86th Sts., 85th St. from Jamaica Ave. to Park Lane S., 85th St., from Jamaica to Atlantic Aves.; grading, curbing and laying sidewalks, etc., on Richard Ave., Opdyke and 123rd Sts.

N. Y., New York—June 30, by J. Miller, pres. Manhattan Boro., Municipal Bldg., granite block paving 18th St.; wideing and repaving Madison Ave.; curbing, recurbing, flagging, reflagging and paving West 176th St.; curbing and flagging West 187th St.

N. Y., St. George — July 3, by J. A. Lynch, pres. Richmond Boro., Boro Hall, repaving with granite block Jersey St.; concrete curb, etc., on Elizabeth St.

New Jersey—July 9, by Bd. Freeholders Atlantic Co. (Mays Landing), Guarantee Trust Bldg., Atlantic City, reconstructing Absecon Blvd. joining Absecon with Atlantic City. F. L. Willetts, clk.; adv. E. N.-R. June 26.

N. J., Mt. Holly—July 11, by Bd. Freeholders, Burlington Co., reconstructing 13,800 sq.yd. Coopertown Rd., and 54,348 sq. yd. Riverton-Moorestown Rd., Moorestown, Cinnaminson and Riverton Boro. Twps. H. B. Smith, co. engr.; adv. E. N.-R. June 26.

N. J., National Park—July 15, by Bd. Freeholders Gloucester Co., Woodbury, concrete paving Natl. Park Blvd., West Deptford Twp., here. W. C. Cattell, Merritt Bldg., Woodbury, co. engr.; adv. E. N.-R. June 26.

N. J., New Brunswick—July 10, by Bd. Freeholders Middlesex Co., rein.-con. paving, etc., Old Bridge-Matawan Rd., Madison Twp. M. F. Larson, 175 Smith St., Perth Amboy, co. engr.; adv. E. N.-R. June 26.

Pennsylvania—July 15, by State Dept. Hys., Harrisburg, constructing 37 mi. of 15 projects in 12 counties, bituminous surface on concrete or rein.-con. P. D. Wright, secy. highways; adv. E. N.-R. June 26.

Pa., East Conemaugh (Johnstown P. O.)—June 30, by Boro Council, F. W. Campbell, secy., reconstructing with rein.-con., 577 sq.yd. brick paving, 24 ft. wide, 290 sq.yd. concrete sidewalk, 8 ft. wide, 585 sq.yd. rein.-con. floor system, etc. $30,000. O. P. Thomas, Park Bldg., Johnstown, engr.

Pa., Spangler—July 9, by Boro Council of Spangled and Barnesboro, jointly, paving and grading 1,000 lin.ft. Marth and North 17th Sts., 16 ft. single course rein.-con., and 3 in. vitr. brick on concrete, also 4 ft. gutter on each side, etc. C. E. Schlicher, Spangler, and J. A. Scollon, Barnesboro, engrs.

Pa., Williamsport—June 30, by C. L. Jones, supt. highways, grading, curbing and paving 37,600 sq.yd. Washington, West 4th and Maynard Sts., brick, sheet asphalt or other type of paving. L. Mussina, city engr.

Pa., Williamsport — July 1, by C. L. Jones, supt. highways, curbing 34,492 ft. Memorial Ave., High, Chestnut, Almond and Walnut Sts. L. Mussina, city engr.

Maryland—July 9, by State Rds. Comn., Baltimore, concrete paving in Montgomery, Prince George's, Howard, Baltimore, Queen Anne's and Cecil Counties, Contrs. M-52, P-53, Ho-48, Ho-25, B-12-C, Q-30 and Co-32; graveling in Calvert Co., Contr. C-17; concrete shoulders in Montgomery Co., Contr. 169-S. J. N. Mackall, chn.; adv. E. N.-R. June 26.

W. Va., Fairmont—July 16, by L. N. Satterfield, clk. Marion Co. **(P means Project, S means Section)**, improving roads in Paw Paw Dist.: 1.18 mi. Rivesville-Parkers Run Rd., P-1, S-1, 2 mi. Rivesville-Baxter Rd., P-2, S-1, 2.5 mi. Baxter-Hoodsville Rd., P-3, S-2, 2.5 mi. Hoodsville-Shumans Run Rd., P-2, S-3, 2.5 mi. Baxter-Grants Town Rd., P-3, S-1, 1 mi. Wheeling-Fairmont Turnpike-Robinson Rd., P-4, S-1, 1.13 mi. Fairview-Bennefield Rd., P-5, S-1, 1.13 mi. Fairmont-Wheeling Turnpike, P-6, S-1; grading and paving roads in Lincoln Dist.: 1.7 mi. Jimtown Rd. and 1 mi. Fairview Pike, P-1-A and B, 2.5 Plum Run Rd. and 7 mi. East Run Rd., P-2, and 3, 1 mi. Helens Run Rd. and 1 mi. Caroline Rd., P-4-A and 5, 1.5 mi. Teverbaugh Rd., P-6, 1.8 mi. Bingamon Rd. P-7, 0.24 mi. Thoburn Rd. and 0.51 mi. Everson Rd., P-8 and 9. F. J. Wilfong, Court House, dist. road engr.

W. Va., Grantsville—July 8, by S. T. Waldo, clk. Calhoun Co., grading approximately 4 mi. Grantsville-Sheridan Rd., Project 3249, Route 35. Noted Jan. 31.

W. Va., Moundsville—July 11, by Marshall Co. grading and concrete paving 3.8 mi. Federal Aid Project 138-A, 18 ft., $100.000; 1 mi. Federal Aid Project 138-B, 18 ft., $35,000. H. E. Snyder, Parkersburg, engr.

W. Va., Williamson—July 8, by Mingo Co., improving 9 mi. Beech Creek Rd., Project 30, 47,620 lin.ft. clearing, 60,000

Streets and Roads (Continued)

cu.yd. excav., 15,000 cu.yd. borrow, 250 cu. yd. cement rubble masonry, 8,000 lb. reinforcing, 3,050 lin.ft. 15- to 24-in. rein.-con. pipe, etc. J. R. Hunt, co. engr.

Georgia—July 2, by State Hy. Dept., East Point, improving about 60 mi. roads in various counties. W. R. Neel, highway engr.

Fla., Jacksonville—July 9, by City Comn., paving Curry, 9th, Pine, Victoria, William and Laura Sts., $28,000; Cherry Ave. and Edgewood St., $26,000. W. E. Sheddan, Engineers Bldg., engr.

Fla., Key West—July 7, by J. O. Kirchheimer, chn., Bd. Comrs. Monroe Co., stone surfacing, and oiling 4.48 mi. highway on Key Largo from Barnes Point to Mainland, $37,000; Stock Island to Saddle Bunches, $75,000, both 16 ft. wide. Probably B. C. Moremo, Key West, engr.

Fla., Lakeland—July 8, by city, concrete sidewalks, etc. C. C. Brown, city engr.; adv. E. N.-R. June 26.

Alabama—July 10, by State Hy. Comn., Montgomery, graveling 29 mi. Roy Bridge-Marbury Rd., 20 ft., Montgomery and Autauga Counties. $50,000. W. S. Keller, highway engr. Noted Apr. 24.

Miss., Laurel—June 30, by City Comn., 22,000 sq.yd. paving, 6,700 sq.yd. sidewalks, 12,000 lin.ft. curb and gutter, 2,500 ft. concrete heading. $90,000. F. B. Cass, Laurel, engr.

Tenn., Jackson—July 8, by C. E. Griffin, comr. Pub. Utilities, improving city streets. E. R. Dike, city engr. Adv. E. N.-R. June 26.

Kentucky—July 15, by State Hy. Dept., Frankfort, **(F. A. P. means Federal Aid Project, S. P. means State Project)**, grading 10.115 mi. Scottsville-Glasgow Rd., 26 and 30 ft., F. A. P. 112, Allen Co., 10.767 mi. Covington-Lexington Rd., 26 and 30 ft., F. A. P. 114, Grant Co., 5.289 mi. Paintsville-Prestonsburg Rd., 24 and 28 ft., S. P. 50-B, Johnson Co., 9.498 mi. Richmond-Mt. Vernon Rd., 26 and 30 ft., F. A. P. 88, Madison and Rockcastle Counties; bank gravel or macadam surfacing 7.765 mi. Dixie Bee Line Rd., 18 ft., F. A. P. 111, Christian Co., 17.082 mi. Overton-Georgetown Rd., 14 ft., S. P. 49-A, Owen Co., 15.13 mi. Overton-Georgetown Rd., 14 and 32 ft., S. P. 49-A, Scott Co., 10.582 mi. Hodgenville-Bardstown Rd., 18 ft., S. P. 3-B, Larue Co.; bank gravel or concrete surfacing 9.27 mi. Louisville-Paducah Rd., 16 ft., S. P. 8-C, Union Co., 20.51 mi. Louisville-Paducah Rd., 16 ft., S. P. 8-D, Hancock Co.; bituminous concrete or rein.-con. surfacing 10.21 mi. Grayson-Ashland Rd., 16 ft., S. P. 47-C, Carter Co.; waterbound macadam surfacing 1.12 mi. Grayson-Ashland Rd., 16 ft., S. P. 47-R, Carter Co.; concrete or bituminous concrete surfacing 3.747 mi. Louisville-Bardstown Rd., 20 ft., F. A. P. 50-B, Jefferson Co.; concrete, rock asphalt or bituminous concrete surfacing 4.19 mi. Covington-Falmouth Rd., 18 ft., S. P. 62-E, Kenton Co.; concrete or waterbound macadam surfacing 5.54 mi. Loudon-Mt. Vernon Rd., 18 ft., F. A. P. 29-E, Laurel Co.; concrete or asphalt surfacing 17.035 mi. Barboursville-Corbin Rd., 18 ft., F. A. P. 61-C, Knox Co. J. S. Boggs, highway engr.

Ky., Poor Fork — July 7, improving Main, Cumberland, Huff and Market Sts., 14,070 sq.yd. rock asphalt surfacing on concrete, 7,900 lin.ft. concrete curbing, 3,700 cu.yd. excav., also 1,700 lin.ft. sewers. C. Wallace, Empire Bldg., Knoxville, Tenn., engr.

Ind., Muncie—June 30, by J. P. Dragoo, aud. Delaware Co., concrete paving 5,795 ft. Thomas Booker Rd. $49,000.

Michigan—June 30, by State Hy. Dept. at office Comrs. Dickinson Co., Iron Mountain, grading and surfacing 0.245 mi. State Trunk Line Rd. 75-2, 4,643 cu.yd. excav., 2,879 sq.yd. concrete; also 0.994 mi. State Trunk Line Rd. 75-3, 3,761 cu.yd. excav., 11,633 sq.yd. concrete. G. C. Dillman, Lansing, state engr.

Michigan—June 30, by State Hy. Dept. at office Comrs. Sanilac Co., Sandusky, shaping and surfacing 5.754 mi. State Trunk Line Rd. 27-12, Sect. C, 54,456 sq.yd. gravel; 4.924 mi. State Trunk Line Rd. 27-12, Sect. A, 46,620 sq.yd. gravel; 0.407 mi. State Trunk Line Rd. 27-12, Sect. B, 5,003 sq.yd. concrete, etc. G. C. Dillman, Lansing, ch. engr.

Michigan—June 30, by State Hy. Dept. at office Comrs. Iosco Co., Tawas City, grading and surfacing 0.979 mi. State Trunk Line Rd. 10-21, Sect. D1, 4,916 cu.yd. excav., 10,333 sq.yd. concrete; 0.945 mi. State Trunk Line Rd. 10-21, Sect. D2, 9,884 sq.yd. concrete; 0.646 mi. State Trunk Line Rd. 10-21, Sect. C, 2,864 cu.yd. excav., 7,578 sq.yd. concrete, etc. G. C. Dillman, Lansing, ch. engr.

Michigan—July 1, by State Hy. Dept. at office Comrs. Osceola Co., Hersey, grading and surfacing 0.473 mi. State Trunk Line Rd. 20-19, Sect. B, 2,475 cu.yd. excav., 6,227 sq.yd. concrete. G. C. Dillman, Lansing, ch. engr.

Ill., Mason City—June 30, 10,700 sq.yd. rein.-con. paving and 5,000 ft. straight curb in Dist. C, also 8,000 sq.yd. rein.-con. paving, 4,625 ft. straight curb in Dist. E. C. H. Kreiling, Havana, engr.

Ill., Villa Park—June 30, by Bd. Local Impvts., Meehan's Hall, Village Ave., approximately 16,000 lin.ft. concrete sidewalks. Suhr & Berryman, 105 North Clark Sts., Chicago, engrs.

Ill., Pekin—July 1, at office City Clerk, concrete paving Court St. R. L. Russell, corp. counsel; adv. E. N.-R. June 26

Minn., Anoka—July 15, by A. A. Caswell, aud. Anoka Co., improving Job 2301, State Rd. 7: 2.4 mi., 17,322 cu.yd. excav., 83,180 cu.yd. overhaul, 164 ft. 12 to 24 in. corrugated metal culverts; Job 2407, State Rd. 3: 6.55 mi., 55,766 cu.yd. excav., 16,960 cu.yd. hand ditch, 506,470 cu.yd. overhaul, etc. $31,000. H. B. Childe, Anoka, engr.

Kan., Winfield—July 16, by Clerk Cowley Co. grading and surfacing 2.676 mi. Federal Aid Project 231-A, 28,211 sq.yd. brick or concrete, 9,963 cu.yd. excav., 8,406 lb. reinforcing, etc. W. S. Ruggles, co. engr. Noted May 22.

Montana—June 27, by State Hy. Comn., Helena, grading, etc., 4 mi. Federal Aid Project 202, Sanders Co., 24,230 cu.yd. earth, 11,983 cu.yd. intermediate and 11,062 cu.yd. rock excav., 18,081 sta.yd. overhaul, 6,111 cu.yd. crushed gravel surfacing, etc., $26,000; 10.68 mi. Federal Aid Project 208-A, Glacier Co., 58,705 cu.yd. common, 16,999 cu.yd. intermediate and 2,124 cu.yd. rock excav., 2,481 sta.yd. overhaul, 15,958 cu.yd. crushed gravel surfacing, 90 ft. pony truss bridge on concrete abutments, $45,000. Noted Apr. 24.

Mo., St. Louis — July 15, by Bd. Pub. Serv., 208 City Hall, reconstructing with asphaltic concrete and mineral matter surface on concrete, concrete gutters and granite curbs, 27,290 sq.yd. Madison St., $78,000, 7,680 sq.yd. Dodier St. $40,920, 4,210 sq.yd. Cora St. $20,000, 2,100 sq.yd. Nashville St. $10,200; Warrenite or asphaltic concrete and mineral matter surface, concrete parkway curbing 3,800 sq.yd. Forest Park, $70,200. W. W. Horner, 300 City Hall, engr.

Mo., St. Louis — July 22, by Bd. Pub. Serv., 208 City Hall, 13 concrete alleys in various parts of city, $39,920; widening and concrete curbing Watson Rd. from Penrod to Southwest Aves., $30,800. W. W. Horner, city engr.

Ark., Hot Springs—June 30, by Commissioners Paving Dist. 74, at office of C. Smith, city engr., City Hall, 3,983 cu.yd. grading 2,160 ft. 12- to 24-in. tile, 10,297 lin. ft. concrete curbing, 9,744 lin. ft. concrete gutters, 14,215 lin. ft. expansion joints, 16,397 sq.yd. 6 in. concrete paving, 11 corner intakes, 13 side intakes, 3 concrete one 3 x 9 x 60, one 3 x 7 x 60 and one 3 x 4 x 60 concrete arches.

Ark., Pine Bluff—July 2, 29,000 sq.yd. vibrolithic paving, 13,000 cu.yd. excav., 18,000 ft. combined curb and gutter. D. T. Purnell, 1,709 West 6th St., Pine Bluff, city chn.

Tex., Georgetown — July 14, by F. D. Love, judge Williamson Co., surfacing with road base and 1 in. bituminous topping 14.7 mi. State Highway 2, Federal Aid Project 140-C, 18 ft. $128,000. M. C. Wilborn, Georgetown, engr.

Tex., Roscoe—July 7, paving 10,800 sq. yd. various streets, standard alternates. $300,000. Montgomery & Ward, City Natl. Bank, Wichita Falls, engrs.

Tex., Rock Springs — July 9, by A. P. Allison, judge Edwards Co., grading and surfacing with crushed and sledged stone, etc., 9.77 mi. State Highway 41, 16 ft. $125,772. W. E. Simpson Co., Natl. Bank of Commerce Bldg., San Antonio, engrs.

Colo., Denver—July 1, by Dept. Impvts. & Parks, curbing, grading and surfacing ¾ mi. roads in North Denver Impvt. Dist. 34. $121,600. A. K. Vickery, city engr.

Wash., Auburn—July 1, by City Clerk, paving in business and residential sections, 17,000 sq.yd. 6 and 8 in. concrete. J. A. Fallgreen, Auburn, engr.

Wash., Port Angeles—July 7, by Comrs. Clallam Co., grading and graveling 4.5 mi. Count Rd. 2. F. Sullivan, Port Angeles, engr.

Calif., Marysville—Taking bids grading and paving about 13 blocks, portions of I, 7th, 8th Sts., etc., 1½ in. warrenite-bitulithic on 3½ in. asphaltic concrete, curbs, gutters, etc. W. M. Meek, city engr.

Calif., Hayward—Town Trustees taking bids, improving Sunset Blvd. and Sotoo St., etc., 118,270 sq.ft. 1½ in. on 3½ in. asphaltic concrete, curbs and concrete gutter, etc. To exceed $25,000. J. B. Holly, town engr. Noted June 5.

Calif., San Rafael — July 7, concrete paving 22,700 sq.ft. Irwin St. E. W. Smith, city clk.

BIDS RECEIVED

N. Y., Brooklyn—E. Riegelmann, boro pres., Boro Hall, reconcreting asphalt pavement in various streets, from Edwards & Flood, Inc., 25 Court St., $26,500. Noted June 12.

N. Y., Long Island City—M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., from A. A. Johnson Corp., Queens Blvd., sheet asphalt paving Van Alst Ave. $61,044, grading, curbing and laying sidewalks on Woodside Ave., $239,921, 6th Ave. $28,629; regrading, curbing, recurbing, flagging, reflagging and paving 4th Ave. $14,841; from Green Contg. Co., 734 Vernon Ave., Astoria, grading, curbing and laying sidewalks on Van Alst Ave. $25,164; from W. P. McDonald Constr. Co., 17 West 42nd St., New York, sheet asphalt paving 85th Rd., $4,471; from J. J. O'Brien, Jr., William St., Jamaica, grading sidewalk and gutter spaces on 147th Pl. $2,803; 87th St. $7,613; from Cleveland Trinidad Paving Co., Flushing, paving 87th St. $14,833. Noted June 12.

N. Y., Utica—Bd. Contr. & Supply, from H. W. Roberts & Co., 622 South St., (1) rein.-con. (2) Warrenite paving Springate St. (1) $5,104 (2) $5,662, Sherman Pl. (1) $6,223 (2) $6,873, Lamb St. (1) $7,281 (2) $8,115 Hager St. (1) $4,485, (2) $4,976, Ballantyne Brae (1) $15,648 (2) $18,208, Leslie Ave. (1) $14,058 (2) $15,709.

New Jersey—State Hy. Comn., Trenton, constructing Route 9, Sect. 15, Union Co., 54,216 sq.yd. rein.-con., from Newark Paving Co., 133 1st Ave., Newark, $284,208; Route 3, Sect. 11, Camden Co., 60,824 sq.yd. 8 in. gravel, from C. T. Kavanaugh, Prospect Ave., Bayonne, $77,108; Route 2, Sect. 6, Burlington Co., 47,500 sq.yd. sheet asphalt, from Union Paving Co., 30th and Locust Sts., Phila., Pa., $63,360. Noted June 5.

N. J., Camden—C. F. Wise, chn. Roads Comn., Court House, paving Park Ave., Pensauken Twp., from Fish-Rutherford Inc., Real Estate Trust Bldg., Phila., Pa., $70,740.

Pennsylvania—State Dept. Hys., Harrisburg, **(R. means Route and A. Application)** constructing R. 376, Lebanon Co., from Swanger & White, 2nd and Canal Sts., Lebanon, $155,753; R. 204, Beaver Co., from S. B. Markley, New Brighton, $41,486; R. 15 and 343, A. 2335 and 2340, Bradford Co., from Lane Constr. Corp., 35 Colony St., Meriden, Conn., $222,151; R. 117, Fayette Co., from G. McIntyre, Fairchance, $85,852; A. 1788, Warren Co., from E. M. Love & Son, Cory, $47,976; R. 288, A. 568, Allegheny Co., from Frazier Manfield, McKeesport, $34,810; R. 150, Bucks Co., from Sutton & Corson Co., 9th St. and Simpson Ave., Ocean City, N. J., $331,104; R. 170, Luzerne Co., from D. A. Grant Co., Inc., 413 Veach Bldg., Oil City, $55,750; A. 2577, Clarion Co., to Standard Paving & Constr. Co., 210 East Ohio St., Chicago, $98,330; A. 1824, Westmoreland Co., from State Constr. Co., New Kensington, $42,756; R. 118, A. 2843, Washington Co., from Charleroi Constr. Co., Box 168, Charleroi, $29,591; A. 1616, Somerset Co., from D. E. Keller & Son, Somerset, $54,753; R. 169, Monroe Co., from McInerney & McNeal, Inc., 703 Northampton Natl. Bank, Easton, $26,040; R. 102, Tioga Co., from D. Schoentag, Inc., 68 Ulster Ave., Saugerties, N. Y., $405,614; R. 118, Washington Co., from H. P. Streicher Co., Inc., 319 Terminal Bldg., Toledo, O., $167,997; R. 247, Fayette Co., from Georges Constr. Co., Uniontown, $81,200; R. 162, Schuylkill and Carbon Counties, from E. A. Corson, 739 Asbury Ave., Ocean City, N. J., $177,219; A. 2734, Monroe Co., from Juniata Co., 410 Empire Bldg., Phila., $134,256; R. 97, Elk Co., from F. D. Ross, 74 High St., Bradford, $440,479; R. 183, A. 2118, Columbia Co., from J. Christiano, 301 South Shamokin St., Shamokin, $128,744; R. 184, A. 1219, Luzerne Co., from Freeland Constr. Co., 501 Amer. Bank & Trust Bldg., Hazelton, $64,913; R. 59, Jefferson and Clearfield Counties, from H. W. Horst Co., Rock Island, Ill., $424,068; R. 88, Warren Co., from J. C. Devine Co., Alliance, O., $401,243; R. 381, Forest Co., from T. W. Munro & Co., Du Bois, $41,647; A. 31, Tioga Co., from R. D. Richardson Constr. Co., 828 Connell Bldg., Scranton, $187,140; R. 185, Schuylkill Co., from W. H. Murphy & Sons, 2100 State St., Harrisburg, $405,904; R. 215, Chester Co., R. 158, Montgomery Co. and R. 158, Berks and Lehigh Counties, from Lincoln Constr. Co., Strafford, $44,672, $16,714 and $37,779 respectively; R. 355 and R. 291, A. 2207, both Lycoming Co., from Continental Contg. Co., Knickerbocker Bldg., Baltimore, Md., $55,385 and $66,777 respectively; bridge over Rock Creek, R. 42, Adams Co., from J. S. McIlvaine & Co., Chambersburg, $12,566. Noted June 5.

W. Va., Williamson—Mingo Co., grading,

Streets and Roads (Continued)

etc., Naugatuck-Duncan Fork Rd., Project 18-A, B and C, from I. Webb, Williamson, $59,909; Burch-Trace Rd., Project 27, from Waugh & Longley, Williamson, $58,546. Noted June 6.

Fla., Hillcrest Heights (Babson Park P. O.)—Improving 2 mi. Pomella, Palm, Catherine and Oak Sts., 24 ft., from W. P. Kennedy Constr. Co., Avon Park, excav. $0.46, 5 in. limestone rock base $0.72, 2 in. asphalt $1.20, total $33,944. Noted June 12.

Alabama—State Hy. Dept., Montgomery, improving 6.035 mi. Thomasville-Maringo Co. line Rd., S-21, Clark Co., from J. P. McKee, Leroy, $73,329; grading, etc., 9.187 mi. Eutaw-Gainsville Rd., S-4-B, Greene Co., from Lamb & McLemore, Eutaw, $55,805; surfacing 9.187 Eutaw-Gainsville Rd., S-4-B, Greene Co., from W. C. McCoy, Lafayette, $55,000. Noted May 22.

La., Shreveport — Permanent paving Fetzer Ave., from E. J. Deas Co., Shreveport, $114,021.

Tennessee — State Dept. Hys. & Pub. Wks., Nashville, **(F. A. P. means Federal Aid Project, S. P. means State Project)**, grading, etc., 7.37 mi. Brighton-Covington Rd., F. A. P. 31-B, Tipton Co., from Little & Dean Constr. Co., Memphis, $43,989, 4.6 mi. Hornbeak Rd. to F. A. P. 71-B, S. P. 169-B, and 8.026 mi. Troy-Hornbeak Rd., incl. bridge over 20 ft. span concrete bridge, S. P. 169-A, Obion Co., from Ellis & Smithers Co., Owensboro, Ky., $35,067 and $74,349 respectively, 7.78 mi. Jackson-Gibson Co. line Rd., F. A. P. 29-B, and 3.66 mi. Gibson Co. line Rd., to F. A. P. 29, S. P. 168, Madison Co., from F. D. Harvey & Co., Memphis, $46,047 and $58,562 respectively, 5.02 mi. Tarlton-Warren Co. line Rd., incl. two timber bridges, over 20 ft. span, S. P. 171, Grundy Co., and grading and waterbound macadam surfacing 4.625 mi. Little Creek Rd. to S. P. 136, incl. 4 bridges, Marion Co., from Brown Bros. Constr. Co., Tracy City, $65,737 and $136,924 respectively, 2.25 mi. Humbolt-Jackson Co. line Rd., incl. two bridges over 20 ft. span, F. A. P. 29-A, Gibson Co., from Cresap Constr. Co., $34,877, 9.86 mi. Brighton-Shelby Co. line Rd., incl. one concrete bridge, over 20 ft. span, F. A. P. 31-A, Tipton Co., from J. A. Pardue & Co., Pine Bluff, Ark., $106,053, 9.413 mi. Milan-Madison Co. line Rd., incl. one bridge over 20 ft. span, S. P. 167, Gibson Co., from S. R. Hall Constr. Co., Newbern, $58,950; grading and surfacing with limestone on giant macadam 9.143 mi. Rutherford Co. line to point 5 mi. of Manchester, S. P. 151-C, Coffee Co., from Pitts Bros. Constr. Co., Mt. Pleasant, $84,368. Noted June 5.

Ohio—Dept. Hys. and Pub. Wks., Columbus, grading, bridging and paving with **(a)** bituminous macadam, asphalt, **(b)** state to furnish stone, **(c)** bituminous macadam, tar **(d)** state not to furnish stone **(e)** bituminous macadam, lake **(f)** waterbound gravel **(g)** brick **(h)** tar macadam **(i)** rein.-con. **(j)** waterbound macadam incl. stone **(k)** waterbound macadam, state to furnish stone **(l)** concrete **(m)** state to furnish brick **(n)** Kentucky rock asphalt **(o)** asphalt **(p)** tar, **(1)** 1.887 mi. Sect. "H," Athens-Logan Rd., Athens Co. **(2)** 2.043 mi. Sect. "J," Athens-Logan Rd., Hocking Co. **(3)** 1.228 mi. Sect. "Amelia," Cincinnati-West Union Rd., Clermont Co. **(4)** 2.386 mi. Sect. "B-2-b" and "C," Portsmouth-Lucasville Western Rd., Scioto Co. **(5)** 3.274 mi. Sect. "F-2," Canton-Massillon Rd., Stark Co. **(6)** 6.346 mi. Sect. "A" Salem-Warren Rd., Trumbull Co. **(7)** 1.873 mi. Sect. "E," New Philadelphia-Uhrichsville Rd., Tuscarawas Co. **(8)** 4.285 mi. Sect. "A," Lancaster-Newark Rd., Fairfield Co. **(9)** 0.405 mi. Sect. "Nashville," Mansfield-Millersburg Rd., Holmes Co. **(10)** 2.77 mi. Sect. "A2," Ottawa Co. **(11)** 0.414 mi. Sect. "B" Zanesville-New Lexington Rd., Perry Co. **(12)** 0.279 mi. Sect. "I-2," Portsmouth-Columbus Rd., Scioto Co. **(13)** 3.409 mi. Sect. "C," Dayton-Lebanon Rd., Warren Co. **(14)** 0.471 mi. Sect. "Smithville," Akron-Wooster Rd., Wayne Co.; grading **(15)** 2.685 mi. Sect. "D" Morristown-New Athens Rd., Belmont Co. **(16)** 2.948 mi. Sect. "H" McArthur-Athens Rd., Vinton Co.; surface treating **(17)** 4.49 mi. Sect. "B," Bono-Port Clinton Rd., Ottawa Co.; bridge approaches **(18)** 0.083 mi. Sect. "O," Lima-Sandusky Rd., Seneca Co., from Straw & Huber, Eaton, **(a1)** $24,694 **(g5)** $167,430; Harrison Constr. Co., Columbus, **(b1)** $20,307; Carey & Abt, Ada, **(c1)** $25,889; T. Wolfe, Bloomville, **(b2)** $18,888 **(d2)** $26,253 **(k8)** $25,666; Neff & Rader, Circleville, **(a2)** $24,870 **(j8)** $48,105; Miller & Co., Martinsville, **(a3)** $23,159 **(c3)** $23,159; J. Grover, Bethel, **(e3)** $24,338; Coharis & Gerkins, Toledo, **(m3)** $24,500 **(g12)** $27,860; W. C. Brown, Chillicothe, **(f4)** $28,661; L. Jones, Kansas, **(e18)** $12,937; Kolbarger & Langdon, Marion, **(p18)** $13,619; Laubis Stone Co., Kenton, **(a6)** $120,702; Mango & Gross, Niles, **(h6)** $122,411; Daley Bros., Bolivar, **(j7)** $43,694; Griggs-Anderson Co., Millersburg, **(l9)** $8,867; Weis Bros. & Burman, Elmore, **(g10)** $106,546 **(l10)** $91,866; Modern Constr. Co., Fremont, **(m10)** $77,900; E. H. Clifton & Son, McConnellsville, **(b11)** $9,300 **(h11)** $11,059; R. Stone Co., Lima, **(a13)** $78,399; Craig & Jordan, Blanchester, **(h13)** $80,558; Studebaker & Son, Greenville, **(g14)** $17,651; Jefferson Constr. Co., Bloomingdale, **(15)** $26,506; Gaty Constr. Co., Columbus, **(16)** $22,986; L. Dehmer, Tiffon, **(17)** $2,984. Noted June 5.

O., Columbus — Franklin Co., June 11, from A. W. Burns Co., 316 South High St., sheet asphalt paving 2,213 ft. Schreyer Pl. Rd., 24 ft., $24,937, 2,007 ft. Dominion Blvd. West Rd., 24 ft., $27,579, 579 ft. Rosemary Parkway Rd., 50 ft. with 18 ft. parkway in center $11,359, 750 ft. Zeller Rd., 50 ft. with 18 ft. parkway in center $15,677, 438 ft. Olentangy Blvd. Rd., 30 ft. $8,287, 1,934 ft. Aldrich Rd., 26 ft. $33,220. Noted June 5.

Michigan — State Hy. Dept. at office Comrs. Wasstenaw Co., Ann Arbor, grading 3.578 mi. Federal Aid Project 67 A1 and A2, 86,549 cu.yd. excav., etc., from D. Jeffrey, Clarkston, $43,394; grading and concrete surfacing 16,707 sq.yd. Federal Aid Project 67 A3, from J. C. O'Connor & Sons, Ft. Wayne, Ind., $36,638; shaping and surfacing 5.13 mi. Federal Aid Project 67 E1, $54,176 sq.yd. concrete, from H. A. Hoxie, Grand Rapids, $136,020. Noted May 29.

Mich., Detroit — From Detroit Asphalt Paving Co., 909 Free Press Bldg., paving with 3½ in. sheet asphalt on 8 in. concrete, Chopin Ave. $26,093, Gaylor Ave. $1,429, Lawton Ave. $14,881, Livernois Ave. Sect. 1 $43,268, Livernois Ave. Sect. 2 $90,192, Prairie Ave. Sect. 1 $16,245, Turner Ave. $51,461, Tuller Ave. $69,020, 3rd Ave. $15,414; from Cleveland Trinidad Paving Co., 402 Hammond Bldg., Florence Ave. $21,461, Parkside Ave. Sect. 2 $22,484, Stoepel Ave. Sect. 1 $31,675.

Wis., West Allis—Bd. Pub. Wks., June 9, **(a)** grading **(b)** one course concrete paving **(c)** vibrolithic concrete paving **(1)** 50th Ave. **(2)** 13 alleys, from Reisinger & Co., 464 Oakland Ave., Milwaukee, **(a1)** $0.85 per cu.yd. **(b1)** $2.39 **(c1)** $2.48; from Texas Constr. Co., 446 68th Ave., **(a2)** at $0.75 to $1 per cu.yd. **(b2)** $1.98 to $2.02. Noted June 5.

Michigan — State Hy. Dept. at office Comrs. Shiawassee Co., Corunna, grading and surfacing 1.524 mi. State Trunk Line Rd. 21-23, 7,231 cu.yd. excav., 17,910 sq.yd. concrete, from J. C. Stewart Co., Owosso, $44,935. Noted May 29.

Neb., Lincoln—Paving, curbing and guttering Dist. 538, from Able Constr. Co., 318 Terminal Bldg., asphaltic concrete $59,378; from Roberts Constr. Co., brick $79,759. Engrs. est. $60,000 asphaltic concrete.

Missouri — State Hy. Dept., Jefferson City, from C. F. Johnson & Sons, Buffalo, grading 3.892 mi. road from St. Louis to Springfield, $31,529, 3.811 mi. road from St. Louis to Springfield, $23,918, 4.793 mi. road from Marshfield north and west, $33,835, 4.944 mi. road from St. Louis to Kansas City, $40,400, all 34 ft. in Webster Co.; from M. Haase, Trenton, grading 1.301 mi. road from Kansas City to Park Villa, Clay Co., $21,792, 4.329 mi. road from Deepwater to Lowry City, Henry Co., 30 ft., $20,962, concrete paving 1.301 mi. road from Kansas City to Parkville, 18 ft., Clay Co., $16,152; from W. C. Johnson, Belleville, Ill., grading 4.552 mi. road from St. Louis to Festus, $7,278, 2.852 mi. St. Louis to Festus, $4,065, concrete paving 4.552 mi. road from St. Louis to Festus, $113,851, 4.79 mi. road from St. Louis to Jackson, $106,963, 2.852 mi. road from St. Louis to Festus, $60,235, all 18 ft., Jefferson Co.; from Haller & Davis, Boonville, grading 4.834 mi. road from Wright City east and west, $36,613, concrete paving 3.834 mi. road from Wright City east and west, 18 ft., $65,343, both Warren Co.; from Felix Kersting Co., Jefferson City, graveling 2.835 mi. road from Rolla south, Phelps Co., $24,762, 3.327 mi. road from Zebra east and west, Camden Co., $16,076, both 12 ft.; from Gaines Bros., Fairland, Okla., grading 4.523 mi. Kansas City-St. Louis Rd., $41,782, 4.083 mi. Kansas City-St. Louis Rd., $25,930, 3.712 mi. road from Warrenton west, $14,588, all 34 ft., Warren Co.; from L. O. Kimball, Clear Lake, Ia., graveling 4.838 mi. road from Eldon east, Miller Co., $15,412, 4.045 mi. Hollister-Forsyth Rd., Taney Co., $16,021, both 12 ft.; from C. P. O'Reilly & Co., Wainwright Bldg., St. Louis, 12 ft., $26,156, 2.889 mi. road from Silva North and South, 26 ft., $16,310, both Wayne Co.; from Doehle & Kolkmeyer, Jefferson City, grading 5 mi. road from Brazito south, $20,783, 1.753 mi. road from Brazito south, $9,121, both 30 ft., Cole Co.; from W. W. Banker Constr. Co., Memphis, Tenn., graveling 4.711 mi. Caruth-Hornersville Rd., $55,969, 2.273 mi. Caruth-Hornersville Rd., $33,592, both 16 ft., Dunklin Co.; from M. E. Gillioz, Monett, graveling 2.481 mi. Monett-Springfield Rd., $22,279, 3.426 mi. Monett-Springfield Rd., $18,474, both 16 ft., Lawrence Co.; from W. F. Smith & Co., Horana, Ill., grading 4.79 mi. St. Louis-Jackson Rd., Jefferson Co., $5,850, from C. T. Johnson, Warrensburg, 4.648 mi. Vista-Collins Rd., 30 ft., St. Clair Co., $28,304; from Pittsburg Des Moines Steel Co., Tuttle and Southwest 10th Sts., Des Moines, Ia., 1.15 mi. road from Chillicothe south, Livingston Co., $28,526, from C. C. Rowell, Montgomery City, 1.138 mi. road from Highhill east, 30 ft., Montgomery Co., $4,402, from J. L. Moss, Webster Groves, 1.163 mi. road from Elvins to Bismarck, 26 ft., St. Francois Co., $11,612, from Summerfield-Jones, Billings, 1.943 mi. road from Ava North, 26 ft., Douglas Co., $8,204, from Winstead & Gunther, Silvan Springs, Ark., 3.349 mi. road from Anderson south, 26 ft., McDonald Co., $36,206, from J. T. Fox, Branson, 4.214 mi. road from Ozark east, 26 ft., Christian Co., $11,264; from Reynolds, Bloker & Crews, Carruthersville, graveling 2.098 mi. road from East Prairie east, Mississippi Co., $24,888, from Wilson Constr. Co., Warrensburg, 2.374 mi. road from Baring north and south, Knox Co., $17,843, from C. G. Oglesby, 1856 Union St., Memphis, Tenn., 3.51 mi. road from Arbyrd south, Dunklin Co., $42,050, from Easley Bros., Aurora, 3.227 mi. road from Bolivar west, Polk Co., $33,425. Noted June 5.

Ark., Hot Springs—Paving Dist. 72, 1,356 cu.yd. excav., 576 lin.ft. arch concrete, 400 ft. 12- to 24-in. tile, 1,589 ft. concrete gutter and reset curb, 2,466 ft. new curb and gutter, 8,140 sq.yd. concrete paving, etc., from E. B. Mooney, 348 Valley St., $27,454. Noted May 29.

Wash., Seattle—Pub. Wks., June 13, paving 5th Ave., et al., LID 3820, from R. G. Stevenson, 1327 North 34th St., 8,580 sq.yd. 8-in. concrete $2.05, 2,100 cu.yd. subgrade $0.60, clearing, $500, total, concrete $24,603, engrs. est. $27,983, brick $25,353, engrs. est. $28,463.

California—State Highway Comn., Sacramento, grading 5.3 mi. between Boca and Sorenson, Nevada Co., from Irey & Holden, Lodi, $245,162. Noted May 29.

Calif., Fairfield—Solano Co. improving highway near Rockville, gravel or broken stone and concrete shoulders, from Tibballs, Percival & Cress, 214 Forum Bldg., Sacramento, $42,406. Engrs. est. $44,512.

Calif., Chico—Improving Normal Ave., Chestnut St., etc., 581,040 sq.ft. grading, 575,200 sq.ft. 5 in. asphaltic concrete paving, curbs, gutters, walks, etc., from Clark & Henery Constr. Co., Chancery Bldg., San Francisco, approximately $127,491. Noted June 12.

Calif., Los Angeles—Improving Division St. between Wollam St. and San Fernando Rd., from Curtis Paving Co., 2440 East 26th St., grading $18,600, 18,375 sq.ft. 5 in. concrete $0.23, 138,897 sq.ft. warrenite $0.26, 8,267 ft. curb $0.70, 38,444 sq.ft. walks $0.22, 8,599 sq.ft. gutters $0.35, storm drain $3,965, sanitary sewer $20,000. Noted June 12.

CONTRACTS AWARDED

Rhode Island — State Bd. Pub. Rds., Providence, relocating and rein.-con. paving 3.54 mi. Hopkinton-Westerly Rd. in Hopkinton, Federal Aid Project 20, Div. A, Contr. 2402, to A. D. Bridges Sons, Hazardville, Conn., $164,521; rein.-con. paving 2.05 mi. Fall River-Tiverton Rd., in Tiverton, Federal Aid Project 21, Div. A, Contr. 2403, to T. J. Quinn, Ashton, $107,153. Noted June 5.

Massachusetts—Dept. Pub. Wks., Div. of Highways, State House, Boston, improving highway in Reading, North Reading and Andover, bitulithic macadam, to R. R. Newell Co., Uxbridge, $52,933. Noted June 19.

Mass., Brookline (Boston P. O.) — Bd. Selectmen, Town Hall, paving about 1 mi. Beacon St. from Coolidge Corner to St. Mary's St., to Warren Bros., Parkman Bldg., Boston, $33,414. Noted June 5.

Mass., East Boston (Boston P. O.)—Dept. Pub. Wks., Boston, granite block paving, Border St., here, to Boston Contg. Co., Inc., Everett St., $35,069. Noted June 19.

Mass., West Roxbury (Boston P. O.)—Dept. Pub. Wks., City Hall, Boston, bitulithic paving Grove St., here, to S. J. Tomassello, 11 Cushing Terrace, Dorchester, $57,859. Noted June 19.

Calif., Suisun—Improving various streets, 19,924 sq.ft. 2 in., 85,345 ft. 2½ in. 45,821 sq.ft. 3½ in. asphaltic concrete paving, curbs, sewers, etc., to J. A. Costello, Jr., 564 Market St., San Francisco, $26,100. Noted June 19.

Calif., Vacaville — Improving various streets, 313,000 sq.ft. 2½ to 4½ in. willite

Streets and Roads (Continued)

surfacing, to California Constr. Co., 58 2nd St., San Francisco, approximately $75,000. Noted June 19.

Que., St. Thimothee—Paving 4.1 mi. National Rd., oil macadam, to Kennedy Constr. Co., Ltd., 310 Shaughnessy Bldg., Montreal, $60,234. Engrs. est. $75,000.

N. Y., Brooklyn — E. Riegelmann. boro pres. Boro Hall, to F. Persicano, 350 Fulton St., grading, curbing and flagging East 13th St. $5,791, to Galco Contg. Co., 745 Dean St., 67th St. $6,595, to G. M. Mandatto, 129 29th St., East 16th St. $5,846, to T. B. Scott, 671 Halsey St., East 28th St. $3,037, 49th St. $3,950, 85th St. $5,192; to Cranford Co., 52 9th St., asphalt paving East 16th St. $8,860, East 18th St. $2,835, East 28th St. $9,111, 49th St. $8,350, 87th St. $7,413, Foster Ave. $6,559, Grace Court $6,559, 12th Ave. $19,873, 82nd St. $5,462, 67th St. $30,755. Noted June 12.

N. Y., Kenmore—Paving various streets, to Rossney Contg. Corp., 73 West Eagle St., Buffalo, about $160,000.

N. Y., Brooklyn—E. Riegelmann, boro. pres. Boro Hall, to Uvalde Asphalt Paving Co., 7 Bway., New York, repaving Bushwick Ave. $5,138, Osborn St., $13,669, Pitkin Ave. $15,193, paving and repaving Farragut Rd. $41,289, paving with Malta St. $8,040 all asphalt; to C. Bennett Contg. Co., 414 Rutland Rd., grading, curbing and flagging East 17th St. $8,382; to Galecor Contg. Co., 745 Dean St., grading, curbing and flagging East 15th St. $6,153, West 9th St. $2,598; to Cranford Co., 52 9th St., repaving 85th St., asphalt $9,141; to Hastings Paving Co., 25 Broad St., New York, repaving Troutman St., asphalt block, $10,489; to F. J. Gallagher, 490 Park Pl., paving and repaving Marginal St., granite block $79,494. Noted June 19.

N. Y., Long Island City — M. E. Connolly, pres. Queens Boro., Queens Subway Bldg., to C. Kurth, 9519 126th St., Richmond Hill, grading, curbing and laying sidewalks on Arcadia and Maurice Aves., $1,965 and $10,645 respectively; to Welsh Bros., 32 Queens St., Astoria, grading, etc., Hunt St. $8,145, and grading, curbing and laying sidewalks on Siboutsen and 1st Sts., $6,040 and $5,782 respectively; to Kennedy & Smith, 93 Amity St., Flushing, grading, curbing and laying sidewalks on Hunt and Opdyke Sts., $19,387 and $8,465 respectively; to W. P. McDonald, 17 West 42nd St., New York, grading, curbing, flagging and asphalt paving, etc., Court St. $1,045, grading, curbing and laying sidewalks on 123rd St., $31,415; to Sicilian Asphalt Paving Co., 41 Park Row, New York, grading, regrading, curbing, recurbing and laying sidewalks on Gasman Ave., $147,825, grading, curbing, laying sidewalks and paving Richard Ave. $11,895, to F. Soviero, grading, curbing and laying sidewalks ,etc., on 2 sections 85th St. $10,885 and $10,775, 86th St. $10,028, 97th St. $13,573, 103rd Ave. $12,574. Noted June 12.

N. Y., New York—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., to Asphalt Constr. Co., 208 Bway., repaving with granite block on concrete Boscobel Ave., $135,746, asphalt paving East 175th St. $22,971, repaving with granite block roadway of East 163rd St. $18,402; to Burnside Contg. Co., 270 Burnside Ave., asphalt paving East 165th St. $87,175; to Regan Towers Inc., 124 West 121st St., repaving with granite block on concrete Boston Rd. $18,983, East 175th St. $92,015; to J. V. Timoney Constr. Co., 220 East 201st St., sewers in LaSalle Ave. $8,386. Noted June 19.

N. Y., New York—H. Bruckner, pres. Bronx Boro., 3rd and Tremont Sts., constructing Transverse Rd. carrying the center driveways of Grand Blvd. and Concourse under East Fordham Rd., to Bronx Sewer Constr. Co., 375 East Fordham Rd., $394,391. Noted June 12.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., to W. J. Fitzgerald, 547 West 45th St., widening and repaving with sheet asphalt Madison Ave., $52,114; to Asphalt Constr. Co., 208 Bway., curbing, recurbing and sheet asphalt paving Haven Ave. $37,165, repaving with granite block 44th St. $21,323; to D. J. McCarthy, 149 East 48th St., grading, curbing and flagging West 186th St., $5,615; to T. A. Reilly Co., 48 East 41st St., altering and improving sewer in Cedar St. $7,255; to W. M. Duffy, grading Chittenden Ave. $4,102. Noted June 19.

N. Y., New York—J. Miller, pres. Manhattan Boro., Municipal Bldg., repaving New Chambers St., to P. J. Kearns Contg. Co., 2306 Creston Ave., $45,065; Carmine St., to Casper Helbock, Inc., 633 Wales Ave., $41,318, both granite block on concrete. Noted June 12.

N. Y., Niagara Falls—For 10,964 sq.yd. 3 in. brick paving, asphalt filler on 6 in. concrete, etc., to J. F. McKinney, Gluck Bldg., $4.98 per sq.yd. E. B. Moss, city engr.

N. J., North Caldwell (mail Caldwell)—G. C. Bergen, purch. agt. Essex Co., Court House, Newark, grading and paving Grandview Ave., 8 in. rein.-con. here, to J. Heller, South Orange Ave., South Orange, $80,270. Engrs. est. $79,000.

N. J., Orange—G. C. Bergen, purch. agt. Essex Co., Court House, Newark, paving 2,000 sq.yd. Scotland St., 3 in. sheet asphalt on 6 in. concrete, to Standard Bitulithic Co., 50 Church St., New York City, $72,244. Engrs. est. $79,000. Noted May 29.

Pennsylvania—State Hy. Dept., Harrisburg, **(R. means Route and A. Application)** rein.-con. paving 27,780 sq.yd. R. 88, A. 1145 and 2679, to C. H. Fry Constr. Co., Erie, $197,645; 35,750 sq.yd. R. 258, A. 2908 and 2909, Erie Co., to J. C. Devine Co., Alliance, O., $167,045; 24,855 sq.yd. R. 59, Jefferson Co., to W. C. Quick & Co., Brookville, $120,790; 44,297 sq.yd. R. 178, Bucks Co., to E. Riley Mixner Co., Goshen, N. J., $177,658; 14,862 sq.yd. R. 4, Luzerne Co., to B. G. Coon Constr. Co., Luzerne, $96,763; 70,160 sq.yd. R. 223, Indiana Co., to Paul Constr. Co., Cresson, $357,018; 40,600 sq.yd. R. 95, McKean Co., to D. L. Dennis, Eldred, $192,268; 107,700 sq.yd. R. 189 and 338, Jefferson Co., to M. Bennett & Sons, Indiana, $550,254; bituminous surfacing 28,512 sq.yd. R. 140, Schuylkill Co., to Warren Bros. Constr. Co., Parkman Bldg., Boston, Mass., $146,060. Noted May 15.

Pa., Phila.—Bureau Hys., Dept. Pub. Wks. grading, to J. F. Nolan & Sons, 64 Church Lane, Champlost, Fairhill, Nedro, Spencer and 3rd Sts., $11,482, to Ferrante & Cellucci, 16th and Dickinon Sts., Sheldon St. $3,341, to E. A. Mullen, Inc., 5512 Vine St., Warrington St. $1,877, to Morrissey Bros., 4345 North 7th and 13th Sts. $1,648; asphalt paving, to Eastern Paving Co., 402 Colonial Trust Bldg., Diamond, Grange, Lippincott and Wheeler Sts., $24,807, asphalt repaving Ellsworth, Wharton, Gordon, Marshall and 23rd Sts., $46,864; redressed granite block repaving to J. Meehan & Son, 916 West Dakota St., Brown and Lehigh (track area) Sts., $22,410; repairing and resurfacing asphalt streets, to Barber Asphalt Co., 239 North 30th St., $156,475, to Union Paving Co., 306 Locust St., $300,065; repairing, surfacing and resurfacing country roads, to A. J. Henderson, 5807 Chew St., $23,056; improving League Island Park Bathing Pool, to E. Foy & Son, 2 South Mole St., $13,898.

Maryland—State Rds. Comn., Baltimore, macadam resurfacing 3.36 mi. road in Allegany Co., Contr. A-29, to S. T. Brotmarkle Maple St., Cumberland, $62,374, 1.94 mi., Harford Co., Contr. H-40, to T. P. Murray, Towson, $17,708; concrete paving 3.6 mi., Dorchester Co., Contr. D-38, to Slacum, Brohawn & Woolford, Cambridge, $85,451, 1 mi., Worcester Co., Contr. WO-34, to J. K. Flick, Sudlersville, $33,104, 1.17 mi., Caroline Co., Contr. CO-35, to Holt Constr. Co., Federalsburg, $29,515, 1.5 mi., Queen Anne's Co., Contr. Q-28, to C. Webster Constr. Co., East New Market, $35,-151, 1.3 mi., Kent Co., Contr. K-25, to Kaufman Constr. Co., Denton, $33,528, 2.14 mi., Cecil Co., Contr. CE-46, to Broad Creek Constr. Co., Elkton, $61,080; graveling 1.88 mi., Anne Arundel Co., Contr. AA-41, to J. J. Stehle, Annapolis, $19,375; penetration macadam resurfacing and concrete shoulders, 4.6 mi., Baltimore Co., Contr. B-63, to F. D. Carrozza, Notre Dame Ave., Govans, $104,606. Noted June 12 and 19.

Md., Baltimore — Grading, curbing and paving with sheet asphalt streets listed in Contr. 258-NA, to P. Flanigan & Son, Harford Rd. and Baltimore & Ohio R.R., $29,665. Noted June 12.

West Virginia — State Road Comn., Charleston, to H. W. Taylor, Hagerstown, bituminous macadam paving 3.19 mi. Berkley Springs-Martinsburg Rd., Project 3030-A, Morgan Co., $104,165, to L. J. Chandler, Moorefield, 1.6 mi. Northwestern Turnpike, Project 122-A, Mineral Co., $43,-137, rock asphalt surfacing 0.8 mi. Main St. of Moorefield, Project 62-R, Hardy Co., $20,020; to Battershill Goode Co., Charlottesville, bituminous macadam paving 2 mi. Marlinton-Buckeye Rd., Project 131, Pocahontas Co., $69,094; to Elkins Constr. Co., Elkins, grading and bituminous macadam paving 1.5 mi. Philippi-Clarksburg Rd., Project 3276, Barbour Co., $52,795; to Stringer & Springer Constr. Co., Wheeling Bank and Trust Company Bldg., Wheeling, 0.15 mi. River road, Project 3032-A-1, Wetzel Co., $5,935, 0.5 mi. Ramp Hollow Creek Rd., Project 3140 Marshall Co., $18,-479, grading and bituminous macadam paving 3 mi. Sistersville-Middlebourne Rd., Project 3314, Tyler Co., $117,089; to Kelley Constr. Co., Clarksburg, grading 7.75 mi. Weston-Gilmer Co. line Rd., Project 3278-B, Lewis Co., $141,542, to Smith & Bender, Nitro, 1.6 mi. Country Club-Poco Rd., Project 3246, Putnam Co., $26,859, to Gilbert Constr. Co., Ansted, 6 mi. Blair-Hetzel Rd., Project 3200, Logan Co., $94,609, to Venable & Farkas, Charleston, 2.2 mi. Tyler Mountain Rd., Project 3134, Kanawha Co., $23,389, to Draper Bros., Bluefield, 5 mi. Wolfs Creek-Sinks Grove Rd., Project 137-B, Monroe Co., $107,193, to Walton, Suddeth-Waugh Co., Fayetteville, 0.9 mi. Hinton-Tug Creek Rd., Project 3313, Summers Co., $33,038, to Rogers & Shumway, Worthington, 2.2 mi. New Martinsville-Wileyville Rd., Project 3162-A, Wetzel Co., $43,468, to Cooper, Piper & Co., 7.2 mi. Arnoldsburg-Stumptown Rd., Projects 3166 and 3322, Calhoun and Gilmer Counties, $165,976, all 18 ft. wide. Noted May 22.

W. Va., Elkins — Randolph Co., paving Seneca Pike, to W. H. Rhodes, Elkins, $29,-576; Bennington Pike and I. O. O. F. Rd., to P. Williams, Elkins, $54,014. Noted May 22.

Ala., Anniston—Asphalt paving 6 blocks 8th St. and Woodstock Ave., to Morgan Hill Paving Co., Amer. Trust Bldg., Birmingham, $28,500. Engrs. est. 30,000. Noted Mar. 6.

Ala., Huntsville — Bituminous concrete paving Reynolds Ave., to Lashley Bros. Constr. Co., Chattanooga, approximately $29,050. Engrs. est. $25,000.

Fla., Frostproof — To W. P. Kennedy Constr. Co., Avon Park, **(e. e. means engrs. est.)** paving, Wall St. e. e. $25,771, B and 6th Sts., Palm and Orange Aves., e. e. $25,000, 3rd and Wall Sts., Lake Ave. and Lakeshore Blvd., e. e. $27,035, each 1¾ mi., 15 ft. wide, excav. $0.46, 5 in. rock base $0.72, 2 in. asphalt surface $1.20, curb and gutter $0.77.

La., Shreveport—Permanent Paving Centenary Blvd., to Southern Roads Co., Shreveport, $40,688.

O., Columbus—W. H. Duffy, dir. Pub. Serv., to L. S. Gaty, Sandusky and Mound Sts.; grading, paving and laying necessary water services and sewer connections in 362 ft. alley north 11th Ave., 22.5 ft., $2 366, 554 ft. alley north 7th Ave., 16 ft. $2,456, 350 ft. alley north 6th Ave., 16 ft. $1,700, all concrete; to Knight & Wells, 483 Oak St., 1,054 ft. Atcheson St., 30 ft. $19,041, 746 ft. Malvern Ave., 24 ft. $23,-684, both asphalt; to B. F. Patterson, 1214 Neil Ave., 1,029 ft. Ardmore Ave., 24 ft., asphalt $13,956; to W. Neilson, 169 East Lane Ave., 126 ft. 2nd alley west of High St., 16 ft., concrete $649; to I. O. Jones, 707 Grove St., 332 ft. 2nd alley west Kimball Pl., 14 ft., concrete $1,587. Noted June 5.

O., Shaker Heights (Cleveland P. O.)—Paving, etc., East 156th St., Milverton and Norwood Rds., 6,550 lin.ft. stone curbing, 5,508 cu.yd. earth excav., 11,175 sq.yd. asphaltic concrete, 97,575 sq.yd. concrete base, to Rieley Bros., The Arcade, Cleveland, $72,445. Noted June 19.

Mich., Detroit—To Detroit Asphalt Paving Co., 909 Free Press Bldg., paving with 3½ in. sheet asphalt on 8 in. concrete, Beechwood Ave. $37,322, Barton Ave. $24,377, Majestic Ave. $26,413, Petoskey Ave. $19,789, Proctor Ave. $46,508, Rosemary Ave. $39,818, Sparta Ave. $33,815. Ohio Ave. $30,831, Wyoming Ave. $77,466, Wilshire Ave., $39,439, and Warren Ave. $184,-397; to Cleveland Trinidad Paving Co., 402 Hammond Bldg., Parkside Ave. $39,331. Noted June 12.

Wis., Milwaukee—Dept. Pub. Wks., paving Jefferson St., sandstone, to Tallmadge & Hunt Constr. Co., 445 Milwaukee St., $32,690; Midland St. ,asphaltic concrete, to Badger Constr. Co., 97 Wisconsin St., $20,-782; 6 alleys, concrete, to Bodemann Constr. Co., 691 48th St., $33,886; 2 alleys, concrete, to F. W. Blodgett Constr. Co., 521 Newton Ave., $7,144; 1 alley, concrete, to Parkinson Constr. Co., 322 27th St., $2,078.

Wis., Milwaukee — Milwaukee Co., concrete surfacing 2.7 mi. Hopkins Rd., to McGucken-Vander Heyden Co., 314 Fowler St., $77,520, 1.6 mi. Old Chicago Rd., to Kroening Constr. Co., Mitchell St. and 39th Ave., $48,916. Noted June 19.

N. D., Jamestown—Stutsman Co., grading 8 mi. Federal Aid Project 239, 48,150 cu.yd. earth and 854 cu.yd. rock excav., 3,038 cu.yd. overhaul, culverts, etc., to Holman, Webster & Son, Turtle Lake. $16,486; graveling same 10,926 cu.yd. load, unload and spread, 37,643 cu.yd. gravel, to W. H. Noel, Jamestown, $9,088.

Minn., Duluth—Improving 1st St., 18,-515 sq.yd. Trinidad asphalt on concrete, 5,170 cu.yd. excav., also 3,540 ft. 10- to 20-in. sewers, to D. H. Clough Co., 405 Polladio Blvd., $99,184.

Kan., Oskaloosa—Grading and concrete surfacing 1.009 mi. Federal Aid Project 178, Jefferson Co., to Mitzger & Evans, Valley Falls, $57,276. Engrs. est. $59,126. Noted May 22.

Kan., Salina—Grading and sand clay surfacing 7.015 mi. Federal Aid Project 45-A

Streets and Roads (Continued)

and B, 18 ft., Salina Co., to F. Eberhardt Paving Co., Salina, $51,576. Engrs. est. $58,795. Noted May 29.

Neb., Lincoln—Asphaltic concrete paving, curbing and guttering in Dist. 538, to Able Constr. Co., 318 Terminal Bldg., $59,378. Engrs. est. $60,000.

Neb., Omaha—H. Beal, city engr., City Hall, 200,000 sq.yd. paving to J. J. Parks Co., 4 Elks Bldg., Natl. Constr. Co., 310 Arthur Bldg., J. Sherlock, and Carl Noble & Co. Materials to be determined later. Noted June 5.

Neb., Omaha—H. Beal, city engr., City Hall, asphaltic concrete paving in various districts, to Jas. J. Parks Co., 4 Elks Bldg., and Natl. Constr. Co., 310 Arthur Bldg., $300,000 each. Engrs. est. $300,500 each. Noted June 5.

Mont., Shelby—To Fortune & O'Connor, Fargo, N. Dak., concrete sidewalks in Dists. 8 and 9, $18,414 and $6,057 respectively, sewers in Dist. 14, $14,579. Noted May 8.

Tex., Bay City—Matagorda Co., grading and shell surfacing 4.89 mi. State Highway 60, Federal Aid Project 428, 15 ft., to J. M. Neary and L. M. Le Tulle, Bay City, $12,552; drainage structures, to Dotson & White, Bay City, $8,511; furnishing shell to Culver Shell Co., Matagorda, $11,950. Engrs. est. $44,760. Noted June 12.

Tex., Carrizo Springs — Dimmitt Co., grading and shell and gravel surfacing, etc., 12.58 mi. State Highway 85, State Aid Project 483, 16 ft., (18,699 cu.yd. gravel and 10,807 cu.yd. shell to be furnished), to Evans & Greathouse, 1706 West 6th St., Austin, $59,596. Engrs. est. $76,011. Noted June 19.

Tex., Franklin—Robertson Co., grading, etc., 10.87 mi. State Highway 6, Hearne-Benchly Rd., 26 ft., to F. P. McElwrath, Corsicana, $94,637. Engrs. est. $98,000. Noted June 19.

Okla., Grandfield—Grading and paving 5 blocks West 2nd St., 6,150 sq.yd. concrete, 3,300 lin.ft. curbing, 2,100 cu.yd. excav., to Pearce Constr. Co., Edmond, $25,836. Engrs. est. $27,500. Noted June 12.

Idaho—Bureau of Highways, Boise, **(F. A. P. means Federal Aid Project, e. e. means engineers estimate)** grading F. A. P. 73-B, between Stations 239 and 311 plus 49 from Wallace to Mullan, Coeur d'Alene-Yellowstone Trail, Shoshone Co., to S. Orino, Kellogg, $25,340, e.e. $32,251; grading and paving F. A. P. 73-B, between Stations 2 plus 25 and 239 of same road, to Warren Constr. Co., Park Rose Bldg., Portland, Ore.; crushed rock surfacing 17.08 mi. F. A. P. 20-A and 20-B, between Bonners Ferry and Bonner Co. line, North and South Highway, Boundary Co., to Payne & Doust, Spokane, Wash., $38,176, e. e. $32,232; grading and surfacing 3.91 mi. F. A. P. 77 on same road between Bonners Ferry and Port Hill, to Standard Asphalt Paving Co., 517 Lincoln St., Spokane, Wash., $75,950, e. e. $67,943; grading 10.06 mi. F. A. P. 80, Old Oregon Trail Highway between Georgetown and Montpelier, Bear Lake Co., to Gleim & Shafer, $13,505, e. e. $12,636. Noted May 8.

Wash., Seattle—To J. L. Smith, Pioneer Bldg., improving Evanston Ave., 96,000 sq.yd. 6 in. concrete paving $1.60 per sq.yd., 8,750 sq.yd. 7 in. concrete paving $1.84, 8,800 lin.ft. 5 in. curbing $0.55, 56,500 lin.ft. concrete curbing $0.32, 2,300 cu.yd. excav. $0.52, 30,500 cu.yd. subgrade $0.52, total $301,588. Engrs. est. $345,804. Noted June 19.

Wash., Seattle—Bd. Pub. Wks., improving Dibble Ave., et al., 155,000 lin.ft. curb and gutter, 26,000 cu.yd. excav., etc., to Odman Contg. Co., 2534 33rd St., $28,170. Engrs. est. $31,567.

California—State Hy. Comn., Sacramento, **(e. e. means engrs. estimate)** grading 8 mi. highway between ¾ mi. north of Colfax and Gold Run, Placer Co., to C. R. Adams, Merced, $299,411, e. e. $313,735; widening 4.3 mi. road with concrete shoulders between Greenville and Livermore, Alameda Co., to W. A. Dontanville, Salinas, $51,648, e. e. $55,924; grading and seawall 1.2 mi. road between Sea Cliff and Rancho El Rincon, Ventura Co., to J. H. Tillman Co., Ry. Exch. Bldg., Portland, Ore., $382,103, e. e. $397,833. Noted May 15 and 29.

California—State Hy. Comn., Sacramento, **(e. e. means engineers estimate)** paving 4.5 mi. highway between Susanville and Johnstonville, Lassen Co., asphaltic macadam, to T. H. and M. C. Polk, Chico, $47,682, e. e. $57,138; 3.5 mi. highway between Redwood City and South boundary, San Mateo Co., asphaltic concrete and widened with macadam shoulders, to Freeman & Whiting, Fresno, $115,492, e. e. $126,806. Noted June 12.

Calif., Glendale — Improving portion Hermosita, Capistrano Aves., etc., 440,910 sq.ft. grading, 90,518 sq.ft. 5 in. and 185,704 sq.ft. 3 in. oil macadam, 61,650 sq.ft. walks, 4,131 ft. 8 in. c.i. mains, 8,188 ft. 8 in. vitr. sewers, to E. L. Fleming, 324 West Dryden Ave., $103,425. Noted June 5.

Calif., Glendale — See "Streets and Roads."

Calif., Richmond—Improving McLaughlin, Lassen Sts., etc., 9,440 cu.yd. excav., 3,163 cu.yd. fill, 242,813 sq.ft. 8 in. Richmond standard macadam, 86,943 sq.ft. walks, 32,905 sq.ft. gutters, 16,896 ft. concrete curb, etc., to Hutchinson Co., 1706 Bway., Oakland, $78,225. Noted June 19.

Quebec — Provincial Highway Dept., Quebec, paving St. Hyacinthe-Melbourne Rd., in St. Andre d'Aiton, St. Liboire and Ste. Christine, to Cairnie Constr. Co. Ltd., Lennoxville, $53,913. Engrs. est. $60,000.

Ont., Niagara Falls—Will pave, etc., 35,000 sq.yd. various streets, asphalt on concrete, by day labor. $150,000. T. S. Scott, city engr.

Ont., Peterboro — To J. Carroll, 507 Boliver St., 12,500 sq.yd. concrete pavement $2.04 per sq.yd., to Warren Bituminous Paving Co., 54 University Ave., Toronto, 14,500 sq.yd. bitulithic pavement on concrete, $2.85 per sq.yd. Engrs. est. $75,000.

Ont., Port Arthur — Will repair wood block, asphalt and concrete pavements on various streets, by day labor. $70,000. J. Antonisen, city engr.

Ont., Port Perry—Concrete paving, etc., 13,000 sq.yd. main streets to King & Holmes, Oakville, $30,000.

Ont., Sarnia—Will build 1 mi. waterbound macadam road, and 10,000 lin.ft. concrete sidewalks, by day labor. $25,000. W. V. Taylor, city engr.

Ont., St. Thomas — W. C. Miller, city engr., asphalt paving various streets, to Standard Paving Co., Manning Chambers, Ottawa, $1.65 per sq.yd., excav. and concrete base to Ponsford Constr. Co., St. Thomas, $0.80 for excav., $1.30 per sq.yd. concrete base. Engrs. est. $60,000.

Ont., Sudbury—Will build 10,000 sq.yd. bituminous macadam pavements and 5,000 lin.ft. concrete sidewalks on various streets, by day labor. $25,000. F. C. Lane, Town Hall, engr.

Ont., Toronto — To Kilmer & Barber, Adelaide St. E., asphalt paving Bancroft Ave. $4,393, Kingsmere Rd. $5,343, Selkirk Ave. $2,741, Welland Ave. $6,280, Pearl St. $2,282, brick block paving Austin Terrace, $3,631, grading Chatsworth Dr. $654, Cheritan Ave. $1,314, Chudleigh Ave. $512, Colton Ave. $375, Duplex Ave. $965, Welland Ave. $516; to Constructing & Paving Co., Confederation Life Bldg., asphalt paving Davenport Rd. $9,059, Oriole Gardens $2,596, Poplar Plains Crescent $5,154, Sighthill Ave. $4,948, Sellers Ave. $946; to Godson Contg. Co., Manning Chambers, asphalt surface on Bellvue Ave. $6,444, Clinton St. $10,287; to Warren Bituminous Paving Co., 54 University Ave., bituminous concrete paving Regal Rd. $3,114, Simpson Ave. $8,351, Tyrell Ave. $4,038, concrete curbs Davenport Rd. and Tyrell Ave. $0.72 and $0.70 per lin.ft.; to Dufferin Constr. Co., 210 Victoria St., concrete curbs on Simpson Ave. $0.70; to Asphaltic Concrete Co., 36 Toronto St., asphaltic concrete paving Gifford St. $6,112; to Dept. Pub. Wks., by day labor, asphaltic concrete surfacing Albany Ave. $1,102, Heath St. $4,834, Davenport Rd. $27,477, concrete curbs on Austin Terrace $0.79 per lin.ft.

Industrial Works

PROPOSED WORK

Mass., Templeton—Plant—Travers Mfg. Co., plans manufacturing plant. $100,000. Private plans.

N. Y., Buffalo—Mill Mosier & Summers, 1266 Seneca St., plans to rebuild mill recently destroyed by fire. $40,000.

N. Y., Malone—Plant—Chateaugay Ore & Iron Co., Chateaugay, plans rebuilding 5 story plant, recently destroyed by fire, here. $300,000. J. R. Tinney, mgr.

Tenn., Nashville—Factory—Carter Shoe Co., Louisville & Nashville R.R., plans 4 story and basement, brick addition. $100,000.

O., Akron — Substation — Northern Ohio Traction & Light Co., North Main St., plans fireproof, at Gorge power plant. $40,000.

Ind., Indianapolis — Factory — Standard Sanitary Mfg. Co., Bessemer Bldg., Pittsburgh, Pa., having revised plans prepared by Hunting-Davis Co., Century Bldg., Pittsburgh, Pa., 4 story and basement, 80 x 150 ft., Pratt and Senate Sts., here. $180,000. Former bids rejected. Noted Jan. 24.

Wis., Milwaukee — Factory — Standard Sanitary Mfg. Co., 311 5th St., had plans prepared by Hunting-Davis Co., 1150 Century Bldg., Pittsburgh, Pa., 5 story and basement, 82 x 175 ft., concrete and brick, plain foundation, 17th St. $250,000.

Wis., Milwaukee—Laundry—Ideal Laundry Co., 1520 Wells St., plans rebuilding 3 story, 60 x 132 ft., brick and timber or brick and concrete, recently destroyed by fire. $60,000. Architect not selected.

Wis., Sherwood—Plant—Western Lime & Cement Co., 68 Wisconsin St., plans rebuilding 2 story, brick and concrete, plain foundation, recently destroyed by fire. $40,000. Architect not selected.

Tex., Decatur—Plant—Dodson & Milligan, plan ice plant and cold storage vaults. $45,000.

Tex., El Paso—Plant—El Paso Compress & Fumigation Co., making plans combination cotton compress and fumigation plant, incl. wooden platform, 20,000 bales capacity. $250,000. Private plans. L. J. Ivey, Fabens, interested.

Tex., Houston—Factory—Standard Drug Products Co., c/o Chamber of Commerce, plans 3 story, concrete. $200,000.

Okla., Texola—Plant—See "Waterworks."

Wash., Seattle—Factory—Vance Lumber Co., Stuart Bldg., having plans prepared by V. W. Voorhees, Eitel Bldg., 3 story and basement, 115 x 420 ft., rein.-con. and mill, Republican and Mercer Sts. $400,000.

Calif., Hawthorne — Factory — Green Epidosite Industrial Corp., 209 Bartlett Bldg., Los Angeles, plans factory, here. To exceed $40,000. G. Reid, 305 East Pennsylvania Ave., pres.

Calif., Long Beach—Plant—W. H. Austin, archt., Pacific Southwest Bldg., soon takes bids 4 story and basement, 50 x 150 ft., brick, Pine Ave., for Long Beach Press, 434 Pine Ave. Noted Sept. 13.

Calif., Los Angeles—Factory—Western Amer. Concrete Co., 1147 Glendale Blvd., plans factory, San Fernando Rd.

Calif., Los Angeles—Substation—Los Angeles Ry. Co., Railway Bldg., had plans prepared 1 story, 50 x 60 ft., brick, 6th St. Private plans.

Calif., San Francisco — Warehouse — Amer. Rolling Mill Co., 10th and Bryant Sts. plans probably rein.-con., to contain 20,000 sq.ft. or more floor space, Bryant and 10th Sts. $40,000 or more.

Que., Hull—Factory—E. B. Eddy Co. Ltd., had plans prepared factory. $500,000. Private plans.

Que., Valleyfield—Plant—Walsh Plate & Structural Wks., Montreal, plans steel plant here. $200,000. Engineer and architects' names withheld.

Ont., Meaford—Plant—Hisey Packing Co., Creemore, plans packing and cold storage plant, here. $35,000.

Ont., Milverton — Factory — Hondelick Bros., plans to rebuild factory recently destroyed by fire. $500,000.

Ont., Toronto—Substation—Toronto Electric Comrs., Bd. Trade Bldg., plans 3 story, rein.-con., brick and steel electric substation, Willshire Ave. $320,000. Private plans.

BIDS DESIRED

Pa., Harrisburg—Power Plant—July 9 (extended date), by Dept. Properties and Supplies, Capitol Bldg., alterations and extensions to power plant in Capitol Buildings. A. W. Brunner, 101 Park Ave., New York City, archt. Noted May 22.

N. C., Wake Forest—Plant—July 8, by Building Com. Wake Forest College, central heating plant. $50,000. E. W. Timberlake, chn.

Ind., Indianapolis — Plant — Thornton-Levey Printing Co., 44 South Pennsylvania St., taking bids 2 and 3 story and basement, 42 x 195 ft., brick and steel, North Illinois St., $150,000.

Ind., Richmond—Factory—F. and N. Lawn Mower Co., taking bids 4 story, 75 x 100 ft., rein.-con., brick and steel. $100,000. J. Mueller & Co., Palladium Bldg., archts. Noted June 12.

Ind., Richmond — Laundry — Richmond Home Laundry Co., taking bids 1 story and basement, 57 x 157 ft., rein.-con., brick and steel, $45,000. Werking & Son, Amer. Trust Bldg., archts. Noted June 12.

Wis., Milwaukee—Laundry—Ideal Laundry Co., 1520 Wells St., taking bids rebuilding 3 story, 62 x 130 ft., brick and timber, recently destroyed by fire. $60,000. Private plans. Noted June 26.

Wis., Milwaukee — Plant — M. Fernekes, archt., 915 Chestnut St., taking bids 3 story, 72 x 90 ft., brick and concrete, plain foundation, Muskego St., for Retailers Tallow & Calf Skin Assn., c/o J. Hermann, 2322 State St. $50,000. Noted June 12.

Minn., Owatonna—Plant—July 8, by Utilities Comn., 1,000 kw. steam electric generating plant, electric distribution and street lighting, and steam heating system. $350,000. A. L. Mullergren, Gates Bldg., Kansas City, Mo., consult. engr. Noted Jan. 3.

CONTRACTS AWARDED

Mass., Allston (Boston P. O.)—Machine Shop—H. F. Livermore Co., 100 Cummington St., Boston, will build 2 story, 75 x 245 ft., brick and timber, by day labor. $120,000. Private plans.

Industrial Works (Continued)

Mass., Cambridge — Warehouse — Curtis Ink Co, East Cambridge, warehouse addition. First St, to Scully Co., 118 1st St., East Cambridge. Archts. est. to exceed $100,000.

Mass., Dorchester (Boston P. O.)—Stock —Edison Electric Illuminating Co., 39 Boylston St., Boston, stock building, 1165 Massachusetts Ave., here, to Fred T. Ley Co., Inc., 230 Boylston St., Boston. Archts. est. $200,000.

Mass., Jamaica Plain (Boston P. O.)—Service Station, etc.—Reardon Building Trust, 3168 Washington St., 1 story and basement, 60 x 150 ft., service station and repair shop, to Scully Co., 118 1st St., East Cambridge. Archts. est. $50,000.

Mass., Somerville—Service Station—International Harvester Co., of America, 43 Somerville Ave., 1 story 75 x 100 ft., to D. C. McIntire, Inc., 74 Broad St., Boston. Archts. est. to exceed $40,000. Noted May 8.

N. J., Bridgeton — Power House — See "Buildings."

Pa., Johnstown — Factory — Mitchell Spring & Mfg. Co., will build 1 story, approximately 100 x 100 ft. factory, by day labor. $40,000. Gray & Chaflin, Colonial Bldg., engrs.

Pa., Pittsburgh—Public Service—Philadelphia Co., 435 6th Ave., general contract 8 story and basement, 85 x 249 ft., 6th Ave. and Cherry Way, to W. T. Grange Constr. Co., Keenan Bldg. Archts. est. $1,000,000.

Md., Baltimore—Substation, etc.—United Railways Co., Continental Bldg., 1 story, 37 x 54 ft., brick and concrete, plain foundation, Caroline and Fairmount Aves., to DeCou & Davis, 6 East Mulberry St., $25,000. Noted June 19.

O., Cincinnati—Shop—Davis Welding Co., 1110 Richmond St., 1 story, rein.-con., brick and steel addition, Llewellyn St., to M. R. Hanke, 1009 Ross St. $95,000.

O., Cleveland—Factory—W. S. Tyler Co., C. Zimmerman, secy., 3615 Superior Ave., 2 story and basement, 110 x 115 ft., brick and rein.-con., East 36th St., to S. W. Emerson Co., 1900 Euclid Ave. Archts. est. $200,000. Noted June 12.

O., Hamilton—Shop—Ford Motor Co., Highland Park, Mich., 1 story, 102 x 201 ft., brick, steel and concrete addition, plain foundation, 4th St., here, to F. K. Vaughn Building Co., Dayton St. Archt. est. about $90,000. Noted May 15.

Ind., Indianapolis — Laundry — Crown Laundry Co., 2901 East Washington St., 2 story and basement, rein.-con., brick and steel, addition, to Hall Constr. Co., Board of Trade Bldg. Archts. est. $75,000.

Wis., Kenosha—Plant—Montemurro Bros., 117 South Newell St., pasteurizing and bottling plant, 2 story, 40 x 70 ft., concrete and brick, plain foundation, to J. Stocker, 67 North Brockett St. Archts. est. $40,000.

Wis., Racine—Factory—Belle City Malleable Iron Co., Kewaunee St., 1 story, 80 x 135 ft., brick and mill, plain foundation addition, Kewaunee St., to Nelson & Co., Janes Bldg. Archts. est. $45,000. Noted Apr. 24.

Wis., Two Rivers—Factory—Hamilton Mfg. Co., 1 story, 80 x 121 ft., brick and steel addition, plain foundation, to W. W. Oeflein, 86 Michigan St., Milwaukee. Archts. est. $40,000.

Wis., West Allis—Storage—Allis-Chalmers Mfg. Co., 7 story, 120 x 137 ft., brick and timber, plain foundation, to Klug & Smith Co., 69 Wisconsin St., Milwaukee. Noted May 29.

Mo., Poplar Bluff—Sawmill, etc.—Bimel Ashcroft Mfg. Co., will rebuild plant recently destroyed by fire, by day labor. $65,000. Private plans.

Mo., St. Louis—Service-Terminal Railroad Assn., 1800 Market St., will build railroad service building, 2 story, 28 x 49 x 81 ft., rein.-con. and brick, 3200 Scott St., by day labor. $40,000. Private plans.

Ark., Little Rock—Laundry—Imperial Laundry Co., 1101 Main St., general contract 2 story, brick and concrete, 15th and Main Sts., to J. H. Leveck & Sons, St. Marys St. $35,000.

Calif., Fillmore—Packing Plant—Fillmore Citrus Assn., will build rein.-con. and hollow tile, 150 carload capacity, by day labor under supervision of D. J. Haire, 1051 South Manhattan Pl., Los Angeles.

Calif., San Francisco—Factory—Buckley Door Co., Quint and Evans Aves., 1 story factory, to Meyer Bros., 1 Montgomery St., $42,000.

Ont., North Bay—Shops—Temiskaming & Northern Ontario Ry. Co., shops, to Stuart & Sinclair, Hamilton, $75,000.

Ont., Toronto — Sub-Station — Toronto Electric Comrs., Bd. Trade Bldg., general contract 2 story, 60 x 80 ft., rein.-con., brick and steel, plain foundation, Carlaw Ave., to Archibald & Holmes, 709 Yonge St. Archts. est. $150,000.

Buildings

PROPOSED WORK

Mass., Boston—Hospital—City Building Dept., City Hall, plans hospital, Harrison Ave., $750,000. J. H. Mahoney, comr. Engineer and architect not selected.

Mass., Boston—Loft—Hudson Building Co., c/o J. Barron, 85 Albany St., having preliminary plans prepared by Monks & Johnson, 99 Chauncy St., 12 story and basement, 125 x 125 ft., brick and terra cotta, 69-85 Kneeland St. $600,000.

Mass., Cambridge — Administration — Harvard University, plans administration building at corner College yard on site of old dance hall. $200,000. W. Lawrence, bishop, chn. Engineer and architect not selected.

Mass., Waltham — Church — St. Mary's Roman Catholic Church, 133 School St., plans new church, Main and Warren Sts. $150,000. Engineer and architect not selected.

Mass., Wellesley — Administration — Wellesley University plans brick and steel, plain foundation, on campus, $500,000.

Conn., New Haven—Hospital—Trustees St. Raphael's Hospital, Grove St., had sketches made by L. A. Walsh, 51 Leavenworth St., 4 story and basement, brick. $180,000-$190,000.

N. Y., Brooklyn — Synagogue — Union Temple, Bedford and Lafayette Aves., soon takes bids brick, steel and stone, plain foundation, Eastern Parkway and Plaza St. $1,000,000. A. W. Brunner, 101 Park Ave., New York, archt. and engr.

N. Y., Buffalo—Apartment—J. S. Rowe, Roanoke Hotel, Elmwood Ave. and Chippewa St., had plans prepared by R. R. Rowe, engr., Roanoke Hotel, 10 story, rein.-con., brick and steel, South Elmwood Ave. $400,000.

O., Dayton—Recreation, Auditorium, etc. —Schwind Realty Co., Realty Bldg., having plans prepared by Schenk & Williams, Mutual Howe Bldg., 3 story and basement, 100 x 112 ft., rein.-con., plain foundation, Main St. $175,000.

N. Y., New York—Church—St. Marks Methodist Episcopal Church, c/o Sibley & Featherston, archt., 101 Park Ave., having plans prepared brick, steel and stone, plain foundation, St. Nicholas Ave. and 137th St. $450,000. R. D. Kimball, 15 West 38th St., engr.

N. Y., New York — Offices — Syndicate Trading Co., c/o Cross & Cross, archts. and engrs., 385 Madison Ave., having plans prepared two 14 story, brick, steel and stone, plain foundations, 240 Madison Ave. $500,000 each.

N. Y., New York — High School — Bd. Educ., 500 Park Ave., having sketches made by W. H. Gompert, archt. and engr., Flatbush Ave. extension and Concord St., Brooklyn, brick, steel and stone, plain foundation, 103rd St. and 5th Ave. $1,000,000.

N. Y., New York—School—Bd. Educ., 500 Park Ave., soon takes bids P. S. 136, brick, steel and stone, plain foundation, Edgecombe Ave. $1,150,000. W. H. Gompert, Flatbush Ave. extension and Concord St., Brooklyn, archt. and engr.

N. Y., New York — Theatre — **F. F.** Proctor, c/o T. W. Lamb, archt. and engr., 644 8th Ave., having plans prepared 3 story, brick, steel and stone, plain foundation, Lexington Ave. between 86th aad 87th Sts. $650,000.

N. J., Asbury Park—Hotel—Berkeley-Cararet Hotel Corp., c/o Warren & Wetmore, archts., 16 East 47th St., New York City, having plans prepared brick and stone, plain foundation, Sunset and 6th Aves., here. $3,000,000.

N. J., Atlantic City—Hotel—Maynicke & Franke, archts. and engrs., 25 East 26th St., New York City, preparing plans 15 story, brick, steel and stone, plain foundation, on boardwalk between Providence and Boston Aves., here. $3,800,000. Owner's name withheld.

N. J., Bound Brook—School—School Bd. plans Washington School, Union Ave. $280,000. J. N. Pierson & Son, 175 Smith St., Perth Amboy, archts.

N. J., Camden—Laboratory, etc.—Victor Talking Machine Co., Front and Cooper Sts., preparing plans recording laboratory, Front and Cooper Sts., $500,000, kitchen and office building, Cooper St. between Point and Ambler Sts. $300,000. Architect and engineer not announced.

N. J., Woodbury—County—Bd. Freeholders Gloucester Co., Court House, rejected bids June 12, 3 story and basement, 97 x 117 ft., Delaware Ave. $300,000. Will readvertise. C. R. Peddle, 136 South 4th St., Phila., archt. Noted May 29.

Pa., Beaver Falls—Church—First Presbyterian Church having plans prepared by J. C. Fulton & Son, Thompson Ruby Bldg., Uniontown, 2 story and basement, 1[illegible] x 166 ft., stone and steel, 8th Ave. $160,000.

Pa., Chester—School—School Bd., G. S. Mitchell, pres., Larkins Bldg., having plans prepared by Ritter & Shay, North Amer. Bldg., Phila., 2 story and basement, 12th and Melrose Sts.

Pa., Phila.—Hospital—Jewish Hospital, York and Tabor Rds., having plans prepared by H. W. Caster, Stephen Girard Bldg., 5 story and basement, 60 x 160 ft. $500,000.

Pa., Olyphant — Church — St. Patricks Church T. J. Murphy, pastor, having plans prepared by J. J. Howley, Traders Bank Bldg., Scranton, 2 story and basement, stone and steel. $150,000.

Pa., Waynesburg—Church—Presbyterian Church Society having preliminary plans prepared by Smith & Walker, 80 Boylston St., Boston, Mass., church. $150,000.

D. C., Wash.—Apartment—Kaleb Apartment Co., having revised plans prepared by Stern & Tomlinson, Continental Trust Bldg., apartment, 11th and A Sts. $200,000. Noted May 1.

D. C., Wash.—Apartment—B. Robbins, Natl. Metropolitan Bank Bldg., 613 15th St. N. W., had plans prepared by Stern & Tomlinson, Continental Trust Bldg., apartment, 17th and Kenyon Sts. N. W. $250,000.

D. C., Wash.—Memorial—Womans Universal Alliance, 1519 N. H. Ave., having plans prepared by F. B. Hoffmann, 147 East 51st St., New York City, memorial building and tower. $1,000,000.

Fla., Daytona—Hotel—Rio Vista Hotel Co. plans 150 room hotel in Rio Vista Subdivision. $250,000. G. W. Hurlburt, Jamestown, N. Y., pres.

Fla., Tampa—Bank and Office—Florida Mortgage, Title & Bonding Co. plans 12 story, Franklin and Lafayette Sts. $750,000. C. H. Brown, pres.

Miss., Jackson—Schools—Election in July $400,000 bonds for new Junior high school and improving other schools. H. V. Watkins, chn. Bd. Educ.

O., Cheviot (Cincinnati P. O.)—School—Cheviot Twp., having plans prepared by S. Hannaford & Sons, 1024 Dixie Terminal Bldg., Cincinnati, 1 story, rein.-con., brick and stone, Harrison Park. $219,000.

O., Cleveland—Apartment—W. H. Mason, c/o W. R. Powell, archt., Rose Bldg., had plans prepared 3 story and basement, 56 x 124 ft., brick, 1403 Mentor Ave. $150,000.

O., Gates Mills—Farm Cottages, Garage, etc.—W. T. White, pres. White Sewing Machine Co., 7821 St. Clair Ave., Cleveland, had plans prepared by Bohnard & Parsson, 1900 Euclid Ave., Cleveland, 1 and 2 story, 200 x 300 ft. farm cottages, garage, stables, riding ring kennels, brick, steel and concrete, here. $150,000.

O., Youngstown — Apartment — I. M. Hogg, Stambaugh Bldg., Cleveland, had plans prepared by L. R. Walker and J. L. Mauer, 1900 Euclid Ave., Cleveland, 3 story and basement, 101 x 104 ft., brick, here. $150,000.

Ind., Gary—Hotel—J. Lincoln, c/o H. Erickson, archt., City Hall, having plans prepared 3 story and basement, 63 x 125 ft., rein.-con., brick and steel, 5th St. $150,000.

Mich., Detroit—School—Bd. Educ., 1354 Bway. Ave., having plans prepared by Malcomson & Higginbotham, 1217 Griswold St., 2 story and basement, 162 x 385 ft. rein.-con., brick and steel, plain foundation, LaSalle Blvd. $750,000.

Ill., Chicago—Fine Arts—C. A. Chapin Estate, 410 South Michigan Ave., having plans prepared by Rebori Wentworth & Dewey, 332 South Michigan Ave., 6 story, 20 x 170 ft., fireproof annex, 421 South Wabash Ave. with bridge connecting Michigan Ave. building. $200,000.

Ill., Chicago—Store, etc.—N. K. Aranoff, pres. Book Shop bindery, 314 West Superior St., plans 5 story store, loft and office building, 3746 South Michigan Ave. $350,000.

Ill., Rock Island—School—Villa de Chantal School, Sisters of Visitation, having preliminary plans prepared, 2 and 3 story, brick and concrete. $150,000. Private plans.

Wis., Milwaukee — Apartment — Deuster, Schwartz & Keuper, 530 Grand Ave., having plans prepared by H. G. Lotter, 427 Milwaukee St., 3 story and basement, brick and concrete plain foundation, Prospect Ave. $150,000. Noted May 29.

Wis., Milwaukee — Apartment — Deuster, Schwartz & Keuper, 530 Grand Ave., having plans prepared by H. G. Lotter, 427 Milwaukee St., 3 story and basement, brick and concrete, plain foundation, Grand Ave. and 17th St. $150,000. Noted June 5.

Wis., Milwaukee — Church — Immanuel Lutheran Congregation, C. Dietz, pastor, 1122 Garfield Ave., having revised plans prepared by H. C. Haeuser, 445 Milwaukee St., 2 story, brick, tile and stone, plain

Buildings (Continued)

foundation, Teutonia Ave. $150,000. Former bids rejected. Noted May 8.

Wis., Milwaukee — Hospital — Deaconess Hospital, 1815 Grand Ave., had plans prepared by Leiser & Holst, 105 Wells St., 4 story and basement, brick and concrete addition, plain foundation, Grand Ave. $150,000.

Wis., Milwaukee—Office—English Woolen Mills Co., 204 3rd St., plans 8 story, 120 x 152 ft., brick and concrete, plain foundation. Wells and 3rd Sts. $400,000. Architect and engineer not selected.

Wis., Milwaukee—Office—R. B. Williamson, archt., 405 Bway., making plans 10 story and basement, 52 x 150 ft., brick and concrete, plain foundation, 2nd St. $250,000. Owner's name withheld.

Kan., Manhattan — Church — Methodist Episcopal Church having plans prepared by T. W. Williamson & Co., Central Natl. Bank Bldg., Topeka, 2 story and basement, 68 x 126 ft., native stone and slate. $150,000. Noted Aug. 23.

Tex., Houston — Schools — Bd. Educ. voted $3,000,000 bonds five junior high schools and miscellaneous buildings. J. C. McVea, city engr. Noted May 29.

Okla., Bartlesville — High School — Bd. Educ. having plans prepared by J. H. Felt & Co., 802 Grand Ave. Temple, Kansas City, Mo., 3 story and basement, rein.-con., brick and stone, 4th St. $360,000. Noted June 12.

Ore., Ashland — Hotel — Tourtellotte & Hummel, archts., Failing Bldg., Portland, preparing plans and take bids about Aug. 1, 9 story, 80 x 122 ft., rein.-con., stone and terra cotta, plain foundation, East Main and 1st Sts., here, for Ashland Hotel Co., R. W. Price, pres. $250,000.

Calif., Belmont — Convent — College of Notre Dame, c/o J. J. Donovan, Tappscott Bldg., Oakland, having plans prepared rein.-con. $250,000.

Calif., Los Angeles — Hospital — J. C. Austin and F. M. Ashley, archts., 1125 Detwiler Bldg., soon take bids, Class A. rein.-con., Ocean View Ave., for St. Vincents Hospital, 1151 Sunset Blvd. To exceed $1,000,000. Noted Sept. 20.

Calif., Los Angeles—Store and Loft—R. N. Park, c/o W. S. Hebbard, archt., I. W. Hellman Bldg., having plans prepared 4 story and basement, brick, 7th St. $300,000.

Calif., Pasadena—Exchange—Home Telephone Co., 70 North Raymond Ave., having plans prepared 7 story and basement, rei.n-con., East Colorado St. To exceed $150,000. Private plans.

Calif., Pasadena—Salesroom, Loft, etc.—Pasadena Furniture Co., 83 North Raymond Ave., having plans prepared by Curlett & Beelman, Union Bank Bldg., Los Angeles, 7 story and basement, approximately 75 x 180 ft., Class A, East Colorado Ave.

Calif., Sacramento—High School—Voted $550,000 bonds, fireproof junior high school. C. Hughes, secy. Bd. Educ. Noted Feb. 14.

Calif., San Francisco—High Schools—City and San Francisco Co. having plans prepared by Joseph & Stone, New Call Bldg., one junior high school, $300,000, and by J. Reid, Jr., 1st Natl. Bank Bldg., two junior high schools, $600,000.

Calif., San Francisco—Warehouse—J. A. Roebling & Sons Co., 646 Folsom St., making plans 1 story, 200 x 400 ft., concrete and steel, on block bounded by 16th, 17th, De Haro and Carolina Sts. Private plans. $250,000 or more.

Calif., San Jose—High School—Bd. Educ. having plans prepared by W. H. Weeks, 369 Pine St., San Francisco, 2 story, rein.-con. junior high school, Santa Clara St. $400,000.

Ont., Petrolia—High School—Bd. Educ. plans 2 story and basement, 8 room, brick, steel and tile, plain foundation. $150,000. Engineer and architect not selected.

BIDS DESIRED

Mass., Boston—Garage—July 2, by H. M. Haven, and L. T. Hopkins Inc., archts. and engrs., 11 Beacon St., 8 story and basement, 120 x 150 ft., Beach St. between Washington St. and Harrison Ave., for Jordan Marsh Co., Washington St. $500,000.

Mass., Watertown—Warehouse—F. W. Webb Mfg. Co., 50 Elm St., Boston, taking bids 1 story and basement, 60 x 100 ft., rein.-con. and brick, Arsenal St., here. 40,000. McLaughlin & Burr, 88 Tremont St., Boston, archts.

Mass., Winthrop—School—Bd. Selectmen taking bids 2 story, rein.-con. and brick, Herman St. $280,000. Brainerd & Leeds, 89 Franklin St., Boston, archts. Noted May 15.

Wis., Milwaukee — Apartment — June 30, by M. Tullgren Sons, 425 East Water St., 3 story and basement, 100 x 122 ft., concrete and brick, plain foundation, Prospect Ave. $250,000. Owners name withheld.

N. Y., Auburndale (Flushing P. O.) — School—July 8, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, P. S. 130, 42nd Ave. from Cross Island Blvd. to 201st St., here.

N. Y., Binghamton—Hospital—July 9, by Bd. Contract & Supply, 3 new buildings at City Hospital. $500,000. W. H. Whitlock, S. M. Bldg., archt.

N. Y., Mt. Pleasant—Garage, etc.—July 7, by F. L. Merrit, clk. Bd. Supervs. Westchester Co., Court House, White Plains, garage and dairy barn in connection with Grassland Hospital, here, Walker & Gillette, 128 East 37th St., New York, archts.; adv. E. N.-R. June 26.

N. Y., St. George—School—July 8, by W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, P. S. 39, Sand Lane from McFarland to Major Aves., South Beach, Richmond Boro.

N. J. Lambertville—High School—June 30, by Bd. Educ., 2 story, new school building, and alterations to present high school and 3rd Ward school. $180,000. W. A. Klemann, 1st Natl. Bank Bldg., Trenton, archt.

Pa., Norristown—Court House—July 22, by W. C. Irvin, controller Montgomery Co., renovating and repairing court house; adv. E. N.-R. June 26.

Pa., Phila.—Club—July 8, (extended date) by Penn Athletic Club of Phila., c/o E. B. Morris, Jr., chn. Building Com., 9 story, basement and subbasement, 175 x 195 ft., steel, plain foundation, Rittenhouse Sq. and 18th St. between Walnut and Locust Sts. $3,000,000. W. H. Gravell and I. H. Francis, Otis Bldg., engrs. Zantzinger, Borie & Medary, Otis Bldg., archts.

Pa., Taylor—High School—July 15, by Secretary School Bd., 2 story and basement, 116 x 150 ft., steel and brick, concrete pile foundation. $250,000. J. J. Howley, Traders Bank Bldg., Scranton, archt.

Md., Baltimore—Bank and Office—June 30 by F. A. Fletcher, archt., 407 North Charles St., 6 story, 81 x 81 ft. brick and steel, Gay and Fallsway Sts., for Old Town Natl. Bank, Gay and Exeter Sts. $375,000. Noted June 19.

N. C., Charlotte—Municipal, etc.—July 8, by J. O. Walker, mayor, 3 story and basement, 70 x 165 ft. municipal building, limestone and marble, 2 story and basement, 78 x 94 ft. court building, brick, also 2 story and basement, 78 x 94 ft. fire building, brick. $500,000. C. C. Hook, Trust Bldg., archt. Noted Jan. 24.

O., East Cleveland (Cleveland P. O.)—Apartment—Ideal Impvt. Co., c/o S. Spira, 2607 Ontario St., taking bids 3 story and basement, 80 x 110 ft. brick, 13706 Superior Ave. $175,000. Noted May 29 under Cleveland.

O., Cleveland—Commercial and Apartment—I. Brezin, 10110 Cleveland Ave., taking bids 3 story and basement, 47 x 174 ft., brick, 915 Parkwood Drive, $150,000. M. Weis, Union Bldg., archt.

Ind., Terre Haute—Office—Citizens Gas & Fuel Co., 636 Wabash Ave., taking bids 4 story and basement, rein.-con., brick and steel. $250,000. Shourds-Stoner Co., Tribune Bldg., archts. Noted June 12.

Mich., Detroit—School—July 7, by C. A. Gadd, bus. mgr. Bd. Educ., 2 story and basement, 162 x 385 ft., rein.-con., brick and steel, plain foundation, LaSalle Blvd. $750,000. Malcomson & Higginbotham, 1217 Griswold St., archts.

Wis., Racine—School—July 3, by Bd. Educ., A. Schafer, secy., (1st unit) Theodore Roosevelt School, 2 story and basement, 64 x 149 ft., brick and tile, plain foundation. $150,000. J. M. Matson, Baker Bldg., archt.

Kan., Parsons—Schools—July 21, by Bd. Educ., new 3 story, 167 x 280 ft. high school, also 2 story, 52 x 120 ft. addition, both brick and stone. $400,000. T. W. Williamson & Co., 312 Central Bank Bldg., Topeka, archts. Noted Mar. 27.

Mo., St. Louis — Market and Garage — July 22, by Bd. Pub. Serv., 208 City Hall, 3 story and basement, 226 x 270 ft., rein.-con., brick, stone and steel, Bway., 6th, Lucas and Morgan Sts. H. Updike and L. R. Bowen, 301 City Hall, engrs. E. E. Christopher, 301 City Hall, archt.

Wash., Seattle—Lodge—July 1, by F. J. Peters, archt., Seaboard Bldg., 2 story, 100 x 200 ft., fireproof, 22nd and Market St., N. W., for Ballard Order of Eagles. $400,000. Noted May 8.

Calif., Long Beach—Theatre and Store—C. Boller, archt., 340 Douglas Bldg., Los Angeles, taking bids 3 story and basement, rein.-con. and steel, Seaside Blvd., here. $150,000. Owners name withheld.

Calif., Los Angeles—Auditorium—J. C. Austin, archt., 1125 Detwiler Bldg., and A. M. Edelman, associated archt., H. W. Hellman Bldg., taking bids and open same about July 31, Class A rein.-con., Royal and Jefferson Sts. for Al Malaikan Temple A. A. O. N. M. S. $1,250,000.

Calif., San Francisco—High School—July 9, by Bd. Pub. Wks., Class A. Fell St. for city and San Francisco Co., general contract $700,000, mechanical equipment $70,000, plumbing $40,000, electrical work $48,000. J. Reid, Jr., 1st Natl. Bank Bldg., archt. Steel contract awarded.

BIDS RECEIVED

N. Y., New York—Garage—H. Bruckner, pres. Bronx Boro, 3rd and Tremont Aves., June 17, constructing garage, East 181st St., from Balaban Gordon Co., 116 West 39th St., $138,920 plus $2,500, plus $9,850.

N. Y., New York—School—Dept. Educ., at office W. H. Gompert, supt. school buildings, Flatbush Ave. extension and Concord St., Brooklyn, (a) general contract (b) tunnel, P. S. 173, Ft. Washington Ave. from West 173rd to 174th Sts., from C. Meads & Co., 217 West 14th St., (a) $730,885, from Lustbader Constr. Co., 423 Madison Ave., (b) $210,606. Noted June 5.

Mich., Detroit—School—Bd. Educ., 1354 Bway., 2 story and basement, rein.-con., brick and steel, plain foundation, Cameron Ave., from Martin & Kraussman, 606 Woodward Ave., $540,750. Noted June 19.

Calif., Alameda—School—City, 2 story and basement, school addition, general contract, from C. H. Peterson, 185 Stevenson St., San Francisco, $101,500; excavating, concrete and brick, from White & Gloor, Monadnock Bldg., San Francisco, $25,725. Noted Feb. 21.

Calif., Palo Alto — Theatre — Weeks & Day, archts., 315 Montgomery St., San Francisco, rein.-con., University Ave., and Ramona St., here, from L. J. Cohn, 110 Sutter St., San Francisco, for Palo Alto Theatre Co., approximately $146,500. Noted June 12.

CONTRACTS AWARDED

N. H., Litchfield (mail Thorntons Ferry) —Library—Town, memorial library, to D. M. McCullough, 703 Pine St., Manchester. Archts. est. $150,000.

Mass., Brookline (Boston P. O.)—School —Temple Ohabie Shalom, B. Snider, chn., 18 Tremont St., Boston, 2 story and basement, 60 x 160 ft., Beacon and Marshall Sts., here, to Canter Constr. Co., 6 Beacon St., Boston. Archts. est. $150,000.

Mass., Brighton (Boston P. O.)—Hospital —Florence Crittendon League, 506 Tremont Temple, Boston, 3 story and basement 32 x 106 ft., brick and stone, Oak Sq., Perthshire Rd. and Dunboy St., here, to L. P. Soule & Son, 80 Boylston St., Boston. Archts. est. $250,000. Noted June 5.

N. Y., Brooklyn—Clubhouse—R. T. Short, archt. and engr., 370 Macon St., 9 story, brick, steel and stone, plain foundation, Prospect Park West and Union St., to W. Kennedy Constr. Co., 215 Montague St., for Knights of Columbus, 56 South Portland Ave. Archts. est. $1,185,000.

N. Y., Canton—County—Bd. Supervs. St. Lawrence Co., general contract new county building, to Munn & Shea, Cote St., Montreal, Que., $117,000. Noted May 22.

N. Y., New York—Offices—Natl. Bible Institute, 214 West 35th St., brick, steel and stone, plain foundation, 330 West 55th St., to J. Lowry, 270 Madison Ave. Archts. est. $1,000,000.

N. J., Bridgeton—Hospital—Stearns & Woodnutt, archts., St. Girard Bldg., Phila., 3 story and basement 40 x 140 ft. hospital, and 2 story, 42 x 90 ft. power house, brick and steel, plain foundation. Irving and Magnolia Aves., to D. A. McClelland, Drexell Bldg., Phila., Pa. Archts. est. $150,000. Noted June 5.

Pa., Elwood City—Church, etc.—Methodist Episcopal Congregation, general contract 1 story and basement, 45 x 105 ft. and 50 x 60 ft., church and Sunday school, 5th and Crescent Sts., to P. Schenck, Elwood City. Archts. est. $150,000.

Pa., Windber—High School—Bd. Educ., general contract 2 story and basement, 56 x 162 ft., brick, tile and steel, to Wilson Constr. Co., Johnstown. Archts. est. $170,000. Noted Feb. 28.

Pa., Upper Darby—High School—School Bd., general contract 2 story and basement, 58 x 260 ft., Lansdowne Ave., to D. A. McClelland Co., Drexel Bldg., Phila., $337,452; heating, to Bowers Bros. & Co., 2015 Sansom St., Phila., $45,356; plumbing, to W. Newell & Son, 1707 Sansom St., Phila., $25,378. Noted May 15.

Md., Baltimore—Warehouse—Canton Co., South and Water Sts., 3 story, 80 x 200 ft., concrete and steel, 12th Ave., to Price Constr. Co., Maryland Trust Bldg., $175,000. Noted June 5.

Md., Baltimore — Nurses Home — St. Josephs Hospital, Oliver and Eden Sts., 4 story, 75 x 135 ft., rein.-con. and brick, plain foundation, Oliver and Eden Sts., to Frainie Bros. & Haigley, 19 West Franklin St., $150,000.

Buildings (Continued)

D. C., Wash. — Church, etc. — Hamline Methodist Episcopal Church, 1500 9th St., church and community house, 16th and Allison Sts., to A. L. Smith Co., 819 13th St. N. W. $300,000. Noted May 1.

D. C., Wash.—Store—F. R. Jelleff, 1216 F St. N. W., addition to store to S. J. Prescott, 814 13th St., N. W., $300,000.

Fla., Sarasota—Hotel—W. H. Pepkorn, 712 Park St., Milwaukee, Wis., 7 story, 50 x 150 ft., on site of old Prentice Hotel, here, plastering, to E. G. Gale, Tampa, $13,195; electric work, to R. Parker, Bradentown, $4,139; painting, to W. Davis, Sarasota, $4,341; plumbing and heating, to H. F. Boubonnell, Sarasota, $26,800; concrete frame, to Ricketts & Haworth, 816½ Franklin St., Tampa, $46,500, etc., total cost $240,000. Noted Apr. 24.

La., Shreveport — Warehouse — Alcocke Estate, 4 story, 147 x 147 ft., rein.-con. and brick, Davis and Marshall Sts., to McConnell & McConnell, Shreveport. Archts. est. $150,000.

Tenn., Memphis—Garage and Sales Room—D. Dermon and A. Jett, 2 story, 183 x 245 ft., 44,000 sq.ft. parking space, concrete and steel, Gayoso and South 3rd St., to Hansen & Worden, 507 North Dunlap St., Memphis. Archts. est. $200,000. Noted Jan. 24, under "Industrial Works."

O., Cincinnati — Warehouse — General Electric Co., Provident Bank Bldg., 5 story, 94 x 185 ft., rein.-con. and brick, plain foundation, 3rd St., to Ferro Constr. Co., 3rd and Elm Sts. Archts. est. $500,000.

O., Dayton—Church—First Church of Christ Scientist, 2 story and basement, 50 x 200 ft., concrete, brick and stone, plain foundation, Rubicon St., to W. McIlroy, Springfield, $150,000.

Ind., La Porte—Hospital—Holy Family Hospital, 4 story and basement, 45 x 125 ft., rein.-con. and brick addition, to Larson & Danielson Constr. Co., La Porte. Archts. est. $160,000.

Ind., South Bend—Garage—De Rhodes Motor Co., 3 story and basement, 66 x 166 ft., rein.-con., brick and steel, North Lafayette St., to Fleischer Constr. Co., Builders Exchange Bldg., Minneapolis, Minn. Archts. est. $175,000.

Ind., South Bend—Hotel—H. H. Hayden, 726 East Cedar St., will build 3 story and basement, 50 x 198 ft., brick and steel, West Colfax St., by day labor. $200,000. I. M. Cohen, 708 Bway., Gary, archt. Noted May 22.

Ind., Terre Haute — Bank — First Natl. Bank, 513 Wabash Ave., remodeling, etc., building, to W. Caton & Son, 212 Arcade Bldg., $150,000 plus percentage basis.

Wis., Burlington—High School—School Bd., N. E. Karcher, clk., 2 story and basement, 92 x 180 ft., brick and tile, plain foundation, to Wisconsin Eng. & Constr. Co., 411 Bellin Bldg., Green Bay, $144,750. Noted May 29.

Wis., Green Bay — Community — Green Bay Columbus Club, C. K. Bong, chmn. building com., Sheridan Bldg., 3 story and basement, concrete and brick, plain foundation, to B. Beauregard, De Pere. Archts. est. $350,000. Noted Apr. 17.

Wis., Milwaukee—Apartment—Goodsitt & Helfaer, 4609 North Ave., 3 story and basement, 60 x 120 ft., brick and concrete, plain foundation, Lisbon Ave., to Steldt Constr. Co., 1137 16th St. Archts. est. $150,000.

Wis., Milwaukee—Dormitory—Concordia College, 3127 State St., 3 story and basement, 60 x 142 ft., concrete and brick, plain foundation, State St., to W. W. Oeflein, 86 Michigan St. Archts. est. $170,000. Noted June 12.

Wis., South Milwaukee—Store—R. B. Williamson, archt., 405 Bway., Milwaukee, 3 story and basement, 60 x 120 ft., brick and timber, plain foundation, here, to Czaplewski Bros., 1440 Midland Ave., Milwaukee, for Bettinger & Sons. Archts. est. $150,000. Noted June 12.

Minn., Minneapolis—School—Bd. Educ., general contract 3 story and basement, rein.-con., brick and tile addition, 15th Ave. N and 4th St., to Madsen Constr. Co., 848 Builders Exch. Bldg., $98,000. Noted June 5.

Kan., Manhattan — High School — Bd. Educ., general contract 2 story and basement, 80 x 158 ft., rein.-con., brick and stone, to M. J. Green, Manhattan. Archts. est. $150,000. Noted Mar. 20.

Mo., Caruthersville—Court House—Pemiscot Co., c/o F. Baird, co. clk., general contract 3 story and basement, rein.-con., brick and stone, to McCarthy Constr. Co., 1201 Chemical Bldg., St. Louis. Noted May 22.

Mo., Caruthersville—High School—School Dist. 18, 2 story and basement, 75 x 145 ft., concrete, brick and stone, to McCarthy Constr. Co., 1201 Chemical Bldg., St. Louis. Archts. est. $150,000. Noted May 22.

Mo., Koch—Kitchen, etc.—Bd. Pub. Serv., 208 City Hall, St. Louis, general contract 2 story, rein.-con., brick, stone and steel kitchen at Robert Koch Hospital, here, to E. Steininger Constr. Co., Laclede Gas Bldg., St. Louis, $58,836. 3 story and basement, 62 x 165 ft., rein.-con., brick, stone and steel infirmary, to J. J. Clark Constr. Co., Arcade Bldg., St. Louis, $226,885. Noted June 12.

Mo., St. Louis — Mercantile — Burdeau Realty Co., 801 Chestnut St., will build 2 story and basement, 150 x 160 ft., brick, concrete and stone, Washington St., by day labor. $160,000. J. A. Craven, Century Bldg., archts.

Tex., Houston—Store—W. T. Grant Co., 1009 Capitol St., general contract 3 story, 50 x 125 ft., brick, steel and concrete, Capitol St., to E. S. Newcome, Dan Waggoner Bldg., Ft. Worth, $129,000.

Okla., Wewoka—Court House—Seminole Co., 3 story and basement, 110 x 170 ft., rein.-con., brick and stone, general contract, to Daugherty-Nichols-Wilson Co., Muskogee. Archts., est. $160,000. Noted May 15.

Ore., Portland—Garage and Store—Multnomah Block, Inc., c/o H. F. Corbett, pres., Corbett Bldg., 2 story and basement, 100 x 252 x 480 x 560 ft., rein.-con. and mill, Washington, Morrison, Stout and 19th Sts., to Austin Co., Porter Bldg. Archts. est. $350,000.

Calif., Oceanpark (Santa Monica P. O.)—Theater—Raymond Amusement Co. will build 2 story, 100 x 175 ft., rein.-con., by day labor. $200,000. Noted Apr. 10.

Calif., Pasadena — Theatre — E. Gray, Bank of Italy Bldg., Los Angeles (representing owners), brick and concrete, Moline Ave., here, to Littleton Co., 608 East Colorado St., $155,000. Noted Apr. 12.

Calif., San Rafael — High School — San Rafael High School Dist., 1 story, rein.-con., to contain 25 classrooms and auditorium, general contract to Barenchi & Paganni, 327 Georgia St., Vallejo, $186,513. Noted June 19.

Calif., San Francisco—Apartment—Nineteen Hundred Six Bway., c/o contractors, 10 story and basement, rein.-con., Bway near Laguna St., to Quandt & Bros., Humboldt Bank Bldg., $165,000.

Que., Durocher—Apartment—Bigonesse & Bigonesse, archts., 182 St. Catherine St. E., Montreal, 4 story, 100 x 150 ft. apartment, to A. Boileau, 848 Champagne St., Montreal, $149,000. Company to be formed later.

Que., Quebec—Hospital—Beaule & Morrissette, engrs., Quebec, main building 7 story, 12,600 sq.ft. floor space and two 6 story wings, 2,800 sq.ft. floor space, rein.-con., St. Sacrement St., to O. E. Morrissette Ltd., 236 Latourelle St., for Sisters of Quebec Hospital. $653,000. Noted May 29.

Federal Government Work

PROPOSED WORK

Ky., Fords Ferry—Clam Shell Buckets—U. S. Engineers, P. O. 72, Louisville plans to purchase three 1½ cu.yd. heavy excavating type clam shell buckets.

Ky., Louisville—Steel—U. S. Engineer, P. O. Box 72, takes bids about July 25, furnishing 247 tons structural steel for Dams 49 and 50, Ohio River.

California—Pumps—U. S. Engineer, Constructing Quartermaster, Fort Mason, San Francisco, soon takes bids, one 1,000 gal. and one 1,500 gal. single stage, centrifugal pumps, 25 hp.

BIDS DESIRED

Vt., St. Johnsbury—Post Office—July 14, by Treas. Dept. at office Supervising Archt., Wash., D. C., 1 story, 61 x 69 ft. post office, here; adv. E. N.-R. June 26.

N. Y., Waterloo—Post Office—July 15, by Treas. Dept. at office Supervising Archt., Wash., D. C., 1 story, 50 x 75 ft., brick, here; adv. E. N.-R. June 26.

Pa., Pittsburgh—Mezzanine—July 7, by Treas. Dept. at office Supervising Archt., Wash., D. C., constructing mezzanine fo Room 402, and repairing Post Office anc Court House, here.

W. Va., Charleston—Extensions—July 10, by Treas. Dept. at office Supervising Archt., Wash., D. C., extensions to Post Office and Court House, here.

Ky., Louisville—Hydrated Lime—July 24, by U. S. Engineer, P. O. Box 72, furnishing 750 tons hydrated lime, for Dams 44, 45 and 46, Ohio River; adv. E. N.-R. June 26.

Ky., Louisville—Steel, Castings, etc.—July 2?, by U. S. Engineer, P. O. Box 72, furnishing structural steel, castings, etc., for Locks 49 and 50, Ohio River; adv. E. N.-R. June 26.

Ky., Owensboro—Dwellings—July 7, by U. S. Engineer, War Dept., Wash., D. C., 2 lockeepers dwellings, at Dam 46, Ohio River. Noted June 5.

Ill., Jerseyville—Post Office—July 21, by Treas. Dept. at office Supervising Archt., Wash., D. C., 1 story, brick and tile post office here; adv. E. N.-R. June 26.

Ark., North Little Rock—Road, etc.—July 22, by U. S. Veterans Bureau, Room 791 Arlington Bldg., Wash., D. C., new bituminous macadam roads, and resurfacing and patching existing roads at U. S. Veterans Hospital 78, here. F. T. Hines, dir.; adv. E. N.-R. June 26.

Colorado—Road—June 30, by J. W. Johnson, dist. engr., 301 Customs House Bldg., Denver, grading, etc. 5 mi. Canon Sect. Cumbres Pass Natl. Forest Rd., Conejos Co. 10,052 cu.yd. rock and 31,324 cu.yd. common excav., etc.

California — Road — July 2, by C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., San Francisco, constructing 3.7 mi. Donner Pass Natl. Forest Rd., 70,000 cu.yd. excav., 52,000 lb. steel, etc.

Calif., San Francisco—Buildings—Spec. 5000—July 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., buildings at Marine Corps, here.

Calif., San Francisco—Grading—Spec. 4999—July 23, by Bureau Yards & Docks, Navy Dept., Wash., D. C., grading site for marine corps supply depot. Noted June 5.

BIDS RECEIVED

N. Y., Saranac Lake—Post Office—Treas. Dept. at office Supervising Archt., Wash., D. C., 1 story and basement, 68 x 73 ft. post office here from C. J. Burgess Co., Foster Bldg., Utica, $60,600. Noted May 8.

Pa., Dubois—Post Office—Treas. Dept. at office Spervising Archt., Wash., D. C., 60 x 95 ft. concrete and brick post office here from Regan Constr. Co., 2 East Lexington Ave., Baltimore, Md., 1st story, $60,900; 2nd story $79,600. Noted May 22.

Tex., Galveston—Compass Station—Spec. 4974—Bureau Yards & Docks, Navy Dept., Wash., D. C., radio compass station and quarters, etc., from J. W. Zempter, Galveston, $7,350. Noted June 5.

California—Road—C. H. Sweetser, dist. engr. U. S. Bureau Pub. Rds., 9 Main St., San Francisco, improving 15 mi. Yuba Pass Natl. Forest Rd., Sierra Co., from C. E. Crowley, Pacific Electric Bldg., Los Angeles, $141,133.

CONTRACTS AWARDED

Me., Bar Harbor—Compass Station—Spec. 4966—Bureau Yards & Docks, Navy Dept., Wash., D. C., compass station, here, to A. B. & J. R. Hodgkins, 42 Greeley Ave., $3,486. Noted June 5.

Pa., Hog Island—Compass Station—Spec. 4976—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to quarters compass station and wharf at Naval Radio Sta., to W. L. Morrison Constr. Co., 613 15th St. N. W., Wash., D. C., $1,389 (60 days).

D. C., Wash.—Road and Gutters—Spec. 4986—Bureau Yards & Docks, Navy Dept., Wash., D. C., repairs to roads and gutters at Naval Hospital here to R. E. Boiseau, 5905 Blair Rd., $11,784. Noted June 5.

Fla., Jacksonville—Bulkhead and Pier—U. S. Engineer Office, War Dept., Wash., D. C., bulkhead and pier to C. E. Hillyer, Blum Bldg., $15,800. Noted May 1.

Ala., Florence—Steel Rods, Pipe, Buckets, etc.—U. S. Engineer Office, Florence, 14,520 ft. steel rods, 1 in. diam., to Atlantic Steel Co., South Ry. Belt Line, Atlanta, Ga., $1,575; 20 lengths black, wrought steel and flanged pipe, to Crane Co., 2 South 20th St., Birmingham, $3,900; 10 concrete buckets, to Insley Mfg. Co., Birmingham, 1,915; Items 1-24 inclusive, to Gulf States Steel Co., B. M. Bldg., Birmingham, $7,925; Items 25 and 26 to Tennessee Coal, Iron & R.R. Co., B. M. Bldg., Birmingham, $37; 40,000 sleeve nuts, to Nashville Machine & Supply Co., 123 3rd Ave. N., Nashville, Tenn., $2,848.

Ky., Louisville—Pumps—U. S. Engineer, P. O. Box 72, three 15 in. rope driven centrifugal water pumps, to Kingsford Fdry. & Machine Wks., 264 West 2nd St., Oswego, N. Y., $2,340. Noted May 22.

Ky., Louisville—Truck—U. S. Engineer, P. O. Box 72, one steel dump body truck, to Graham Bros. Truck Co., Evansville, Ind., $2,065. Noted May 29.

Mich., Hastings—Post Office—Treas. Dept. at office Supervising Archt., Wash., D. C., post office here to A. M. Lundberg, Times Bldg., St. Louis, Mo., $64,089. Noted Apr. 24.

Ill., Chicago—Derrick Boat—U. S. Engineer, Office, War Dept., Wash., D. C., steel derrick boat to Sturgeon Bay Dry Dock Co., Sturgeon Bay, Wis., $56,000. Noted May 22.

Ill., Chicago—Dredging—U. S. Engineer Office, 537 South Dearborn St., dredging in North Bend Branch Chicago River, 100,000 cu.yd., to Great Lakes Dredge & Dock Co., 103 South Michigan Ave., $33,000. Noted June 12.

Federal Government Work (Continued)

Ill., **Chicago**—Steel Barage—U. S. Engineer Office, War Dept., Wash., D. C., one 80 ft. steel barge to Midwest Boat & Barge Co., Grafton, Ill., $10,731. Noted May 22.

Calif., San Diego—Building, etc.—Spec. 4933—Bureau Yards & Docks, Navy Dept., Wash., D. C., buildings, roads and service connections, etc. at Naval Operating Base here to W. E. Kier Constr. Co., 813 1st Natl. Bank Bldg., $541,000.

FEDERAL POWER COMMISSION

Applications for Licenses and Permits

Applications

495—Pike Rapids Power Co., Duluth, Minn.—Wants preliminary permit for power dam in Mississippi River 4,000 ft. above mouth of Christy Brook.

496—Prairie River Power Co., St. Paul, Minn.—Wants preliminary permit for 21 ft. dam and power plant in Mississippi River near Aitkin, Aitkin Co.

497—Gauley Power Co., Union Bldg., Charleston, W. Va.—Wants preliminary permit for 2 power dams on Gauley River and 3 power dams on Meadow River, in Nicholas, Fayette and Greenbrier Counties.

498—Pub. Service Co. of Oklahoma, 301 World Bldg., Tulsa, Okla.—Wants preliminary permit for 40 ft. dam and power plant in Grand River, Delaware Co.

499—S. E. Kieffer, 57 Post St., San Francisco, Calif.—Wants preliminary permit for diverting Mokelumne River into Jackson Creek in Amador and Calaveras Counties.

500—Northwestern Power & Mfg. Co., 394 Dupont Bldg., Wilmington, Del.—Wants preliminary permit for diversion dam and power canal extending 3½ mi. in Elwana River, near Port Angeles, Clallam Co., Wash.

Unclassified

PROPOSED WORK

Playground—East Boston (Boston P. O.), Mass.—Park Dept., 33 Beacon St., Boston, plans playground, Condon, East Eagle and Glendon Sts., here. $82,000. J. B. Shea, chn. com.

Playground—Readville (Boston P. O.), Mass.—Park Dept., 33 Beacon St., Boston, plans playground, Sturgis and Bullard Sts., here. $30,000. J. B. Shea, chn. com.

Playground — Roxbury (Boston P. O.), Mass.—Park Dept., 33 Beacon St., Boston, plans playground, Heath St., adjoining Jefferson School. $85,000. J. B. Shea, chn. com.

Coal Loading Dock—Huntington, W. Va.—Philadelphia & Cleveland Coal Co., plans coal loading dock on Ohio River. $25,000. Graham, Scott & Wiswell, 1st Natl. Bank Bldg., engrs.

Transmission Line—Alabama—Alabama Power Co., B. M. Bldg., Birmingham, plans 44,000 volt transmission line from Decatur to Hapgood, near Muscle Shoals.

Subway—Nevada, Mo.—Voted $100,000 bonds subway under track Missouri Pacific, and Missouri-Kansas-Texas Railroads. Total $200,000. Railroads to pay half cost. Noted May 22.

Electric System — Tex., Crawford — See "Waterworks."

Health Resort—Marshall, Tex.—D. C. Driskell, Fuqua, plans walks, drives, sewers, miscellaneous improvements to develop Roseborough Springs into health resort. $100,000. Engineer not announced.

Subway—Long Beach, Calif.—Plans subway under Pacific Electric tracks at Pacific Ave. $170,000 or more. Cost to be borne by city and railroad. C. H. Windham, city mgr.

Ornamental Stret Lighting System—Los Angeles, Calif.—See "Streets and Roads."

Athletic Field—San Francisco, Calif.—San Francisco Baseball Club, 15th and Valencia Sts., G. A. Putnam, secy., plans bowl type athletic field with 2 deck grand stand, parking space for 25,000 autos, etc. $1,000,000. Engineer and architect not selected.

Breakwater—Port Arthur, Ont.—Dept. Pub. Wks., Parliament Bldgs., Ottawa, having plans prepared concrete and timber extension to breakwater, here. $250,000. K. M. Cameron, ch. engr.

Subway and Grade Separation—Toronto, Ont.—City, Canadian Natl. Ry., Union St., (A. F. Stewart, ch. engr.) and Canadian Pacific Ry., Windsor St., Montreal, Que., (J. M. Fairbairn, ch. engr.) plan concrete subways carrying to 6 tracks, 66 ft. wide, structural steel columns and decks, concrete abutments, piers, etc., on Canadian Natl. lines in western section of city, 2 on Bloor St., 2 on Royce Ave., 2 on St. Clair Ave., 1 on Junction Rd., and 1 on Davenport Rd., track elevation, grade separations and subways on Canadian Pacific lines at Dufferin St., Osler, Symmington, Lansdowne and Bartlett Aves. $5,000,000. R. C. Harris, city engr.

Power Development—Ulverton, Que.—Canada Paper Co. Ltd., 70 McGill St., Montreal, plans power development, here, incl. concrete dam and electric generator station. $500,000. Engineer's name withheld.

BIDS DESIRED

Bagging Garners, etc.—Brooklyn, N. Y.—July 18, by R. K. Fuller, comr. Canals & Waterways, Albany, furnishing and installing bagging garners, marine leg pushers and hoists, etc., in grain elevator, at Gowanas Bay, here, Contr. 81-C; adv. E. N.-R. June 26.

Plumbing System—Mt. Pleasant, N. Y.—July 7, at office F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, White Pains, plumbing system in nurses home and employees dormitory, at Grasslands Hospital, here. Walker & Gillette, 128 East 37th St., New York City, archts.; adv. E. N.-R. June 26.

Heating and Plumbing—Oswego, N. Y.—July 18, by R. K. Fuller, comr. Canals & Waterways, Albany, heating system Contr. 82-H, and plumbing system Contr. 82-P, in Administration Building on terminal pier, here; adv. E. N.-R. June 26.

Dock, etc.—Waterford, N. Y.—July 18, by R. K. Fuller, comr. Canals & Waterways, Albany, dry dock and approach channel here; adv. E. N.-R. June 26.

Plumbing System—White Plains, N. Y.—June 30, at office F. L. Merritt, clk. Bd. Supervs. Westchester Co., Court House, White Plains, additional plumbing in County Jail; adv. E. N.-R. June 26.

Pier—New York, N. Y.—July 2, by J. H. Delaney, comr. Docks, Pier A, foot of Battery Pl., North River, building Pier 2, in North River, Contr. 1838.

Retaining Wall—Johnstown, Pa.—July 1, by City Council, 1,000 ft., rein.-con. retaining wall, 10 ft. high, along Stoneycreek River. $25,000. H. L. Wilson, city engr.

Levee—Memphis, Tenn.—July 8, by Mississippi River Comn., 1st and 2nd Dists., 1006 McCall Bldg., 5,315,000 cu.yd. earth work in Upper and Lower St. Francis, Reelfoot and White River Levee Dists.; adv. E. N.-R. June 26.

Concrete Mixers — Detroit, Mich. — T. Frank, 4430 Oleon St., in market for concrete mixers.

Tunnel—Seattle, Wash.—July 1, by Bd. Pub. Wks., completing 1st Ave., S., tunnel under Duwamish River. No bids in excess of $600,000 considered. Former bids rejected. J. D. Blackwell, city engr. Noted May 29.

Revetment Walls—Kincardine, Ont.—July 2, by N. Desjardins, acting secy. Dept. Pub. Wks., Ottawa, rebuilding West, South and East revetment walls, 660 ft., in inner harbor, also repairing wharf, here. $30,000.

BIDS RECEIVED

Fill — Plattsburgh, N. Y. — Plattsburgh Centenary Comn., filling in Thomas McDonough Monument, about 20,000 cu.yd., from T. J. Murtagh, Plattsburgh, $1.49 per cu.yd.

Heating and Ventilating Apparatus—St. George, N. Y.—Bd. Educ., 500 Park Ave., New York, heating and ventilating apparatus in addition to P. S. 16, Daniel Low Terrace, here, from Walker & Chambers, $57,565. Noted June 12.

CONTRACTS AWARDED

Elimination of Grade Crossings—Jamestown, N. Y. — Erie R.R., 50 Church St., eliminating grade crossings at Foote Ave., Main and Institute Sts., to A. McMullen Co., 50 Church St., New York City, about $500,000.

Ferryboats—New York, N. Y.—Dept. Plants & Structures, Municipal Bldg., 6 steel screw ferryboats, 3 to Staten Island Shipbuilding Co., Mariners Harbor, Staten Island, and 3 to Tebo Yacht Basin Corp., 25 Bway. This corrects report in June 5 issue.

Heating, etc.—Upper Darby, Pa.—See "Buildings."

Heating, etc. — Sarasota, Fla. — See "Buildings."

Subway—Cincinnati, O.—Rapid Transit Comrs., City Hall, about 5.3 mi. rapid transit line incl. 1,600 ft. subway, to Hickey Bros., 4200 Spring Grove Ave., $1,089,147. Engrs. est. $1,000,000. Noted June 12.

Stock Yards — Cudahy, Wis. — Cudahy Bros. Co., will build 700 ft. timber stock yard, by day labor. $100,000. W. A. Hayes, c/o owner, engr.

Frame Riding Device — Dallas, Tex. — Wortham Riding Device Co., Fair Park, frame riding device, to J. E. Pearce, P. O. Box 1481, $60,000.

Power Development—Copco, Calif.—California-Oregon Power Co., Klamath Falls, Ore., will take water from the foot of dam, here, and by 2 mi. tunnel turn it back into Klamath River, with 160 ft. drop, to develop 37,000 additional hp. by company forces. $4,000,000. P. B. McKee, ch. engr.

Street Lighting System—Los Angeles, Calif.—Street lighting system in Whittier Blvd., to Electric Lighting Supply Co., 214 West 3rd St., $71,908; Central Ave., to C. W. Sparks, Henne Bldg., $83,632; Santa Monica Blvd., to R. A. Wattson, 4907 Melrose Ave., $66,715. Noted June 19.

Seawall — California — See "Streets and Roads."

Power Lines—Ontario—Ontario Hydro Power Comn., Toronto, extending power lines from Erieau to High Banks, to Chatham Hydro Dept., under supervision of A. Jackson, Chatham, supt. $40,000 plus percentage basis.

Material and Equipment

PROPOSED WORK

Asphalt Road Oil—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, received no bids June 4, 75,000 gal. asphalt road oil.

Paving Materials—St. Paul, Minn.—H. W. Austin, city purch. agt., returned bids June 3 to makers for 1,795 sq.yd. 3 in. vertical fibre brick, 1,440 bbl. Portland cement, 284 tons asphalt, etc., for Hamline Ave., Arcade and East Sts. Work will be done by contract. Noted May 29.

Motor Equipment — Stockton, Calif. — Plans election to vote on $26,300 bonds for motor equipment for street department. W. B. Hogan, city engr.

BIDS DESIRED

Trucks—Long Island City, N. Y.—June 30, by M. E. Connolly, pres. Queens Boro, Queens Subway Bldg., motor trucks and equipment to Street Cleaning Dept. $150,000.

Tractor — Green Island (Troy P. O.), N. Y.—Bd. Village Trustees in market for one 5 ton tractor.

Inorganic Dust—New York, N. Y.—June 30, by J. Miller, pres. Manhattan Boro., Municipal Bldg., 3,000 tons inorganic dust.

Steam Shovel — Shawnee, O. — Ironclay Brick Co., 63 Ruggery Bldg., Columbus, taking bids 1 ton steam shovel for removing overburden and mining clay, at plant, here. J. M. Adams, pres.

Paving Blocks — Minneapolis, Minn. — July 1, by E. S. Gram, city purch. agt., 2,100 sq.yd. granite paving blocks. N. W. Elsberg, city engr.

Asphalt, etc. — Houston, Tex. — Taking bids 5,000 gal. asphalt and 1,200 cu.yd. shell. J. C. McVea, city engr.

Road Roller—Mineral Wells, Tex.—McClung Constr. Co., taking bids 10 ton road roller, steam or gasoline, also small air compressor.

Dump Cars, Concrete Mixers, etc.—Oakland, Calif.—Key System Transit Co., 22nd and Grove Sts., in market for dump cars, concrete mixers, etc. To exceed $25,000.

Road Roller and Truck—Riverside, Calif.—Riverside Co., W. L. Carlson, purch. agt., in market for 12 ton road roller and ¾ ton truck, both gasoline motor driven.

Tractor—Santa Ana, Calif.—City in market for C. L. Best model L tractor. About $3,500.

CONTRACTS AWARDED

Asphalt Sand, etc.—Brooklyn, N. Y.—E. Riegelmann, boro pres., Boro Hall, 7,000 cu.yd. asphalt sand, to Z. Mahoney, 557 46th St., $9,520. Noted May 29.

Castings, Asphaltic Cement, etc.—New York, N. Y.—J. Miller, pres. Manhattan Boro. Municipal Bldg., steel castings to Erie Forge & Steel Co., 50 Church St., $4,455; 6,000 gal. asphaltic cement to Warner Quinlan Co., 79 Wall St., $28,650; 8,000 cu.yd. binder stone, to Calvin Tomkins Co., 30 Church St., $15,440. Noted June 19.

Trucks—Minneapolis, Minn.—Six 1 ton Ford trucks, to W. H. Kuhlmann & Co., 605 West Bway., $968 each; one Kissel truck, to O. M. Nelson Co., 1317 Harmon Pl., $2,990; two Graham Brothers Trucks, to H. E. Mack Co., 1229 Harmon Pl., $1,946 each, all for Garbage Dept. Noted May 29.

Paving Material—Minneapolis, Minn.—To Landers - Morrison - Christenson Co., 800 Builders Exch., 6,500 cu.yd. gravel or crushed rock at $1.90 per cu.yd., 3,600 cu. yd. concrete sand, $0.65. Noted June 5.

Road Oil—St. Paul, Minn.—To Minnesota Road Equipment Co., 4536 Dupont Ave., Minneapolis, 700,000 gal. road oil for Dept. Pub. Wks., at $0.0579 per gal., and 10,000 gal. for Dept. Parks, Playgrounds & Pub. Buildings, $0.063 per gal. Noted Apr. 7.

Pipe—Dallas, Tex.—To Amer. Cast Iron Pipe Co., Praetorian Bldg., for B. B. & S. c.i. pipe, 110 tons 16 in. 12 ft. at $59 per ton, 50 tons 4 in. 12 ft., $63.

Service and Lighting Equipment — Toronto, Ont. — Toronto Electric Comrs., Bd. Trade Bldg., will purchase and erect service and street lighting equipment by day labor. $680,000. Private plans.

SEARCHLIGHT SECTION

OFFICIAL PROPOSALS

Copy: Official Proposals reaching our New York Office by 10 A. M., Tuesday can usually be printed in the issue out Thursday.

Rate:
40 Cents a Line an Insertion

Plans and Specifications for inspection by distant bidders may be filed at any of the Engineering News-Record offices without charge.

THESE ARE OFFICIAL NOTICES THAT BIDS ARE WANTED FROM BIDDERS EVERYWHERE

E.N.-R.

OFFICIAL PROPOSALS

Bids: July 15.

Construction of National Park Boulevard

Woodbury, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Gloucester for the construction of National Park Boulevard in the Borough of National Park and Township of West Deptford in the County of Gloucester with a concrete pavement; estimated amount of concrete pavement required is thirty-four thousand two hundred twenty-four (34,224) square yards, and opened and read in public at Court House, Woodbury, N. J., on Tuesday, July 15th, 1924, at 10.00 o'clock A.M., Eastern Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by William C. Cattell, County Engineer, have been filed in the office of the said engineer at Merritt Building, Woodbury, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and name of road on the outside, addressed to The Board of Chosen Freeholders of the County of Gloucester and must be accompanied by a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hour above named. The standard proposal forms is attached to the specifications, copies of which will be furnished on application to engineer.

By order of The Board of Chosen Freeholders of the County of Gloucester.

CHESTER N. STEELMAN,
Clerk.

WILLIAM C. CATTELL,
County Engineer.

Bids: July 10.

Sewer Connections

Dover, N. J.

The Board of Aldermen of the Town of Dover, N. J., will receive, at a meeting to be held on the 10th day of July, at 2 p.m., at the Council Chambers in the Municipal Building, North Sussex Street, Dover, N. J., sealed proposals for furnishing materials and doing all work required for the construction of 5 inch house connections.

Specifications and forms of proposals may be obtained at the office of the Clerk of the Town of Dover, Municipal Building.

Each bid must be accompanied by a certified check for not less than 10% of the amount of the bid, payable to the order of the Town of Dover.

The Mayor and Board of Aldermen of the Town of Dover reserve the right to reject any and all proposals and to waive any informality in the proposals received and to accept any proposal which they deem to be most favorable to the interests of the Town.

WILLIAM H. HOSKING,
Mayor.

JOSEPH V. BAKER,
Town Clerk.
Dated June 19, 1924.

OFFICIAL PROPOSALS

Bids: July 11.

Highway Work

DEPARTMENT OF PUBLIC WORKS
BUREAU OF HIGHWAYS

Albany, N. Y.

Sealed proposals will be received by the undersigned at their office, No. 55 Lancaster Street, Albany, N. Y., at one o'clock p.m. advanced standard time which is twelve o'clock noon eastern standard time, on Friday, July 11, 1924, for the construction, completion and reconstruction of highways in the following counties:

CATTARAUGUS....(One highway: 3.87)
CAYUGA ....(One contract: 4.78)
CHAUTAUQUA......(One highway: 3.87)
CHENANGO.........(One highway: 4.86)
COLUMBIA.........(One highway: 4.25)
DUTCHESS.........(One contract: 2.82)
ERIE..............(One contract: 3.94)
GENESEE..........(One contract: 2.80)
GREENE...........(One contract: 0.93)
LEWIS.............(One contract: 0.77)
MADISON..........(One contract: 5.87)
MONROE...........(One highway: 0.85)
MONTGOMERY..Completion...(One highway: 3.00)
ONEIDA............(One contract: 3.86)
ORANGE...........(One contract: 2.53)
ST. LAWRENCE..Completion..(One highway: 10.14)
SARATOGA........(One highway: 6.44)
SENECA.....(Two contracts: 4.78 & 2.14 and One highway: 6.23)
SUFFOLK........(One contract: 3.02 and One highway: 9.39)

Maps, plans, specifications and estimates may be seen and proposal forms obtained at the office of the Bureau in Albany, N. Y., and also at the office of the division engineers in whose division the roads are located which are to be constructed, completed and reconstructed. The addresses of the division engineers and the counties in which they are in charge will be furnished upon request.

The especial attention of bidders is called to "General Information for Bidders" in the itemized proposal, specifications and contract agreement.

A. W. BRANDT,
Commissioner of Highways.

Bids: July 8.

Street Improvement

Jackson, Tenn.

Sealed proposals will be received by the undersigned until 10 o'clock A.M., on Tuesday, July 8th, 1924, for the improvement of certain streets in the City of Jackson, Tenn., in accordance with plans, profiles, and specifications prepared and on file in the office of the City Commissioners, approximating 102,600 square yards of pavement, 42,800 lineal feet of concrete curb and gutter, 3,500 lineal feet of storm sewers with necessary inlets and manholes. Bids are requested on sheet asphalt on concrete base, 3 inch vertical fiber brick, on concrete base, 6 inch one course concrete pavement. Bids on other types may be submitted also. Each bid must be accompanied by a certified check or bidder's bond in the amount of ten per cent of the cost of the entire work, computed on the basis of the bids submitted. The right is reserved to reject any or all bids. At 10 o'clock A.M. on said date all bids will be opened and publicly read. A deposit of $5.00 is required for each set of specifications, returnable when bid is submitted, or upon return of specifications.

C. E. GRIFFIN,
Com'r. of Public Utilities.
E. R. DIKE,
City Engineer.

OFFICIAL PROPOSALS

Bids: July 23.

Bridges

Miami, Fla.

Sealed Proposals will be received until 12:00 noon, Wednesday, July 23, 1924, at the office of The Bay Biscayne Improvement Company, 105-107 Northeast Second Avenue, Miami, Florida, for the construction of twelve Reinforced Concrete Bridges and two double-leaf Bascule type Steel Draw Bridges, with a total length of 4,236 feet, across Biscayne Bay between the cities of Miami and Miami Beach, Dade County, Florida, and known as "The Venetian Way."

Plans and Specifications may be seen at the office of the Engineering News-Record, after June 30th, or obtained from the Engineer for the sum of $25.00, $15.00 of which will be refunded upon the return of the plans in good condition.

Bids may be submitted upon one or more of the structures, or upon the Concrete or Steel portions of the Bridges with Draw openings, or upon the entire work.

Payments will be made in cash, on the tenth of each month, for eighty per cent of the value of the work done during the preceding calendar month, upon certificates of the Engineer.

All bids must be accompanied by a certified check or bidder's bond, made payable to the Bay Biscayne Improvement Co., for an amount equal to two (2%) per cent of the total amount of bid.

The Bay Biscayne Improvement Company reserves the right to reject any and all bids, to accept any part of any bid, waive all formalities, or to accept the bid which it deems the most favorable to the Company.

The Bay Biscayne Improvement Company.
By F. C. B. LE GRO,
Vice President.

HARVEY STANLEY,
Consulting Engineer,
Fort Lauderdale, Florida.
Dated June 14, 1924.

Bids: July 7.

Garbage Incinerators and Chimney

Ambridge, Pa.
May 26, 1924.

Sealed proposals for the construction of Garbage Incinerators and Chimney will be received at the office of the Borough Manager of the Borough of Ambridge, Penna., until 6:30 p.m., July 7th, 1924 (Eastern Standard Time).

The plant is to consist of two units each having a capacity of ten (10) tons of garbage and rubbish per eight hours. Bidder is to submit plans, specifications, and guarantees of the incinerators and chimney which he proposes to install, which is to be in accordance with general specifications prepared by the Borough of Ambridge.

A copy of the specifications may be obtained at the office of the Borough Manager.

Each bid must be accompanied by a certified check, made payable to the Treasurer of the Borough of Ambridge, in the amount of Five Hundred ($500.00) Dollars.

The Borough of Ambridge reserves the right to reject any or all bids.

Borough of Ambridge.
By A. W. JOHNS,
Borough Manager.

Volume 92 New York, June 26, 1924 Number 26

Engineering News-Record

A CONSOLIDATION OF ENGINEERING NEWS, ENGINEERING RECORD, AND THE CONTRACTOR

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More Historical Sketches of Construction Machinery

In the issue following *Engineering News-Record's* Fiftieth Anniversary Number of April 17 there appeared the first of a series of articles on "Construction Equipment—Past and Present." The initial subject dealt with was the rock drill and succeeding articles presented historical sketches of the power shovel, the concrete mixer, the hoisting engine and engineering and surveying instruments.

It has been decided to carry this series of historical articles into additional fields which, according to present plans, will include the road grader, the clamshell and orangepeel buckets, the trench excavator, the belt conveyor, the bucket loader, and other standard forms of contractors' equipment.

In an early issue of this journal the historical series will be resumed with some facts about a widely-used engineering tool—**The Road Grader.** This machine dates back to the seventies when Samuel Pennock designed and patented the first grader. Subsequent improvements have included the reversible feature common to all modern graders, 12-ft. instead of 7- or 8-ft. blades, offset hitches, sliding frames, leaning wheels, back-sloper attachments, elevating machinery for handling the excavated earth, and strengthened parts for tractor instead of team haulage.

Every contractor and every engineer will find it worth while to know something about the origin and development of the equipment he uses. To-day's standard improved types present an instructive contrast to the primitive forms of machine used by previous generations of constructors.

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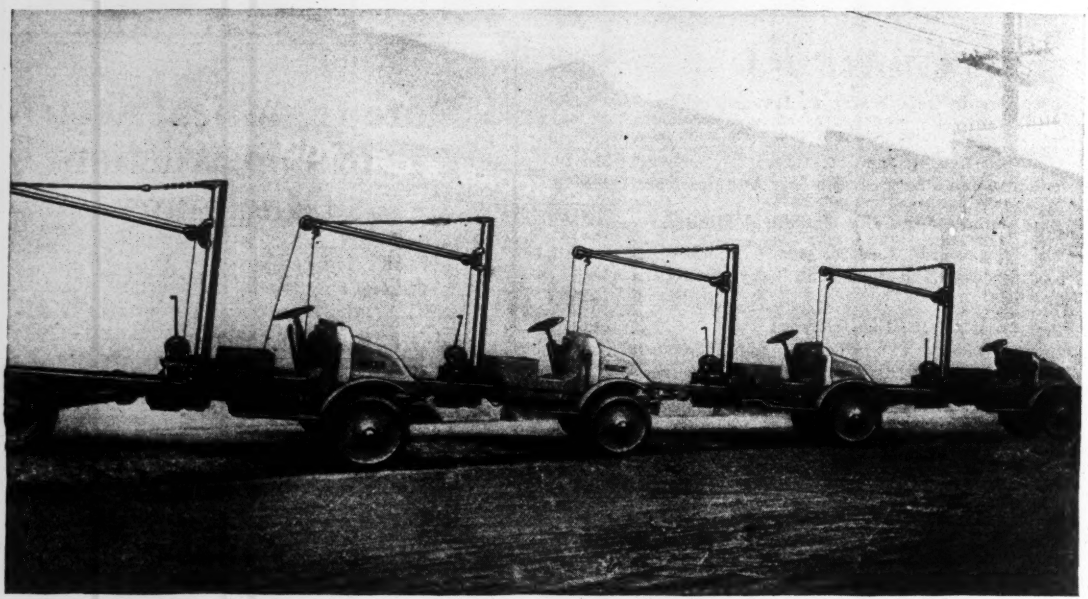

PART OF A TRUCK FLEET RECENTLY SHIPPED TO JAPAN—EQUIPPED WITH MEAD-MORRISON WINCHES AND CRANES

Cheaper Than Japanese Labor—

Mead-Morrison Winches and Cranes

EVEN in Japan, where labor is at its cheapest, the time and money saving advantages of Mead-Morrison Winches and Cranes are apparent. How much greater is the economy of this equipment in the United States, where labor costs are high?

With a Mead-Morrison Crane and Winch on your truck, you can handle a heavy loading or unloading job with a crew of two or three men. The crane operates on the truck engine's idling power—raises, swings and lowers loads rapidly and surely. The crane mast is easily dismounted, leaving the winch available independently for hoisting or hauling.

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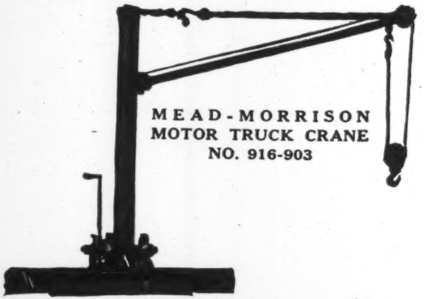

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Multiplies Man-Power
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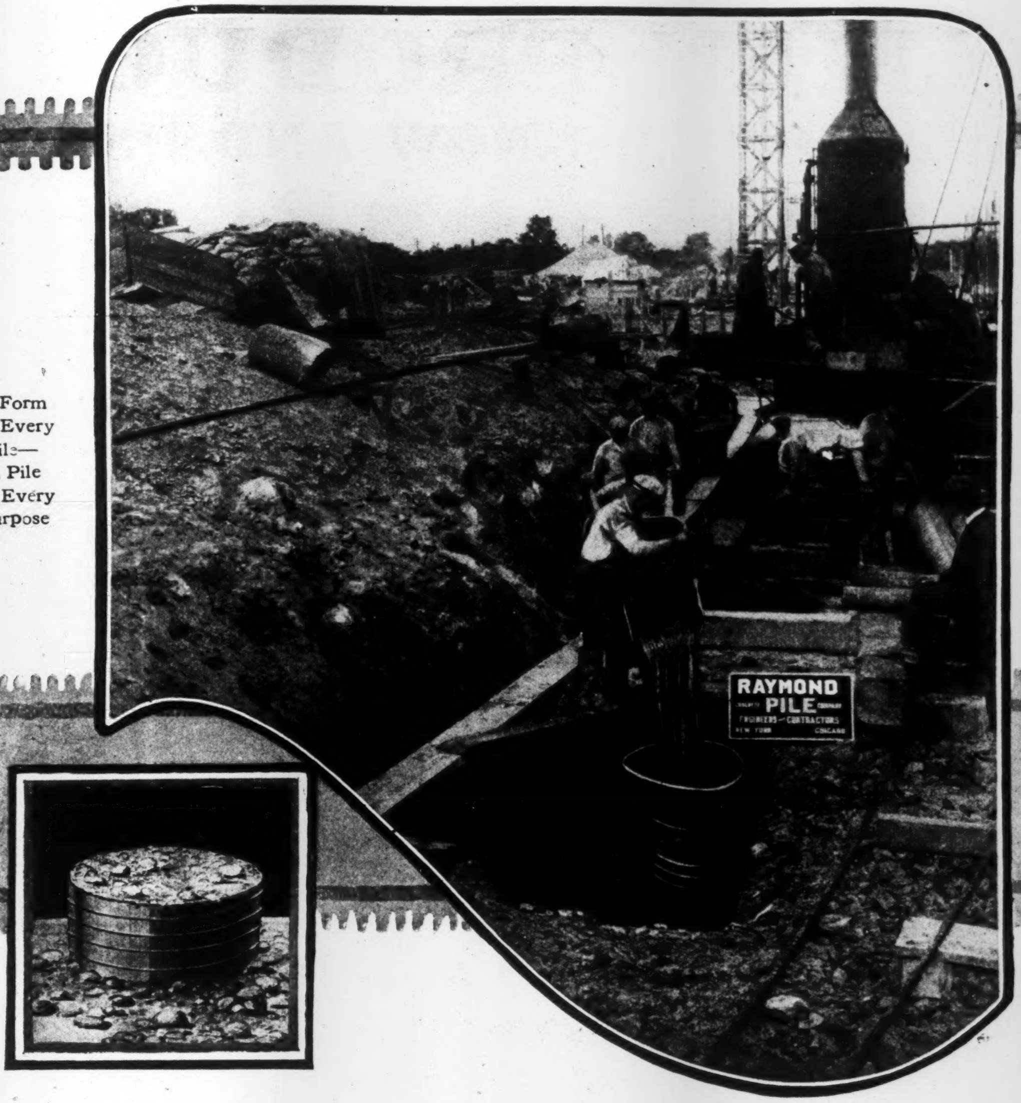
for Every
Pile—
A Pile
for Every
Purpose



Every Raymond Concrete Pile job maintains the reputation of the Raymond name—one reason is because every Raymond Concrete Pile is poured into a spirally reinforced tapered steel shell and the shell is left in the ground.

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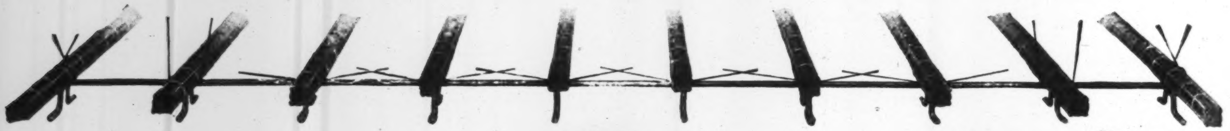

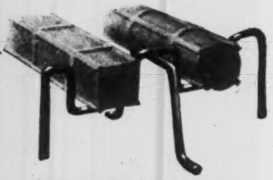

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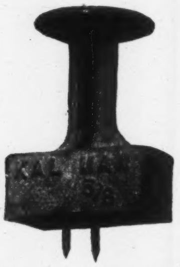

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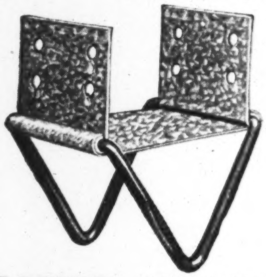

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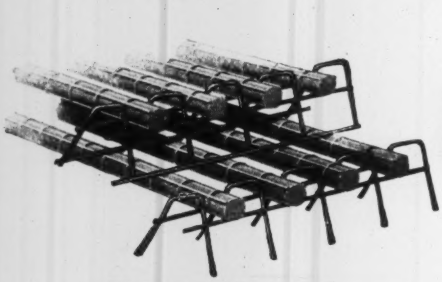

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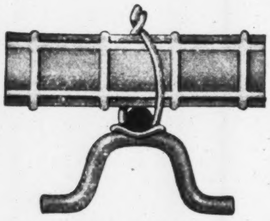

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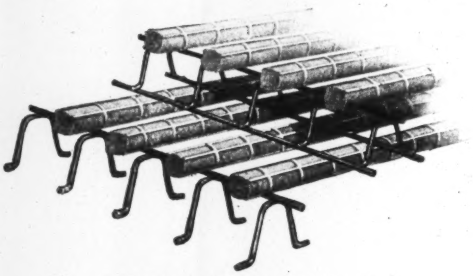

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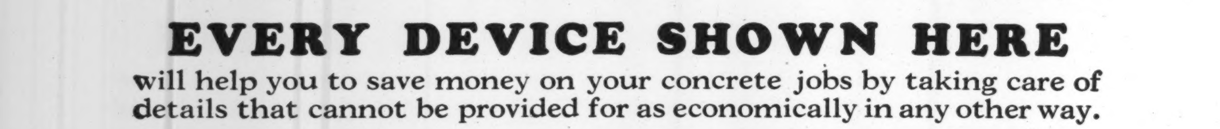

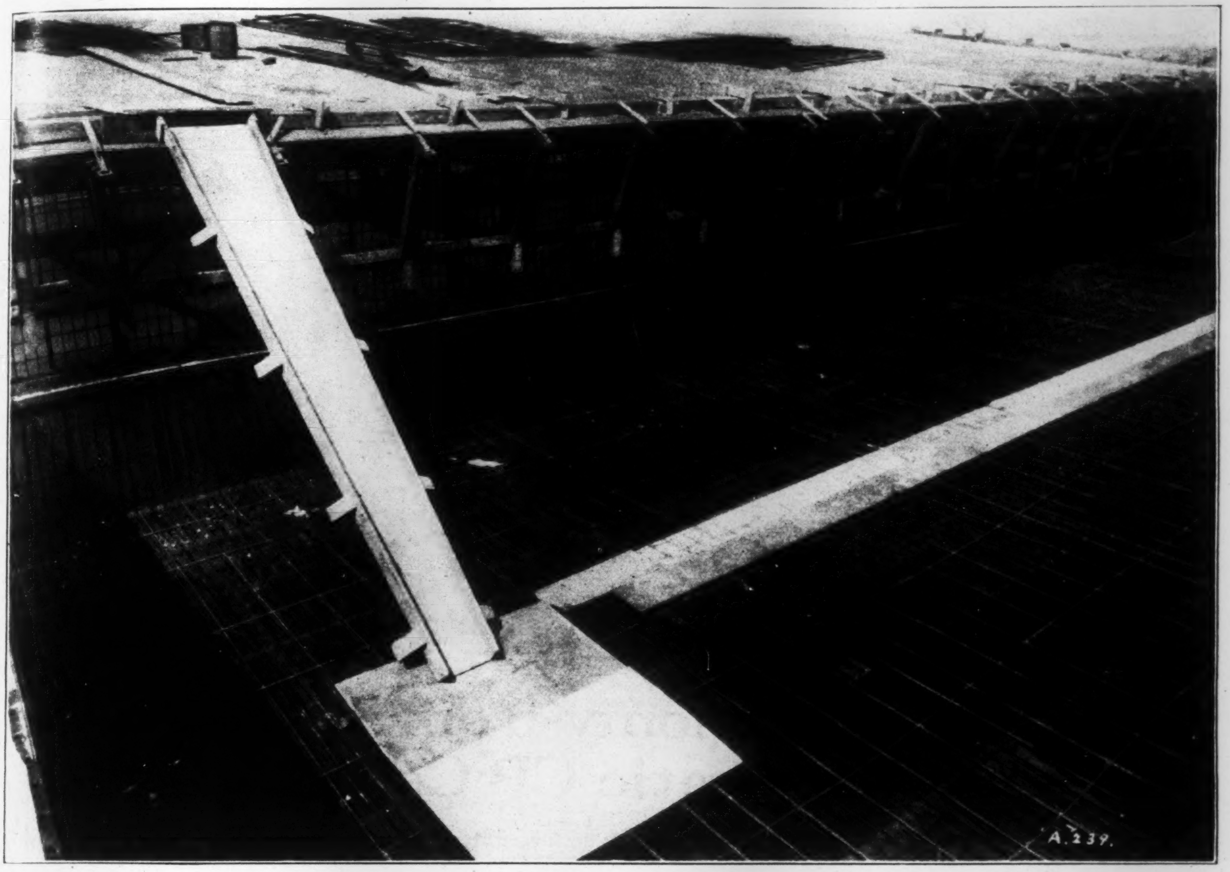

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Hy-Rib used in this roof construction insures the lightest, most economical concrete roof with a big saving in labor.

Truscon ¾-in. Hy-Rib for roofs gives the most economical, properly waterproofed, concrete roof construction on the market.

Truscon ¾-in. Hy-Rib is more than a metal lath. It is a concrete reinforcement for roofs, tanks, arches and floors. It saves forms. For arched floors, balconies and other construction, where elaborate and expensive wood forms are usually required, ¾-in. Hy-Rib can be used with a big saving in material and labor.

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INTERMITTENT loads are efficiently handled by these electrically-driven automatic CP Compressors. They start and stop automatically within predetermined pressure limits; they never idle or run partially unloaded. Electric current, lubricating oil and circulating water are simply and positively controlled by air demands thus effecting maximum economy.

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In the interests of economy for those plants using a large volume of compressed air part of the time and intermittently the remainder of the day it is well to use Automatic CP Compressors, electrically-driven and provided with a simple control for changing from constant use to intermittent service.

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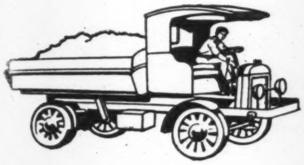
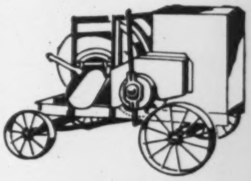


If your truck drivers had to
shift gears 15 or 20 times a minute—

If your concrete mixer operator had to
throw clutches 15 or 20 times a minute—

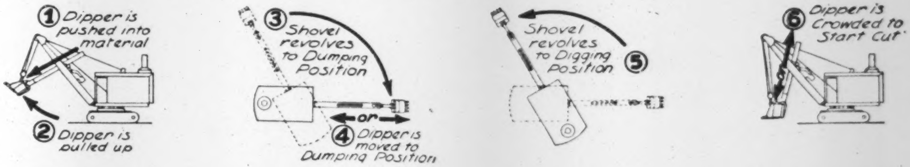


What kind of power would you use?

The answer to this question is easy. You would use steam power, to speed up your work by getting flexibility, and ease of operation, through direct throttle control of each operation.

There are some contractors who think that the same satisfaction can be secured from gasoline power when used on a power shovel, as they get from gas drive on a truck or concrete mixer—overlooking the entirely different problem of shovel work.

Here is a sketch which gives a clear idea of the problem:


① Dipper is pushed into material
② Dipper is pulled up
③ Shovel revolves to Dumping Position
or
④ Dipper is moved to Dumping Position
Shovel revolves to Digging Position ⑤
⑥ Dipper is Crowded to Start Cut

EVERY TIME the shovel's dipper picks up and dumps a load of material, there are six or more *separate applications of power in different directions.* (More than six, when it is hard digging and the dipper must make two or more bites in order to fill).

Yet when independent sets of steam engines are used for the hoisting, crowding and swinging— the shovel can perform this complete digging cycle smoothly and easily *in 10 to 20 seconds.*

That's why you hear of so many contractors getting 600 to 700 cubic yards a day, or even more, from steam ERIES digging in a fairly high bank with plenty of cars or trucks to haul the material away.

Up to the present date, there is no other type of power which can even approach steam for general shovel work. The *flexibility* of steam is of the greatest importance for taking loads which are continually jumping from zero to 150% overload or more. The cushion effect of the steam is a valuable factor in protecting the machine which is facing these conditions.

The ERIE'S ease of operation, and *reliability*, far more than offset any minor convenience of feeding the shovel gasoline instead of coal and water. Its extra output — greater earning power — makes any possible fuel saving triflingly small by comparison. Don't "Save at the Bung and Waste at the Spigot."

Unless you are working in an arid section where water is almost impossible to get— or working where gasoline costs almost nothing, and coal or fuel oil are extremely high — or are digging easy material with only intermittent requirements—

A steam ERIE is the machine to use. It will give you *output.* In June, 1924, there is nothing else that will tackle real digging like a steam ERIE does.

That is the reason why contractors are buying far more steam ERIES than any other $\frac{3}{4}$-yd. excavating machine —

And also, that's why it pays to get definite figures on outputs which have been regularly obtained, before you buy excavating plant for any job.

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Builders of ERIE Shovels, Cranes, Draglines, Steam Hoes, Ditchers, etc.
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MORE THAN 3,000 ERIES NOW IN SERVICE

ERIE Revolving Shovels

RP-72

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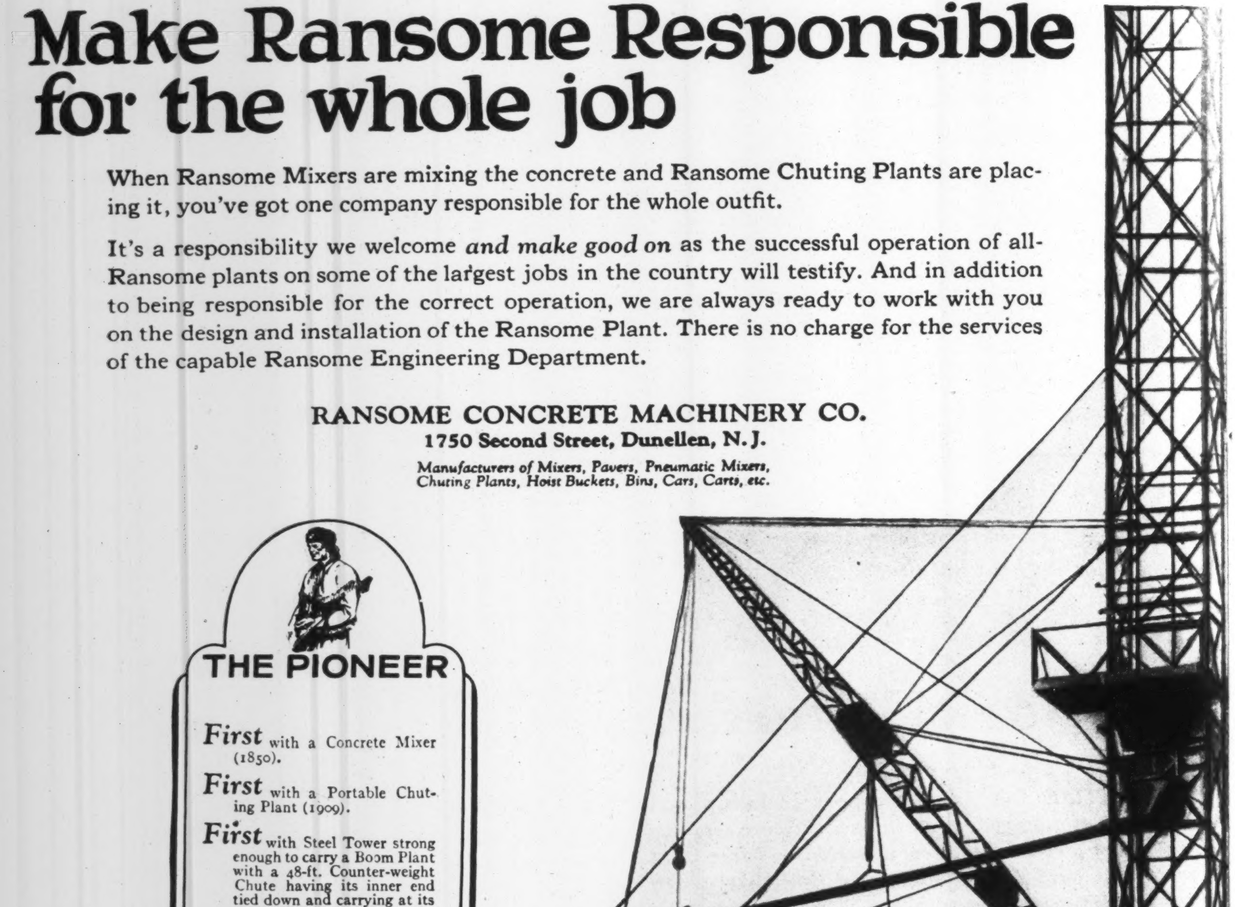

6804

Without obligation on my part, please send me information on:—
Building Mixers, sizes 4-S___; 7-S___; 10-S___; 14-S___; 21-S___; 28-S___; 56-S___. Driven by Belt___, Steam___, Gasoline___, Electric___.
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*NAME*________________ *ADDRESS*________________

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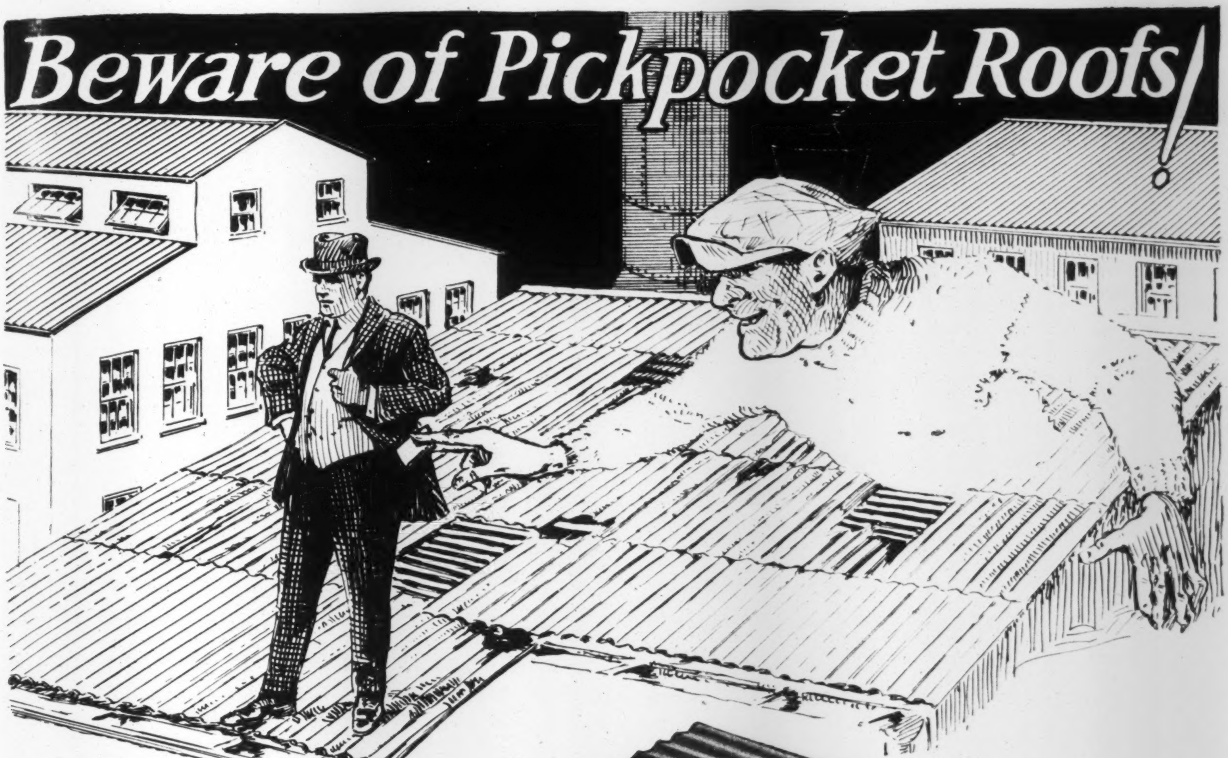

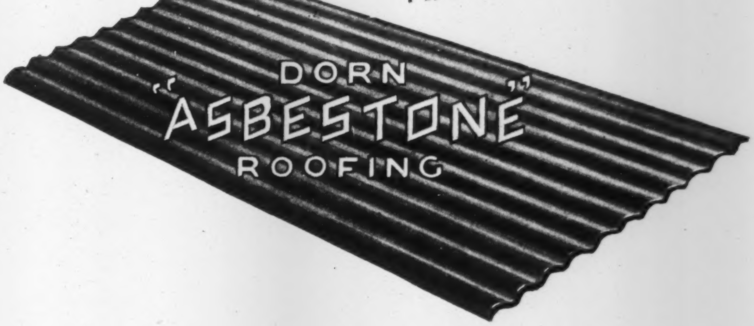

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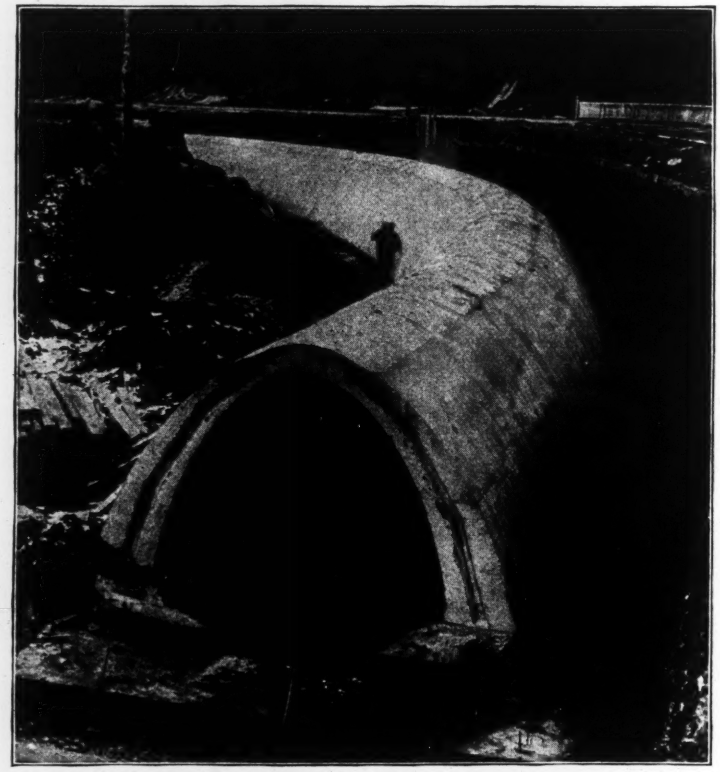
General Sales Office:
82 Wall Street, New York

"ASBESTONE"

"Enduring as the Pyramids"



End section of arch, New Water Supply at Washington, D.C. This job consists of nine miles of horseshoe shaped cross sections of reinforced Concrete. It has a large number of sharp and difficult curves. The work is being done by the Arundel Corporation under the supervision of L. H. Beach, Maj. Gen. and Chief of Engrs. U. S. War Dept.; J. A. O'Connor, Maj. Corps of Engrs. U. S. A.; and E. D. Hardy, Asst. Engr. U. S. Engr. Office.

Another Example of Quality Control in the Field

Government engineers, too, are applying laboratory principles to control the quality of Concrete.

On the New Water Supply Conduit at Washington, D. C., they are carefully grading the aggregates. They keep constant check on the water content. They maintain a minimum time for mixing.

The strength assumed for the Concrete was 2000 pounds. The minimum strength maintained day after day—as shown by hundreds of tests made by the U. S. Bureau of Standards—is 2500 pounds.

Have you seen previous advertisements of this series, telling about some of the many other jobs where modern field methods of control are directly helping to assure Concrete of uniformly greater strength? Proofs of these advertisements will be sent you on request. Address the nearest office listed below.

PORTLAND CEMENT ASSOCIATION

A National Organization to Improve and Extend the Uses of Concrete

Atlanta
Birmingham
Boston
Charlotte, N.C.
Chicago
Dallas
Denver
Des Moines
Detroit
Helena
Indianapolis
Jacksonville
Kansas City
Los Angeles
Memphis
Milwaukee
Minneapolis
New Orleans
New York
Oklahoma City
Parkersburg
Philadelphia
Pittsburgh
Portland, Oreg.
Salt Lake City
San Francisco
Seattle
St. Louis
Vancouver, B. C.
Washington, D.C.

ONE HUNDRED YEARS OF PORTLAND CEMENT 1824 1924

Our Booklets are sent free only in the United States, Canada and Cuba

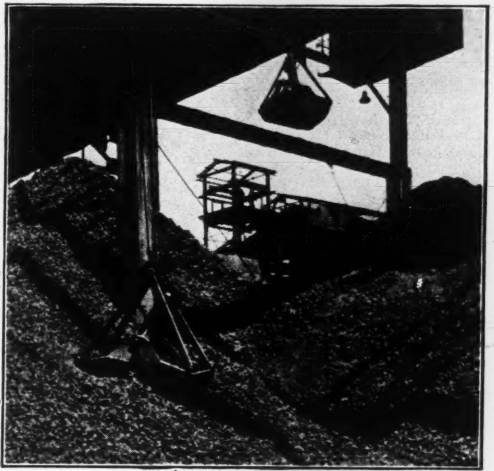
14 years ago, Back in 1910

When Princeton's President became Governor of New Jersey

These 2 Veteran WILLIAMS Buckets went on duty at Providence

Two more "Honor Roll Veteran" Williams Buckets

In all these years, the two Williams "Standard" Buckets that went to the Providence Gas Company back in 1910, have been giving the same satisfactory service.



For 14 years these two "veterans" have been handling coke, often frozen. Working today just as they did when new — and "the cost of upkeep has been unusually low with both buckets," write the owners.

Because of the splendid record made by these two veterans, the Providence Gas Company now uses 8 Williams Buckets all told.

You Will Get the Same Good Results with WILLIAMS Buckets

There is no need to "take a chance" when buying a bucket. Use the Williams, and you are sure of dependable service year after year.

Every Williams Bucket carries this unique guarantee: *"All parts guaranteed against breakage, as long as the bucket is used on the kinds of work we recommend it for."*

There's a WILLIAMS Designed to Handle Your Work

Probably one of the 12 regular types of WILLIAMS Buckets will give the results you want. Sold with a definite guarantee to do your work.

Write for interesting photos, which show the results being obtained by the use of WILLIAMS Buckets. Tell us your particular requirements.

G. H. WILLIAMS COMPANY, 601 Haybarger Lane, Erie, Pa.

WILLIAMS

QUICK-ACTING CLAMSHELLS

All Parts Guaranteed Against Breakage

Dependable service, with low upkeep cost, because of these construction features:

All steel — no cast iron sheaves or other iron parts.
All moving parts are bronze bushed — and easy to get at.
Sheaves turn on oversized pins, extra large diameter, and are held in perfect alignment by the triangular arrangement of the corner bars.
Practically no wear at the hinge pin — since the outer shell lugs are pinned to the main shaft, instead of turning on it.
Roller rope guards, used as line guides at the head of the bucket, prevent fraying of the cable.
All sheaves are in line, on every Williams — no "side leads" to cause rapid wear of cable.

The "Standard" gives good results on any equipment with two drums for bucket operation, such as guy and stiff leg derricks, locomotive cranes and overhead cranes.

It operates with three parts of closing line, and the short cable overhaul speeds up opening and closing. The leverage of the Williams Power Arm gives plenty of closing power for a quick bite into coal, gravel, etc.

No material is spilled between the lips, as the large one-piece hinge bearing holds the scoops in perfect line, even after years of service.

The "Standard" carries the regular Williams guarantee.

Nurses Home for St. Joseph's Hospital, Omaha, Nebraska
T. M. Nachligall, Architect. Anton Kettler Construction Co., General Contractor.
Gate City Erection & Supply Co., Contractors for Metal Lath.

Havemeyer Service exclusively

This is a complete Havemeyer Job. It includes

- —120 tons of Havemeyer Bars—double easle chairs; bar-tys; beam saddles; securo slab spacers.
- —40,000 sq. ft. removable steel forms.
- —40,000 sq. ft. triangle mesh.
- —15,000 sq. yds. metal lath.
- —all channels, corner beads, picture mould.
- —security anchors; wall tys.
- —sanitread for all stairs.
- —some 7000 sq. yds. of 2 in. solid plaster partitions, using Havemeyer diamond mesh lath and channels.

All Havemeyer Products, all delivered on the job on time.

A splendid example of the use of Havemeyer Service and Havemeyer Products.

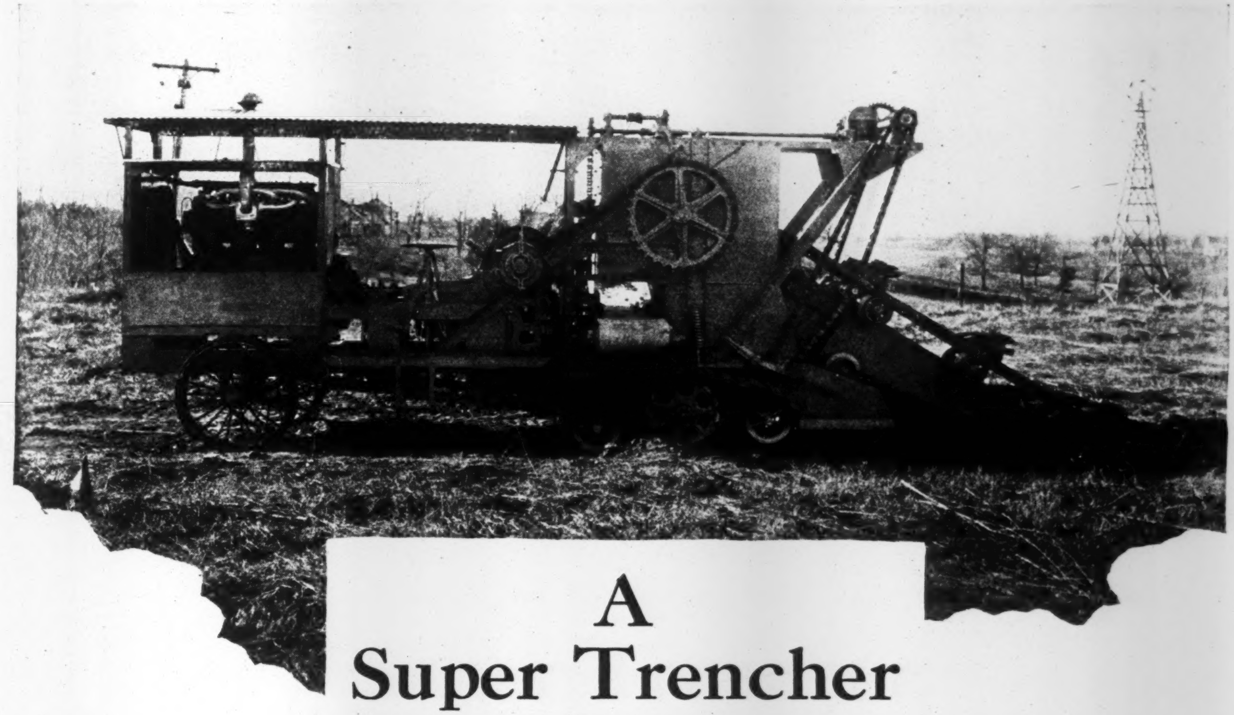
HAVEMEYER BARS
Rolled Exclusively From
NEW BILLET STEEL

Concrete Steel Company

42 Broadway, New York City, N. Y.
Sales Offices and Warehouses in Principal Cities

PARSONS

THE BEST TRENCH EXCAVATOR



A Super Trencher

Six years ahead of its time

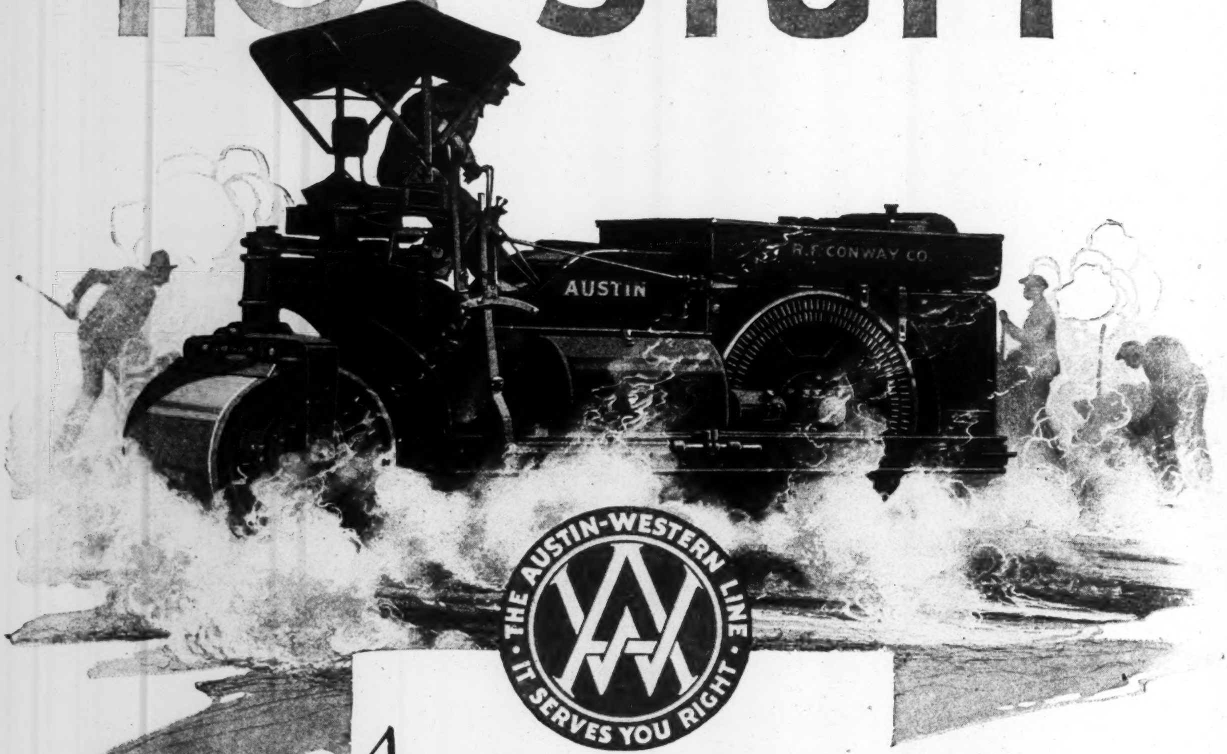
Until you have seen a Parsons Model 40, you cannot appreciate just what a difference there is in the trench excavator of today and the machine of tomorrow—*the Model 40.*

It is newly designed throughout and capable of setting new digging standards on 40 inch, 15 foot trench. Write for detailed information.

THE PARSONS COMPANY
NEWTON, IOWA, U. S. A.
Chicago, 11 S. La Salle St. Kansas City, 1737 Walnut St. New York, 145 Centre St.
Agents in All Principal Cities
MUSSEN'S LIMITED, SOLE DISTRIBUTORS IN CANADA—Montreal, Toronto, Winnipeg, Vancouver

PICK A PARSONS *and* QUIT PICKING

"HOT STUFF"



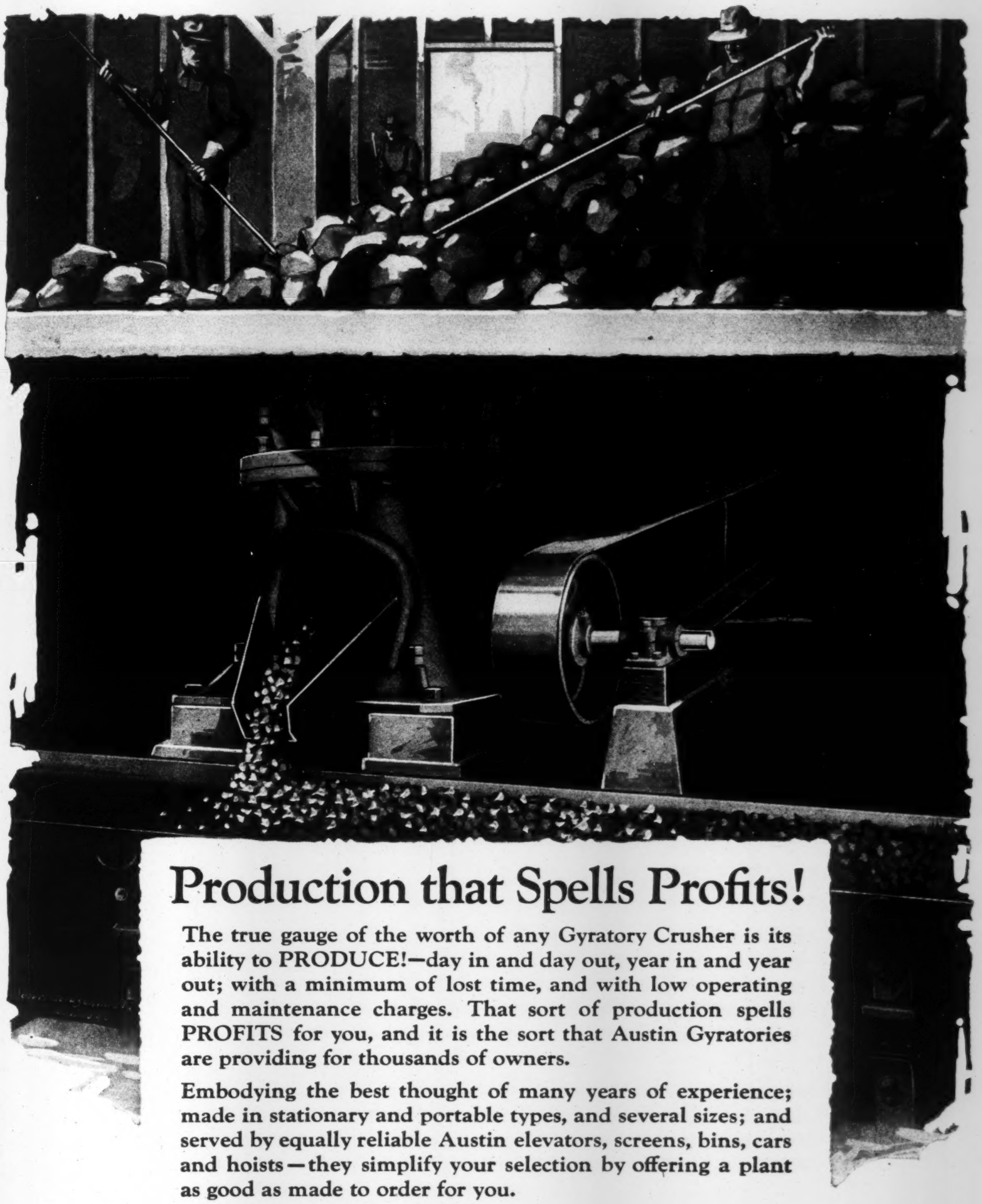
A rush job on one of the World's busiest thorofares—Chicago's famous Michigan Boulevard—a job calling for work of the finest kind, done in the shortest possible time. The R. F. Conway Company landed it, and this Austin Motor Tandem Roller of theirs played no small part in completing it on schedule.

"Hot stuff" puts a tandem roller to the severest test, and that is where the motor driven Austin shines the brightest in comparison with those of the steam driven type. Check over a few of the features that have made Austins such lasting sources of satisfaction and profit to the Conway Company and many others among our more exacting paving contractors, and the answer is plain: No time lost getting up steam and taking on coal and water; no falling coals to injure the pavement; steadier running because of the low center of gravity; and easier steering and handling.

WHY TAKE LESS IN A TANDEM?

THE AUSTIN-WESTERN ROAD MACHINERY CO.

CHICAGO



Production that Spells Profits!

The true gauge of the worth of any Gyratory Crusher is its ability to PRODUCE!—day in and day out, year in and year out; with a minimum of lost time, and with low operating and maintenance charges. That sort of production spells PROFITS for you, and it is the sort that Austin Gyratories are providing for thousands of owners.

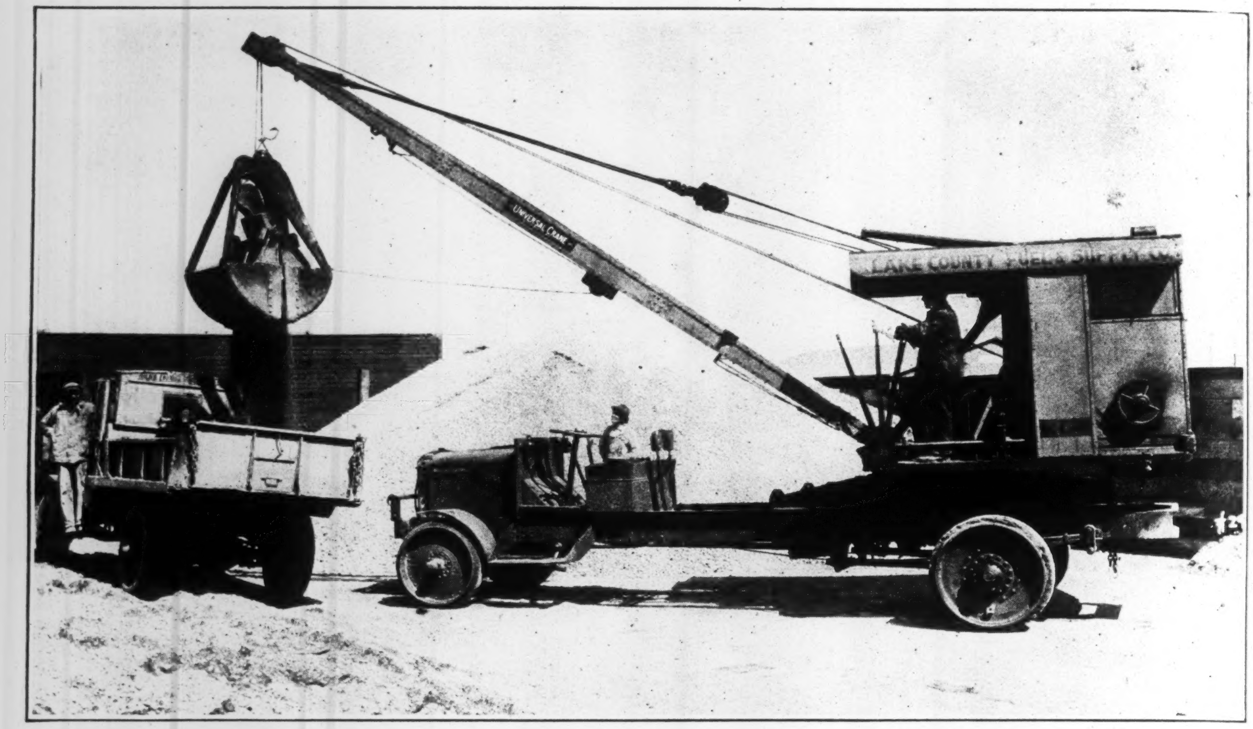
Embodying the best thought of many years of experience; made in stationary and portable types, and several sizes; and served by equally reliable Austin elevators, screens, bins, cars and hoists—they simplify your selection by offering a plant as good as made to order for you.

Special catalogs and bulletins describe the various types in detail. Tell us your needs, and we will send you full information.

AUSTIN MANUFACTURING CO.

CHICAGO NEWYORK

Speed—Mobility—Power—Strength



The Crane that has Them All!

All that you want in a crane, Universal provides,

Speed to finish the job in a hurry and at a profit.

Mobility for moving the unit to the next job quickly with the least wasted time.

Power to meet unusual demands and earn profits impossible with less of it.

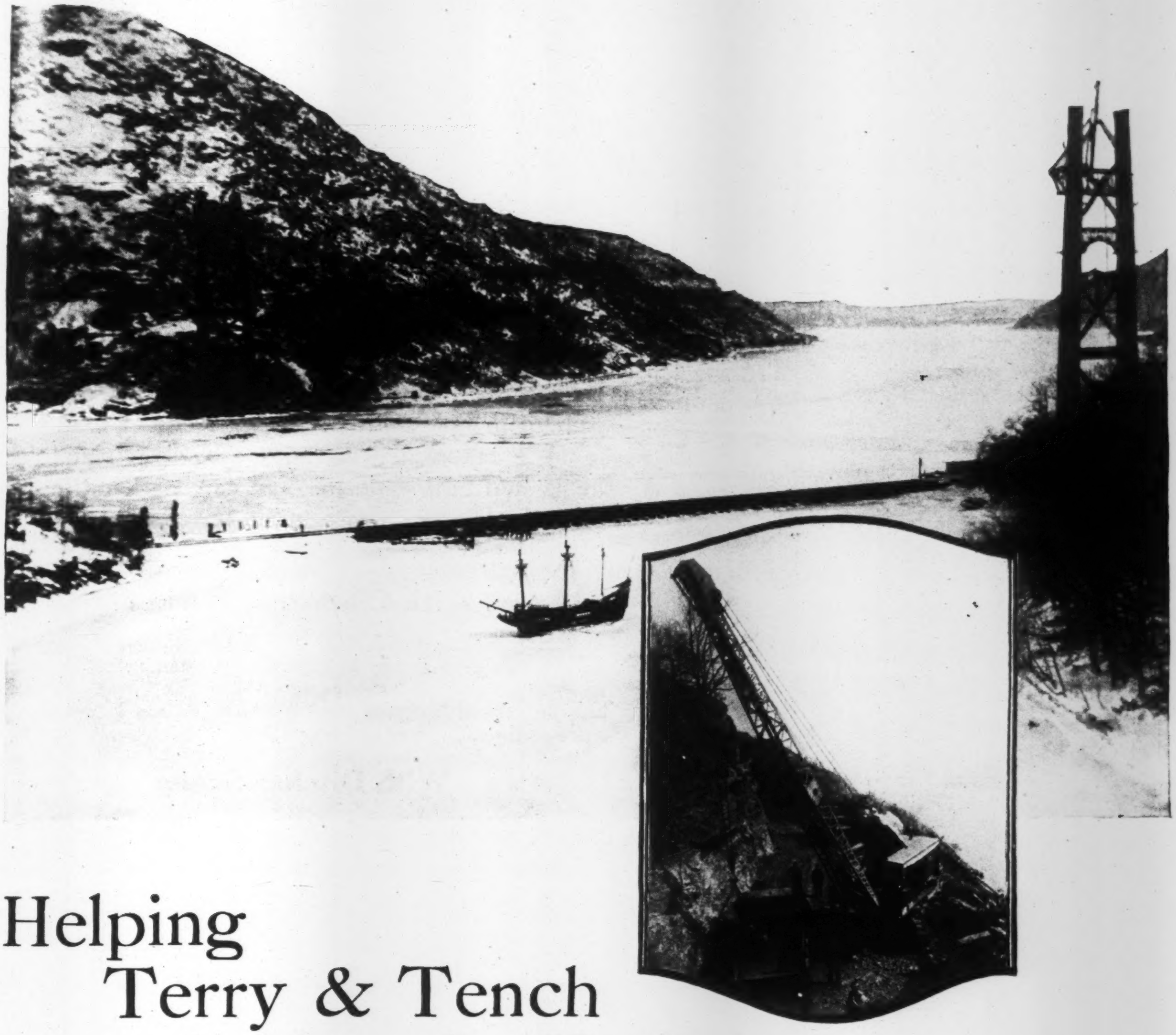
Strength for endurance, giving ability to run day and night, week after week, without delays, if the job demands it and to keep giving economical service for years to come.

It is because Universal gives you all these in abundance that owners stick to Universals and *One out of every four sales is a repeat order.*

It will pay you to get complete details about this crane.

Wire or write for Bulletin No. 226

The Universal Crane Co., 1144 Swetland Bldg., Cleveland, Ohio



Helping Terry & Tench bridge the Hudson

WORKING in the shadow of Anthony's Nose, a Northwest Convertible Crane is helping Terry and Tench to bridge the historic Hudson. Here on fabled ground, beneath the site of old Fort Clinton and above the little replica of Hendrick Hudson's Half Moon the "Last Word" in gasoline crawler cranes is helping to reduce construction costs for Terry and Tench.

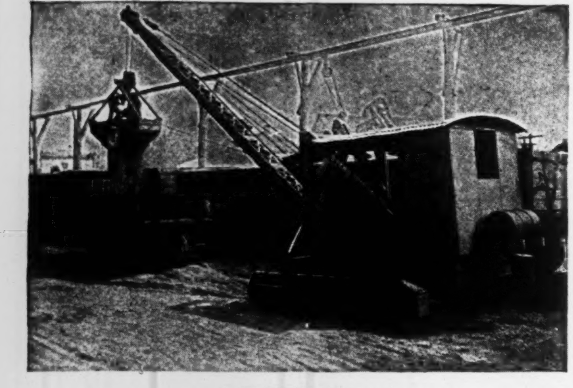
NORTHWEST ENGINEERING CO.
827 STEGER BLDG., CHICAGO

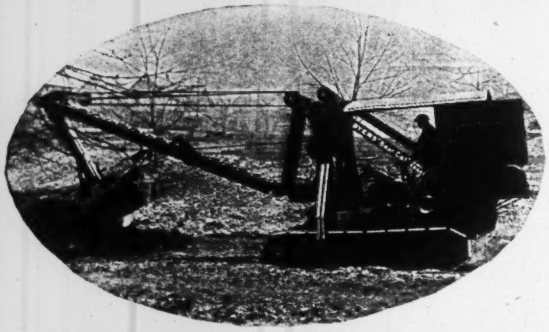
NORTHWEST

GAS or **CONVERTIBLE** *ELECTRIC*
CRANES·SHOVELS·DRAGLINES

E. N.-R. 6-268-RTG

BYERS





Three machines in one, a material handler, a ditcher, a grader and excavator—and a "Bear Cat" at all three jobs.

The "Bear Cat"

The reports that are coming in from the owners of Byers "Bear Cat" Cranes are almost too extravagant to print. Matched against bigger cranes of much greater rated capacity, the "Bear Cat," due to its swiftness, mobility and ease of handling, is actually doing more work in some cases, and doing it much more economically.

With Clamshell Bucket

Handling loose materials of all kinds with a ½-yard clamshell bucket, two or three round trips of the boom per minute can be expected from an average operator. The "Bear Cat" can also do ordinary digging with a clamshell, and is being used successfully on such work right along.

With Ditcher Scoop

At sewer and trench work the "Bear Cat" with ditching attachment is a whirlwind. The full caterpillar mounting gives the traction and mobility necessary and the work moves along with a speed and steadiness that can only be appreciated in the actual seeing. This attachment is offered in two widths, 18 and 24 inch, and operates to a depth of 15 feet.

With Shovel Attachment

The "Bear Cat" is a very efficient grading tool with the Byers-Fogarty shovel attachment or skimmer scoop. On tough, extensive jobs of road grading it has proved entirely satisfactory, and more and more buyers are ordering this attachment now along with one or both of the others.

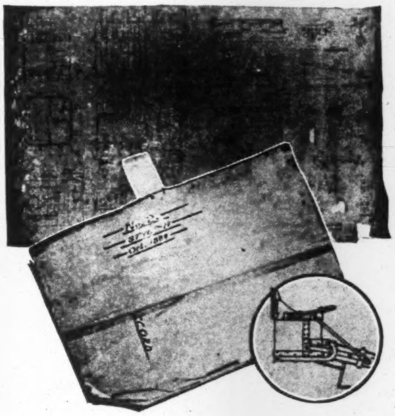
With these interchangeable attachments, the owner of a "Bear Cat" has virtually three machines in one, earning money all the year around.

Don't lose out on this summer's business. Let us send you more information.

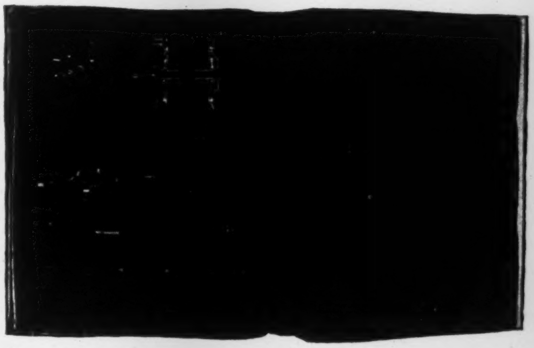
THE BYERS MACHINE COMPANY
250 Sycamore St., Ravenna, Ohio

CRANES

Forty years of well-kept Shovel Records



TWO views of the first tracing ever made of a Marion Shovel, "Number 2," designed, built and sold at Marion, Ohio, in 1884. The inset is an assembly drawing of the old-time dipper with which the Marion of 40 years ago was equipped. Today this historic sheaf of tracing paper reposes in the fire-proof Record Vault along with the blue prints of more than 5000 other Marions working in all parts of the world.



A recent blue print of a Marion Shovel. The minutest details of construction are covered in the working drawings of today.

Before shipment every Marion is checked with the blue print working drawings to assure an accurate and complete record of each machine.

The Marion Steam Shovel Company • Marion, Ohio, U. S. A.

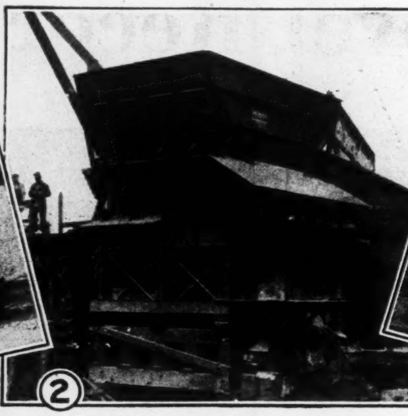
1884 FORTIETH ANNIVERSARY *1924*

2486

Marion Power Shovels

BETTER CONCRETE *for* LESS COST

①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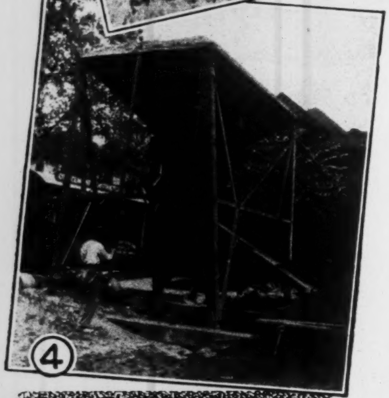
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⑥

1—Doolittle-Russell. Ltd., Hamilton, Ont.
2—Byllesby Eng. Co. Minneapolis, Minn.
3—Utility Const. Co. New Brunswick, N. J.
4—Otis Cement Const. Co., Detroit, Mich.,
5—State of Ohio, Wooster, Ohio.
6—Pyramid Const. Co., Harrisburg, Pa.

The Blaw-Knox Batcherplant saves TIME, LABOR and CEMENT — ask the contractor who owns one or more — who measures every mix ***accurately*** in 5 seconds, and ***in an instant*** loads his trucks, batch cars or mixer with a

BLAW-KNOX (One-Man) BATCHERPLANT

Road Builders and General Contractors everywhere are saving money and increasing profits. Every batch is automatically and ***accurately*** measured — mechanical proportioning prevents any variation of the mix. In every state — in most countries there's a Batcherplant. Inspect the outfit, we will give you the exact location.

BLAW-KNOX COMPANY
601 Farmers Bank Building, Pittsburgh, Pa.

NEW YORK
30 E. 42nd St.
BALTIMORE
Bayard & Warner Sts.
BIRMINGHAM
Am. Trust Bldg.
CHICAGO
Peoples Gas Bldg.
DETROIT
Lincoln Bldg.
BUFFALO
Genesee Bldg.
LONDON, ENG. Caxton House

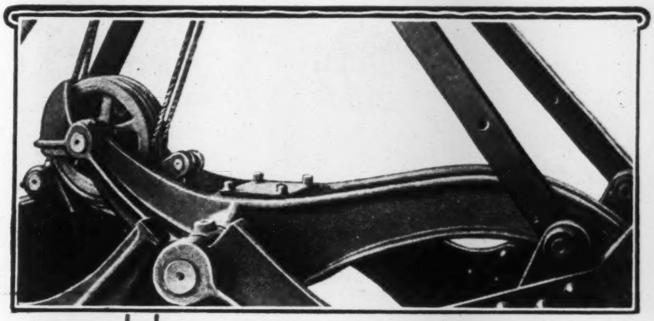
Blaw-Knox Road Building Equipment

Road Forms
Universal Forms
Truck Turntables
Batcherplants
Handy Houses
Clamshell Buckets
Cement Handling and Loading System

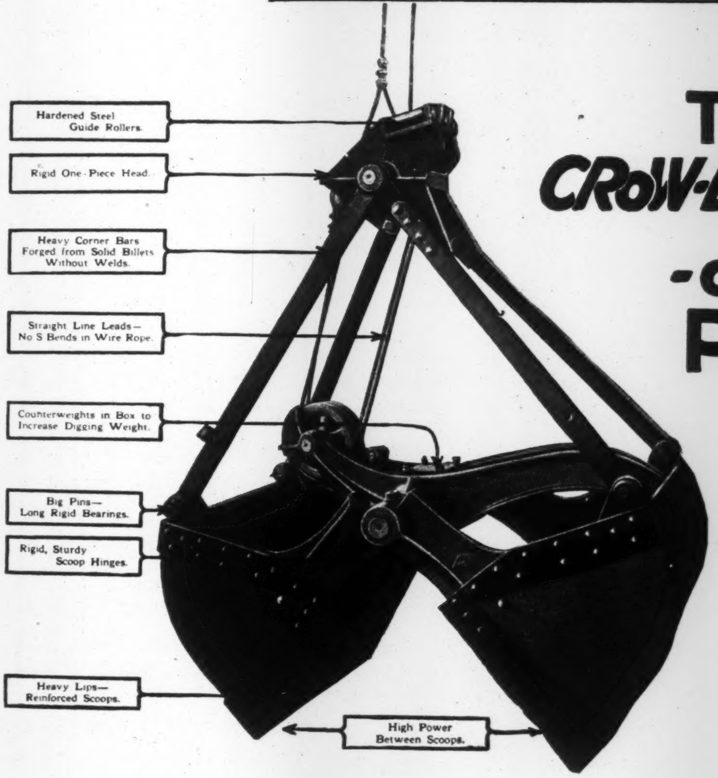
BLAW-KNOX
BLAW-KNOX Batcherplants

HIGH POWER *and* BIG OUTPUT

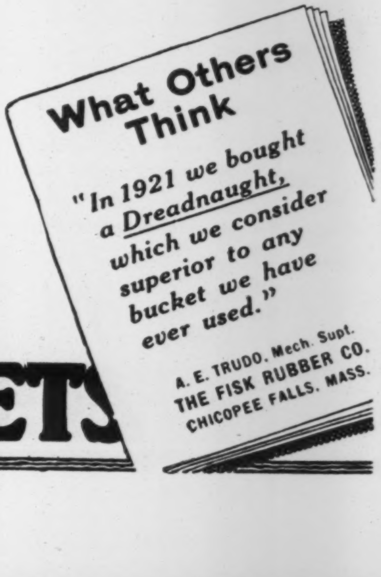
Any Crane Will Do Its Best Day's Work When Equipped with a Blaw-Knox DREADNAUGHT



The Dreadnaught Lever Arm is riveted to the bucket scoop—resting (but not turning) upon the hinge pin, with the closing sheaves mounted on the *extreme end* of the arm—giving tremendous closing power with only four-part reeving.


Hardened Steel Guide Rollers.
Rigid One-Piece Head.
Heavy Corner Bars Forged from Solid Billets Without Welds.
Straight Line Leads—No S Bends in Wire Rope.
Counterweights in Box to Increase Digging Weight.
Big Pins—Long Rigid Bearings.
Rigid, Sturdy Scoop Hinges.
Heavy Lips—Reinforced Scoops.
High Power Between Scoops.

The Lever Arm *CROW-BARS* the Scoops -a Heaping, Paying Load at every grab



What Others Think

"*In 1921 we bought a Dreadnaught, which we consider superior to any bucket we have ever used.*"

A. E. TRUDO, Mech. Supt.
THE FISK RUBBER CO.
CHICOPEE FALLS, MASS.

Write for a copy of Catalog No. 24, on Clamshell Buckets

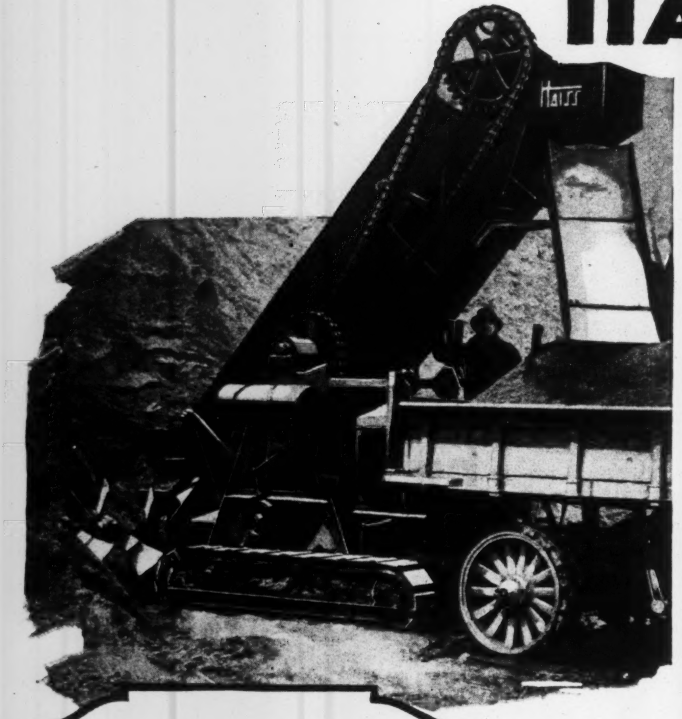
PRODUCTS

Steel Forms
Road Building Equipment
Standard Buildings
Transmission Towers
Structural Steel
Forge and Hammer Welding
Reversing Valves

BLAW-KNOX COMPANY
601 Farmers Bank Building, Pittsburgh, Pa.
NEW YORK—30 E. 42nd St.
CHICAGO—Peoples Gas Bldg.
BALTIMORE—Bayard & Warner Sts.
DETROIT—Lincoln Bldg.
BIRMINGHAM—American Trust Bldg.
BUFFALO—Genesee Bldg.
LONDON, ENG.—Caxton Bldg.

BLAW-KNOX BUCKETS

Low Upkeep? You get full measure in the sturdy built HAISS Creeper Loader!



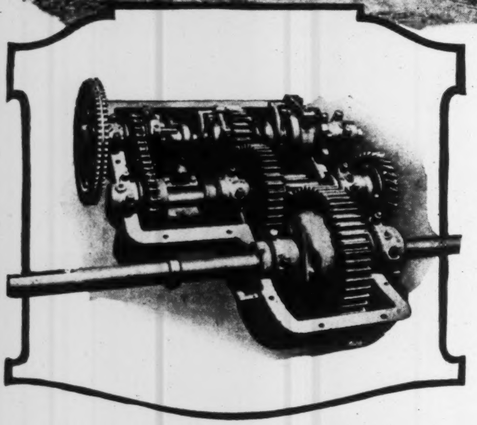
Haiss builds a machine that costs least over a period of years. How so? Every part is strong, no expense is spared to use the best materials for particular purposes. Remember, except for some bearing blocks, the whole machine is built of steel. Haiss uses steel castings for every cast part under strain. You don't have breakages.

Every provision is made to keep dust and grit from the wearing parts. The *enclosed transmission* alone should make the Haiss your unmistakable choice among loaders. All the gears, and clutches too, running in an oil bath, wholly enclosed and protected from dust and dirt. If you ever owned an open shaft machine you must know how quickly the clutches wear when exposed to stone dust flying around. The time you save in not making clutch adjustments every little while is worth a lot to you.

Alemite lubrication on all bearings and the Haiss designed hollow creeper tread rollers packed with grease make these machines truly economical. There's ample lubricant where the friction comes and hard steel parts to stand the gaff.

See the specification of materials in Catalog 523

The George Haiss Manufacturing Company, Inc
140th Street and Rider Avenue
New York, N. Y.



The Enclosed Transmission

marks the Haiss as a good machine to own, all the clutches are inside and the size and weight of the gears speak for themselves.

TRUCK LOADERS

HAISS

MATERIALS HANDLING EQUIPMENT

CLAM SHELL BUCKETS

PORTABLE BELT CONVEYORS

Seven Years' Continuous Service and Still on the Job

The Hughes-Foulkrod Co., have 12 "Standard" Mixers in operation at the present time.

"The Standard" Mixer shown in the photograph below has been in continuous service for seven years for the Hughes-Foulkrod Co., Philadelphia and Pittsburg Contractors. On this job it mixed the concrete for the foundations and at the time this photograph was taken, was mixing the mortar for the brickwork.

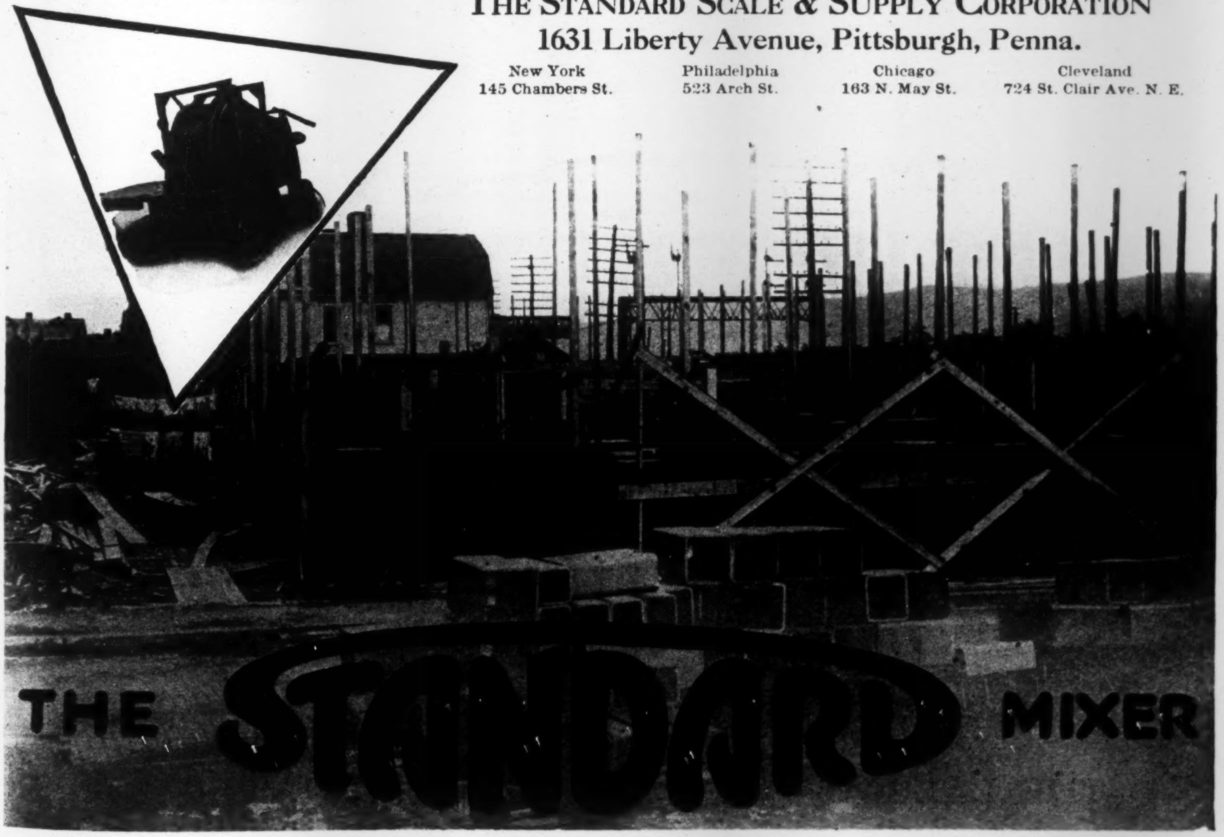
This "Standard," like many others in use throughout the country, has given satisfaction and has been absolutely reliable during its years of service—and even now, it shows no signs of wearing out—no mean accomplishment after the thousands and thousands of yards of concrete and mortar it has mixed.

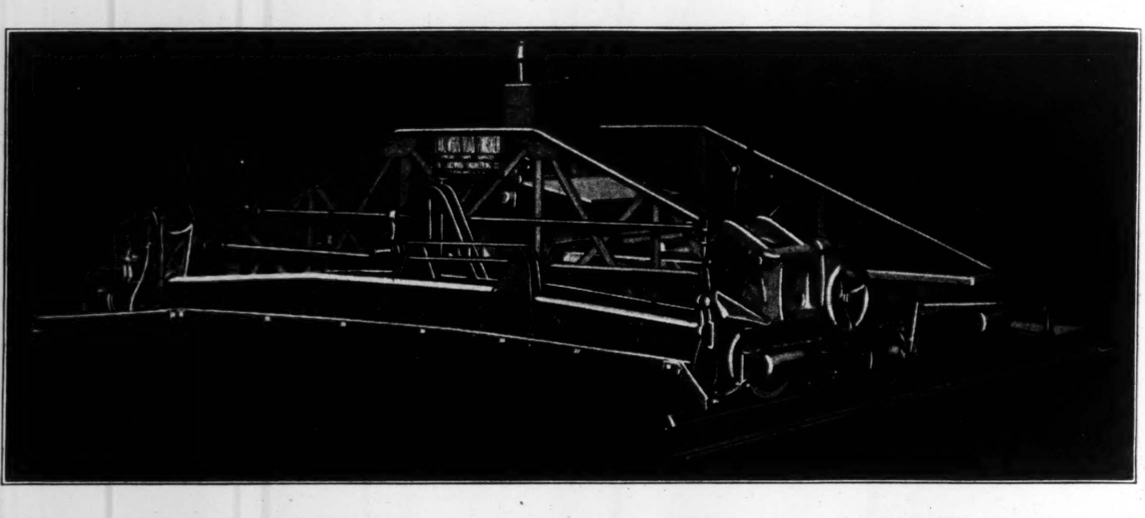
To reliable and well rated contractors who are in the market for a machine, we offer "The Standard" for 15 days' trial. Write us for further information and a new catalog.

THE STANDARD SCALE & SUPPLY CORPORATION
1631 Liberty Avenue, Pittsburgh, Penna.

New York 145 Chambers St.
Philadelphia 523 Arch St.
Chicago 163 N. May St.
Cleveland 724 St. Clair Ave. N. E.

The seven year old "Standard" Mixer in use on an apartment house job at Leetsdale, Pa.





The FINISHER and the FLOATBRIDGE

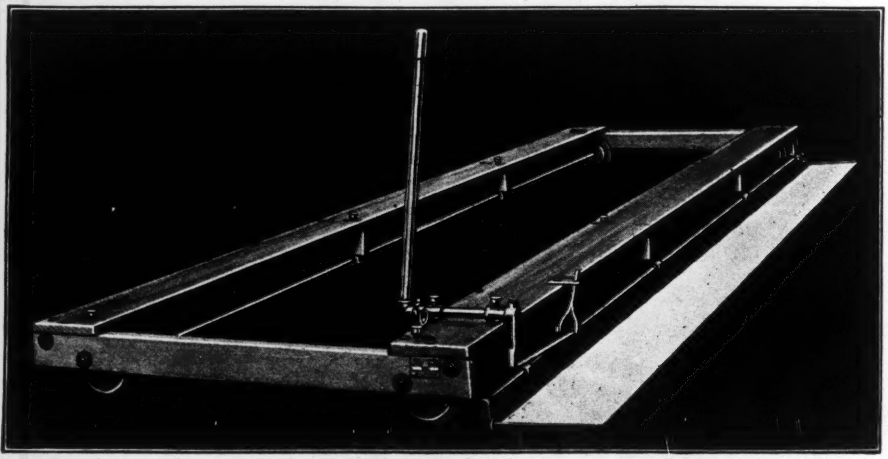
Is indispensable where 1 to 2 inch slump concrete must be finished—It Spreads, Tamps and Floats.

Combines a Substantial Bridge and Hand-operated Finishing Belt.

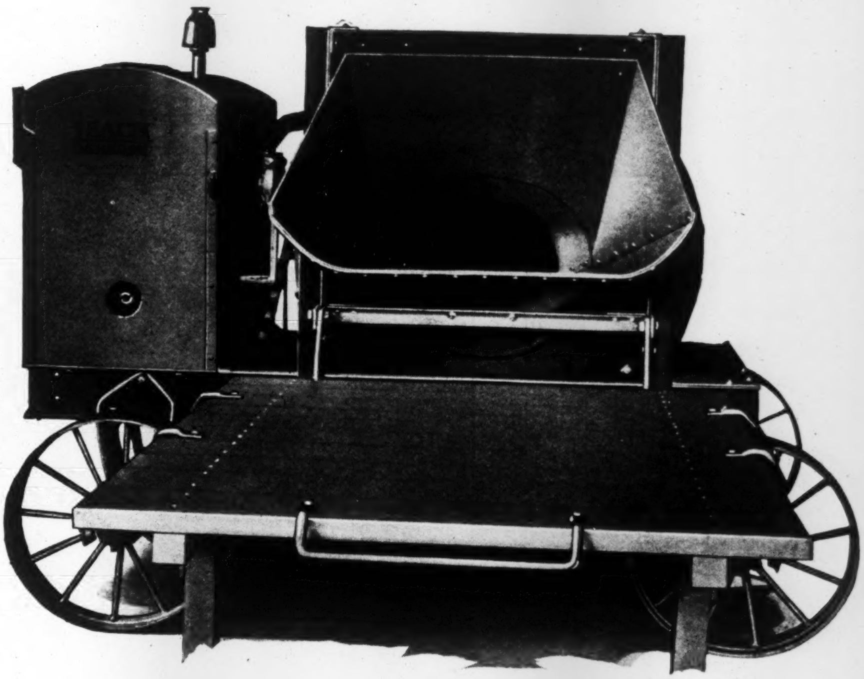
That better concrete of greater density results from the tamping action of the Lakewood Finisher is conclusively proved by core tests made in many localities. Not only does the tamping produce a smooth surface but elimination of voids results in *greater density to the very bottom of the slab.* Eleven years' experience and over 1,200 machines have proved the Lakewood principle of tamping concrete to be correct. There is no substitute for, or any method "just as good" as mechanical tamping. The 1924 Model Finisher gives a contractor more real value than ever before. This machine, with good forms, will give a smooth surface at a less cost than hand methods.

The belt float on the Lakewood Floatbridge is operated by the lever shown. The machine automatically advances with each stroke. In addition, the substantial bridge offers a support for trowelling and touching up. It's the handiest tool on the job. Made for 8 to 30 ft. widths. Used also on city street work, and can be furnished to travel on the curbs. Each machine has an extra belt as standard equipment.

Bulletin 42-R gives complete details of the Lakewood Finisher and the Floatbridge. Yours for the asking.



THE LAKEWOOD ENGINEERING CO., CLEVELAND



To the man who knows how to size up a 7-S mixer—

GO over the Leach-Oshkosh Mixer from wheels to exhaust. You'll find—if you know what's good and bad in mixers—that this is one 7-S Mixer without a single weak point.

The first thing that you'll look for is mixing speed—and you'll find it.

Time the drum speed of the Leach. You'll find that the Leach drum goes 3 to 5 revolutions per minute faster than you've ever seen a 7-S drum go. But that isn't all; the mixing action is perfect because of the correct design of the mixing blades.

And now look at the discharge chute. It's longer and wider than any chute you've ever seen on a mixer of this size—36 inches long and 15½ inches wide. It's the pivoted type and has a steeper slope than you're accustomed to seeing—6 degrees greater than the average slope of the discharge chute in other 7-S mixers.

Try the short discharge lever. The action is easier—simple linkage and good balance are responsible for that action. And don't overlook the locking device that holds the chute in the discharge position. No wonder the Leach-Oshkosh discharges in 7 to 8 seconds!

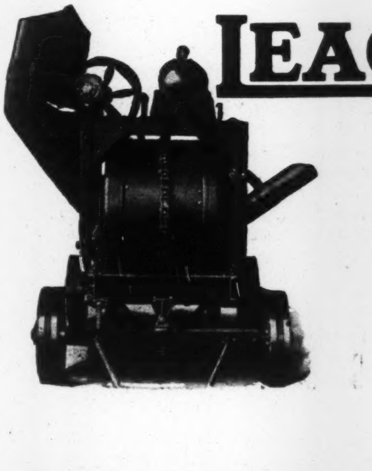
Now go around to the charging side and look at the big receiving hopper. The lower edge is only 13 inches above the platform. You'll know how convenient this is when you dump a wheelbarrow of sand into the drum through the big opening. Just one more Leach refinement!

There isn't enough space here to cover the hundred and one distinguishing points of the Leach and its trouble-proof engine, but it doesn't take a practical man long to discover them.

The coupon below brings a book covering the Leach in detail and including the Robert W. Hunt Company inspections described below.

Mail it.

Leach Company, 649 S. Main St., Oshkosh, Wisconsin
Formerly Oshkosh Mfg. Co.



LEACH - *Oshkosh* MIXER

Leach leads!

The Robert W. Hunt Co., nationally known research engineers, has made a careful engineering investigation of most mixers of the 7-S class. These investigations are significant to every careful buyer of concrete mixers. The coupon opposite brings your copy.

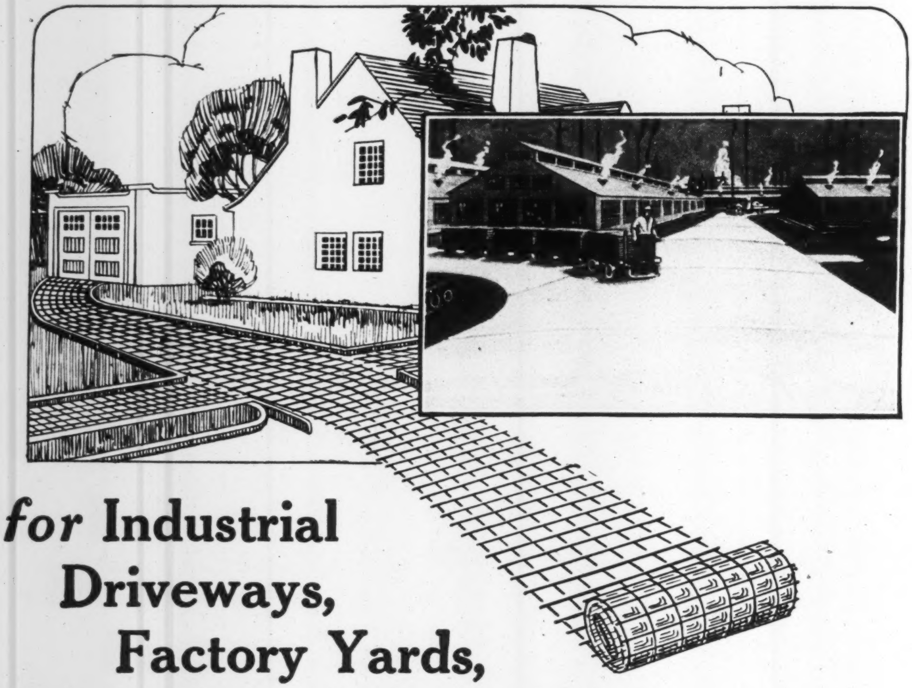
Send a copy of the Robert W. Hunt Company inspections and complete details of the Leach-Oshkosh 7-S Mixer to ....

Firm ....

Address ....

Mail to Leach Company,
649 South Main St.
Oshkosh, Wisconsin.

E. N.-R. 6-26M-BTG



for Industrial Driveways, Factory Yards, Sidewalks and Driveways

Driveways, Factory Yards, and Sidewalks, when built of *reinforced* concrete, will outwear and outlast any and all other types of construction.

For *invisible* strength and for permanency, use National Steel Fabric Reinforcement because it provides the greatest amount of strength for a given amount of steel and, at the same time, is less costly to transport, handle, and place in the concrete.

Get in touch with our nearest office regarding your requirements.

National Steel Fabric Company
(Subsidiary of Pittsburgh Steel Company)
700 Union Trust Bldg., Pittsburgh, Pa.

OFFICES: Atlanta, Chicago, Cleveland, Denver, Detroit Houston, Los Angeles, New Lork, Philadelphia, Pittsburgh, St. Louis, San Antonio, San Francisco
STOCKS: Chicago, Houston, Los Angeles, New York, Pittsburgh, San Francisco

Furnished in Rolls and Sheets

NATIONAL STEEL FABRIC CO

WORLD'S LARGEST MANUFACTURERS *of* WELDED STEEL FABRIC

Greater Possibilities

THE INSLEY STEEL MAST HOIST plant has greater possibilities for the handling of either a 7-S or 14-S batch than almost any other equipment available to the concrete builder.

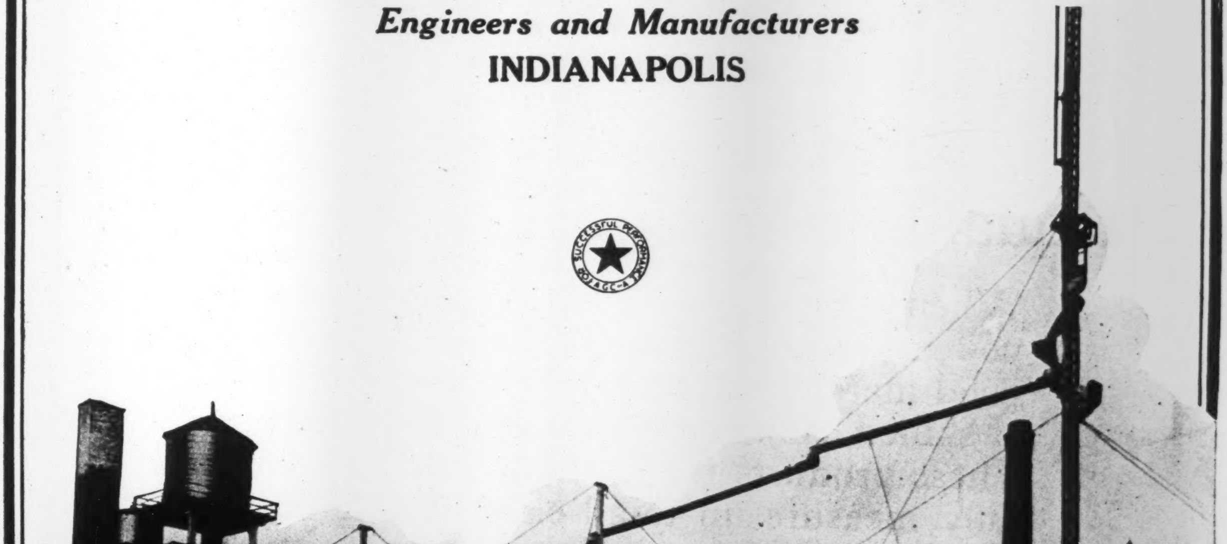
Its purchase and erection costs are such it does not mean the tying up of anticipated profits in equipment on the medium sized job.

Its operating efficiency is superior to that of the wood tower equipment heretofore used in that it is possible to reach 60 ft. with self supported chuting.

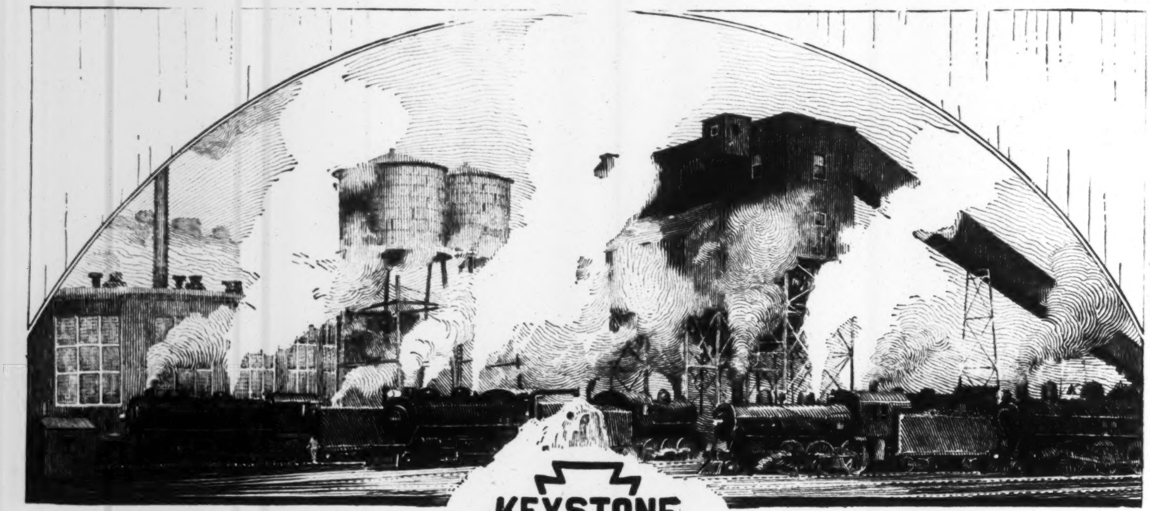
Its salvage value is high in that outside of chutes and sheaves there are practically no parts subject to wear. It is good for job after job.

If you have concrete to handle it will pay you to write for Catalog No. 45.

INSLEY MANUFACTURING CO.
Engineers and Manufacturers
INDIANAPOLIS



KEYSTONE COPPER STEEL



KEYSTONE COPPER STEEL

Every sheet metal shop and office should have a set of our latest revised Weight Cards for Black and Galvanized Sheets.

Are you interested in the problem of rust-resistance? Send for booklet "Reducing Corrosion in Steel Cars."

IT IS true business economy to insist upon Steel Sheets and Tin Plates that represent the highest standards of quality and value.

When you buy the products of our great mills, you are securing the combined excellence of good materials and craftsmanship—the output of skilled, conscientious, and trained workmen. These products render high class service, and fully measure up to all claims made for them. Your requirements will be made our special interest. Write nearest District Sales Office.

American Sheet and Tin Plate Company

General Offices: Frick Building, Pittsburgh, Pa.

DISTRICT SALES OFFICES:

Chicago Cincinnati Denver Detroit New Orleans New York Philadelphia Pittsburgh St. Lou

Pacific Coast Representatives: UNITED STATES STEEL PRODUCTS COMPANY, San Francisco, Los Angeles, Portland, Seattle

Export Representatives: UNITED STATES STEEL PRODUCTS COMPANY, 30 Church St., New York City; 36-38 New Broad St., London, E.

Why did the Railroads purchase over

50,000 TONS

Of Keystone Copper Steel Sheets for use in new car construction during the first twelve weeks of this year?

KEYSTONE
COPPER STEEL

There is but One Answer!

Because Keystone is a *superior* product—it lasts longer, costs less, and minimizes replacements and repairs. If you require maximum service and *rust-resistance*—you need Keystone Copper Steel. Shall we send booklets with the proof?

American Sheet and Tin Plate Company
General Offices: Frick Building, Pittsburgh, Pa.

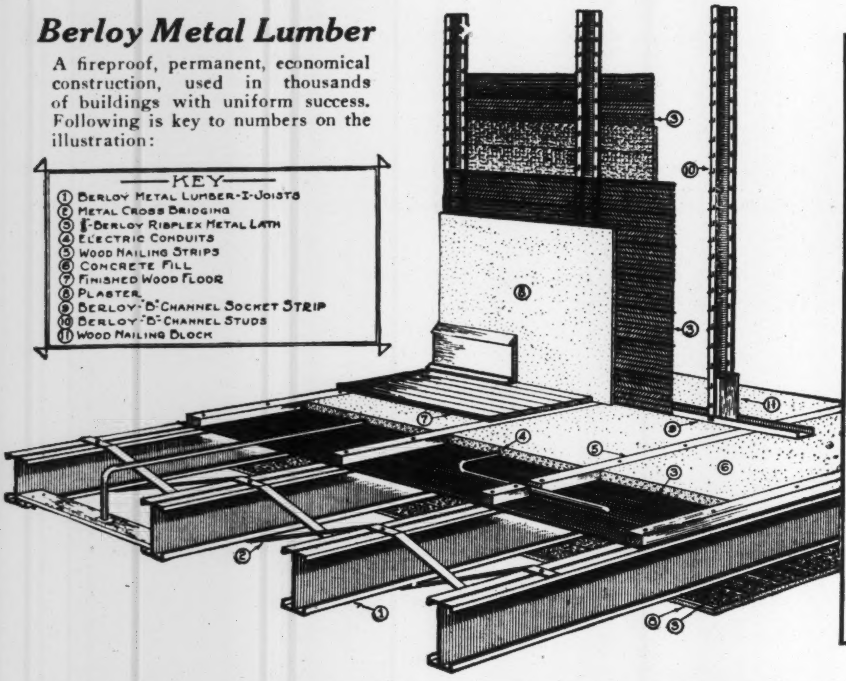
MANUFACTURERS OF
heet and Tin Mill Products for all purposes—Black Sheets, Galvanized Sheets, Tin and Terne Plates, Special Sheets for Stamping
Corrugated and Formed Roofing and Siding Materials, Electrical Sheets
llsville Polished Steel Sheets, Automobile Sheets in all grades, Deep Drawing Sheets, Culvert and Flume Stock, Black Plate, Etc.

Berloy Metal Lumber

A fireproof, permanent, economical construction, used in thousands of buildings with uniform success. Following is key to numbers on the illustration:

KEY

① Berloy Metal Lumber-I-Joists
② Metal Cross Bridging
③ ⅜-Berloy Ribplex Metal Lath
④ Electric Conduits
⑤ Wood Nailing Strips
⑥ Concrete Fill
⑦ Finished Wood Floor
⑧ Plaster
⑨ Berloy-"B"-Channel Socket Strip
⑩ Berloy-"B"-Channel Studs
⑪ Wood Nailing Block



Brick walls are not enough, Furnace walls, too, are made of brick

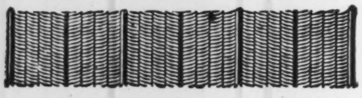
More than ninety fires out of a hundred originate on the interior.

In view of this fact it would seem that far too little attention has been given to making interiors fireproof or at least fire-resistive.

This page tells about fire-safe interior constructions that have been used in thousands of buildings.

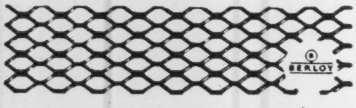
THE WAY TO FIRE SAFETY

Berloy ⅜ in. Ribplex



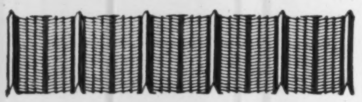
Metal Lath with ribs ⅜-in. high spaced 8-in. on centers. Ideal for all straight away lath work.

Diamond Mesh Lath



Essential for ornamental furring and other formed lath work. Excellent for all lath purposes.

Berloy ¾ in. Ribplex



For work requiring heavier, stiffer reinforcement Ribs are ¾-in. high spaced 4.8-in. on centers.

Our nearest sales office will gladly give you full information on the Berloy line of Metal Laths for use in any form of lath work as well as with Metal Lumber.

Fire losses continue to mount

In spite of propaganda against carelessness. In spite of efficient fire departments. In spite of brick and stucco walls. In spite of metal or other unburnable roofs our fire losses continue to mount.

One building burns to every four built

This is an average, over ten years.
Engineers! Architects! Contractors! Building Owners, why?
Let's face this thing squarely. What is the fundamental weakness?
What should we do to save our buildings?

We must stop providing available fuel

It is not an uncommon thing for a building to be a mass of flame within ten minutes after a fire starts. Fire departments have no chance to save the building. Inmates often fail to escape with their lives.

Most fires originate on the interior

Ninety-six percent of all fires are said to originate inside the building. Carelessness, overheated furnaces, defective wiring, and dozens of other causes of fires cannot be controlled. Fires will continue to start.
Interiors should be made fire resistive by protecting burnable material, or, better still, fireproof throughout.

Ideal fire-safe interior constructions

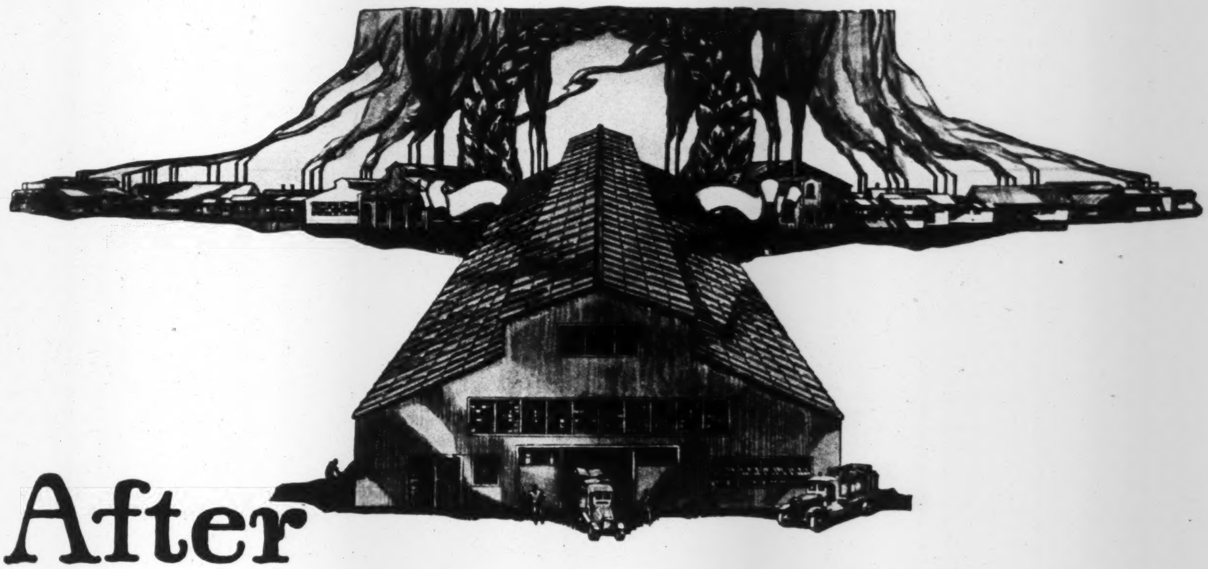
Berloy Metal Lumber provides an economical fireproof interior construction. The Underwriters' Laboratories have given an official rating of one hour to wood frame partitions and ceilings protected by plaster on Metal Lath. Our nearest office will gladly give you full information on these materials. Ask for Metal Lumber Bulletin L-24 or Lath Folder F-24.

THE BERGER MFG. CO.

Canton, O., Boston, New York, Philadelphia, Chicago, St. Louis, Kansas City, Minneapolis, San Francisco, Los Angeles, Dallas, Roanoke, Jacksonville
Export Department: 512 W. 25th Street, New York, N. Y., U. S. A.

BERLOY

METAL LUMBER—RIBPLEX—METAL LATH



After exhaustive investigation, delving for facts on roofings and keeping close record of "Cementile" installations, we arrive at the following conclusion:

CEMENTILE
The Roof Everlasting

is not only the ideal roof for all buildings with steel roof supports, but according to investigations, is absolutely the best roof. Ask us to prove the last statement. Use the coupon below.

American Cement Tile Mfg. Co.
829 Oliver Building, Pittsburgh, Pa.
PLANTS: Wampum, Pa. - Lincoln, N. J. - Birmingham, Ala.
OFFICES: Pittsburgh - New York - Philadelphia - Atlanta - Birmingham

"I'm from Missouri"
"Show Me"

Company .... Individual ....
Address ....
City ....
State ....

RAIL STEEL
REAL STRENGTH

Rail Steel and Building Authorities

'THE BROWN HOTEL, LOUISVILLE, KY.
W. J. Knight & Co., Engineers
Preston J. Bradshaw, Architect
McCormack-Combs Const. Co., Contractors

Municipal building codes have been devised solely for the purpose of public safety. Their specifications define the best accepted economic practice based on years of experience in the use of building materials.

Our principal cities where the largest buildings are being erected and where the utmost care must consequently be exercised have shown their confidence and taken the lead in including Rail Steel Bars in their specifications.

The following is a partial list of these cities, which gives conclusive proof of the dependability of Rail Steel Bars, rolled by mills of the Rail Steel Products Association.

List of Principal Cities

Akron, O.
Atlanta, Ga.
Boston, Mass.
Cambridge, Mass.
Chicago, Ill.
Charleston, S. C.
Cincinnati, O.
Cleveland, O.
Columbus, O.
Dallas, Tex.
Denver, Colo.
Des Moines, Ia.
Fort Worth, Tex.
Grand Rapids, Mich.
Hartford, Conn.
Hamilton, Canada
Indianapolis, Ind.
Jacksonville, Fla.
Kansas City, Mo.
Kitchener, Canada
Los Angeles, Cal.
Louisville, Ky.
Lowell, Mass.
Memphis, Tenn.
Milwaukee, Wis.
Mobile, Ala.
Montreal, Canada
Newark, N. J.
New York, N. Y.
Orange, N. J.
Pittsburgh, Pa.
Portland, Me.
Portland, Ore.
Providence, R. I.
San Francisco, Cal.
Schenectady, N. Y.
Scranton, Pa.
Spokane, Wash.
Springfield, O.
St. Louis, Mo.
St. Paul, Minn.
Syracuse, N. Y.
Toronto, Canada
Utica, N. Y.
Winnipeg, Canada
Windsor, Canada
Worcester, Mass.

Send for this Valuable Book—Free

The first and only authoritative and comprehensive treatise on concrete reinforcing bars and containing most important information on the manufacture, qualities and use of Rail Steel Bars. The cost of this booklet makes it necessary for us to control its distribution and we ask that your request for copy be sent us on the letterhead of an architectural or engineering firm. Address the nearest office, Dept. A.

The Rail Steel Products Association was organized to continue and further promote the high quality standard of Rail Steel, established after many years of co-operative research work by the metallurgists of the individual rolling mills who are now members of this Association.

Specify your reinforcing steel to meet A.S.T.M. Specification A-16-14 or equal.

RAIL STEEL PRODUCTS ASSOCIATION

(Reinforcing Bar Division)

Buffalo Steel Co.
Tonawanda, N. Y.

Calumet Steel Co.
Chicago, Ill.

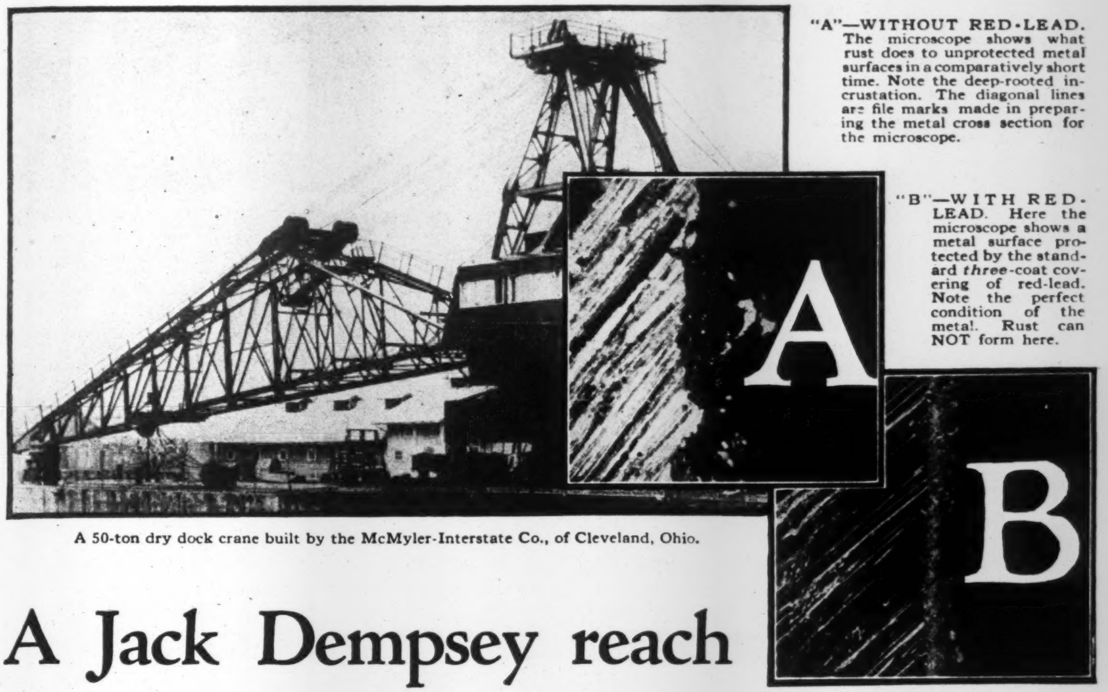
Laclede Steel Co.
St. Louis, Mo.

Burlington Steel Co.
Hamilton, Can.

Franklin Steel Works
Franklin, Pa.

The Pollak Steel Co.
Cincinnati, O.

RAIL STEEL *for* REINFORCING



"A"—WITHOUT RED-LEAD. The microscope shows what rust does to unprotected metal surfaces in a comparatively short time. Note the deep-rooted incrustation. The diagonal lines are file marks made in preparing the metal cross section for the microscope.

"B"—WITH RED-LEAD. Here the microscope shows a metal surface protected by the standard *three*-coat covering of red-lead. Note the perfect condition of the metal. Rust can NOT form here.

A 50-ton dry dock crane built by the McMyler-Interstate Co., of Cleveland, Ohio.

A Jack Dempsey reach but just a thin red film for defense

THE wheel base of this crane is only 22 feet. The overturning moment imposed by the loads at extreme radii is exceptionally large, yet it handles these loads with ease and safety—

Main Hoist, 50 tons at 90 ft., 6 in. radius
Auxiliary Hoist, 15 tons at 129 ft., 6 in. radius
Whip Hoist, 5 tons at 133 ft. radius

In designing this crane the engineering problem was complicated by the large overturning moment and also by the extraordinary wheel loads. The load is distributed over 32 wheels and is equalized by a system of equalizer beams, so that the loads on the wheels supporting one corner of the crane are uniform

Every square inch of metal on such important and costly equipment must surely be protected from rust. Red-lead may provide *only a thin red film for defense,* but the thin red film is adequate. Metal surfaces coated with pure red-lead are safe from rust. Dutch Boy red-lead is *pure* red-lead.

Save the surface and you save all

Mixed with pure linseed oil, Dutch Boy red-lead makes a paint that cannot be surpassed as a rust preventive. It spreads smoothly and uniformly and has unusual covering power. It sticks tight to clean metal. It dries to a hard, yet elastic, coating which expands and contracts without cracking. It gives *full* and *economical* protection to the metal surfaces it covers.

Dutch Boy red-lead is obtainable in both paste and liquid form. The *liquid* comes in the natural red-lead color and also in light and dark green, light and dark brown and black finishing coats. The *paste* comes in the natural color only, but can be shaded to browns, greens and blacks.

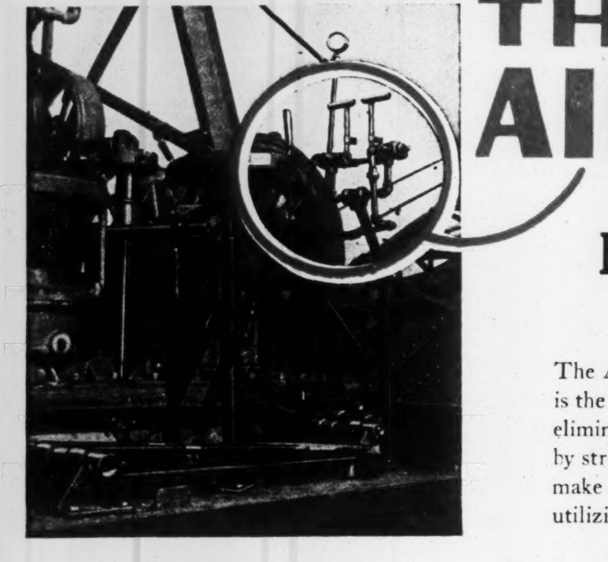
NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State St.; Buffalo, 116 Oak Street; Chicago, 900 West 18th St.; Cincinnati, 659 Freeman Ave.; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut St.; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co. of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

Dutch Boy Red-Lead

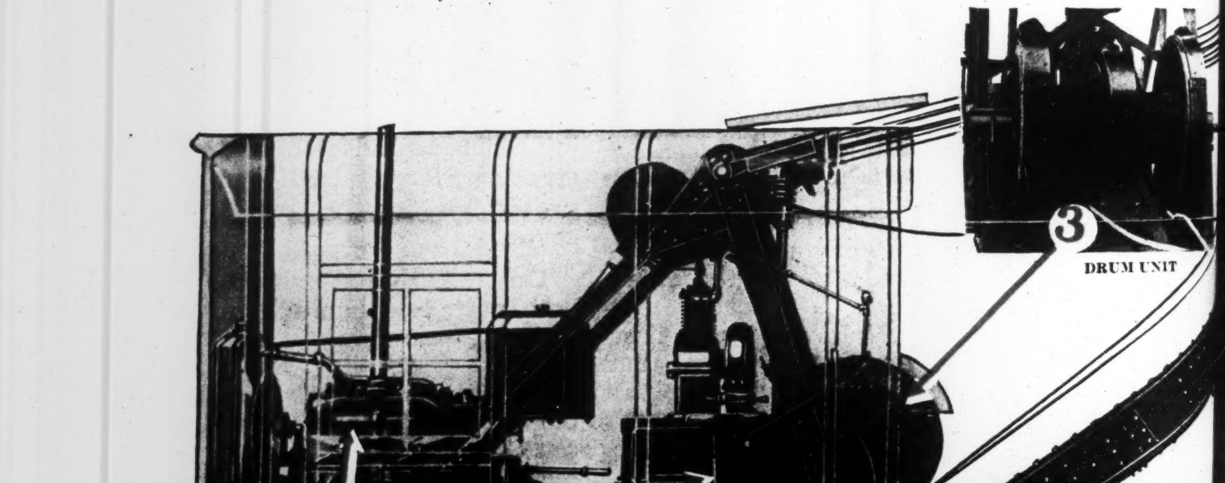
AUSTIN

THREE LEVER
AIR CONTROL



Direct Air Control for Drum Clutches

The Austin Air Control promotes efficient, speedy operation. It is the simplest form of control ever used for clutches, due to the elimination of toggles, fingers, etc. The clutches are operated by straight air, giving instant contact or release. These clutches make contact over the entire 360 degrees of clutch surface—thus utilizing the full power applied.

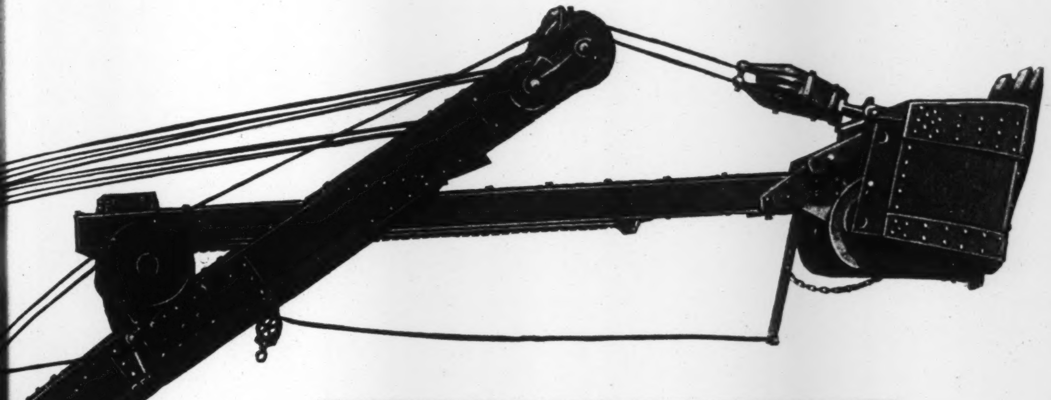


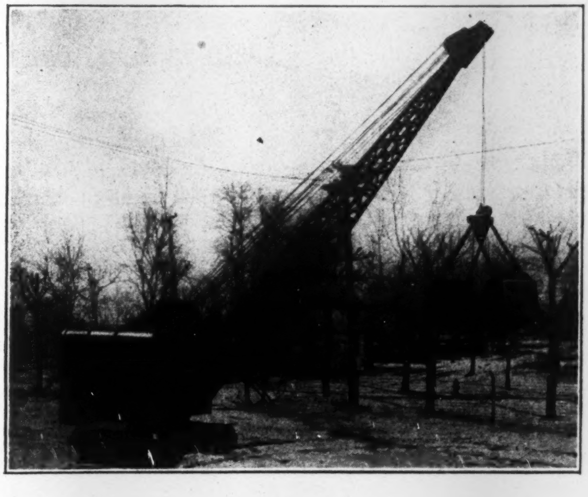
SIMPLEX SHOVEL

Speed with endurance is what you get when you purchase an Austin Simplex Shovel. It is speed that completes the job with a showing of profit. Endurance maintains the profit on every job over a long period. The simplicity of design reduces the number of wearing parts adding to the life of the unit in many ways. Heavy individual parts increase the strength of the machine—making a more rigid construction.

Rigid construction reduces the upkeep cost and insures low cost of operation.

Complete details given on request for folder DL 103-S





CONVERTIBLE

And the Simplex is designed for use as a Crane or Clamshell. Only a change of booms and re-reeve of cables is necessary. Buy a machine that you can keep profitably employed at all times—the Austin Simplex.

AUSTIN MACHINERY CORPORATION

3503 Dorr Street TOLEDO, OHIO

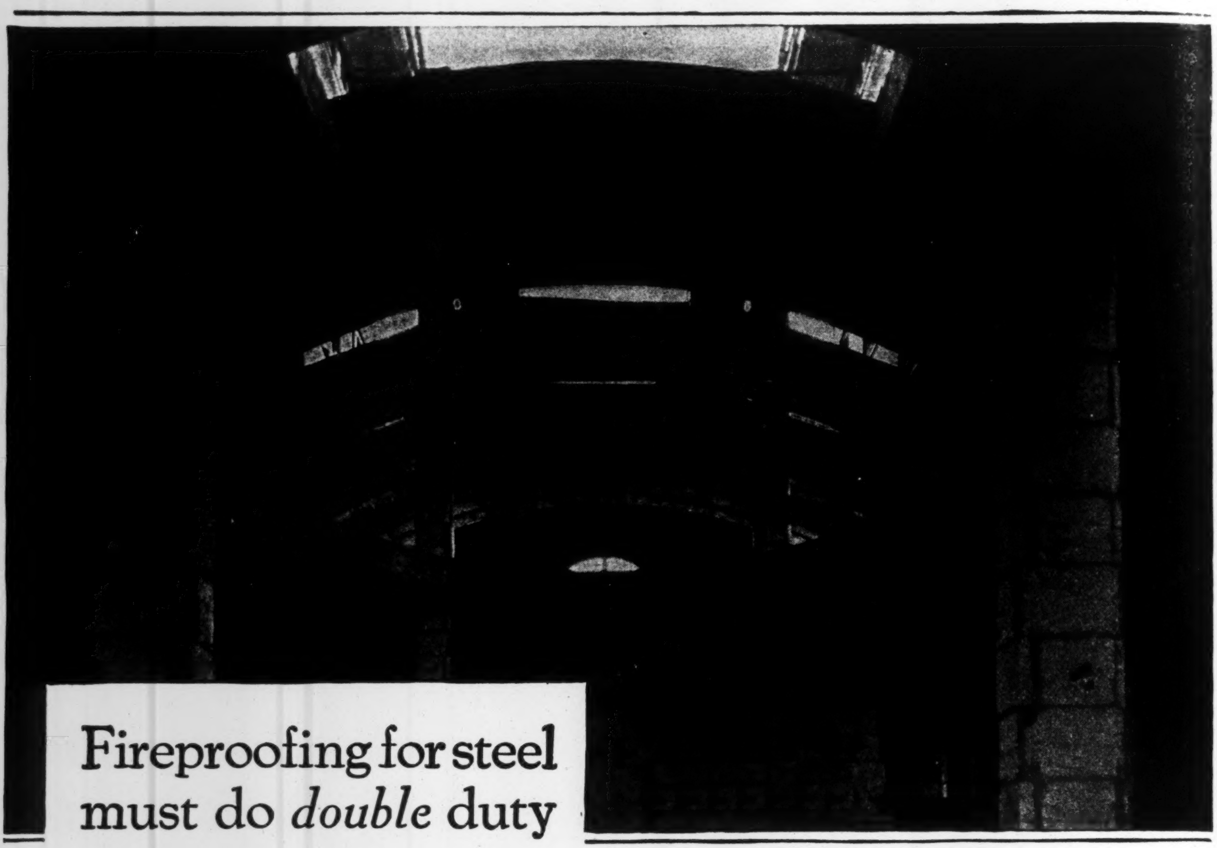
DISTRICT OFFICES—NEW YORK, CHICAGO, ATLANTA, GA, KANSAS CITY, MO.
Distributors in Most Large Cities in the U. S. A. and at Woodstock, Ont., Canada

Austin Machinery Corporation, Toledo, Ohio.
Please send to my address complete information covering the Austin Shovel-Crane. DL-103-4.

Name ....

Concern ....

Address ....



Fireproofing for steel must do *double* duty

A dependable fireproofing material for beams, columns and girders must do more than resist fire. It must *insulate* the steel so that its temperature will never exceed 500° F., the point at which steel begins to lose strength.

Pyrobar Gypsum Tile meet both requirements. Incombustible, they also bar heat travel, and when exposed to intense heat a slow calcination allows only 5 per cent of the heat to reach the steel. They protect against steel failure in most fires.

Pyrobar Tile come in uniform square-edge units. They are easily fitted to beams, columns and girders and consequently cost less in place than less protective materials. Write for booklet describing different types of Pyrobar covering and showing erection details.

UNITED STATES GYPSUM COMPANY
World's Largest Producers of Gypsum Products
General Offices:
Dept. J, 205 West Monroe Street, Chicago, Illinois

PYROBAR

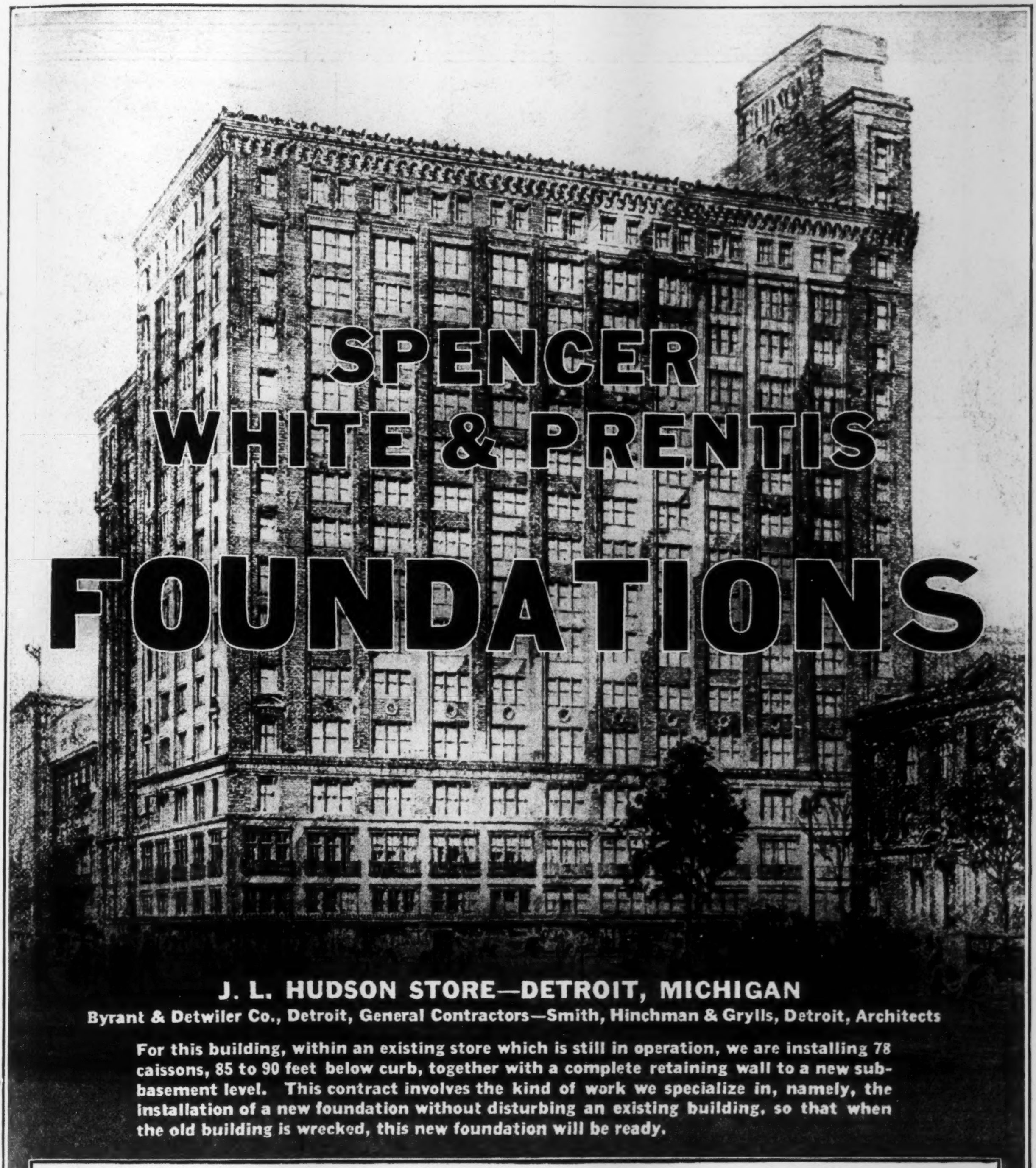
GYPSUM TILE

for

Beams, Columns, Girders

New Edwards Hotel, Jackson, Mississippi. Architect: W. T. Nolan. 26,000 lineal feet Pyrobar Beam and Column Covering used

USG



J. L. HUDSON STORE—DETROIT, MICHIGAN

Byrant & Detwiler Co., Detroit, General Contractors—Smith, Hinchman & Grylls, Detroit, Architects

For this building, within an existing store which is still in operation, we are installing 78 caissons, 85 to 90 feet below curb, together with a complete retaining wall to a new sub-basement level. This contract involves the kind of work we specialize in, namely, the installation of a new foundation without disturbing an existing building, so that when the old building is wrecked, this new foundation will be ready.

THE SPENCER, WHITE & PRENTIS COMPANY

1501 EUCLID AVENUE, CLEVELAND, OHIO
1200 WASHINGTON BLVD., DETROIT, MICH.

SPENCER, WHITE & PRENTIS INCORPORATED

100 WEST 41st STREET
NEW YORK CITY

TUBA STEEL FOUNDATIONS
PRETEST FOUNDATIONS PAT. JUNE 12, 1917
PRETEST UNDERPINNING PAT. FEB. 20, 1917
PILES—SHAFTS—TUNNELS—STEEL AND CONCRETE CONSTRUCTION

CARNEY

for Brick and Tile Mortar

Makes Four Cubic Feet of Smooth Mortar to Every Sack

Carney Has These Exclusive Merits:

IT can be used directly after mixing or left in the box over night. There is no waste to Carney. It requires no lime which saves time and labor in mixing. It prevents loss and waste through carelessness. Each sack (cloth or paper) contains one cubic foot. It has a four parts sand carrying capacity which means four cubic feet of smooth mortar to one sack cement. It lays the maximum number of brick. Being more plastic and smoother working, the mason can work faster and easier on the wall. It does not harden in the box. It can be used immediately after mixing and does not require soaking. It works perfectly in cold weather. It is ideal for all wall-bearing buildings. It becomes harder than the brick and tile it binds, continuing to harden indefinitely. It sets a creamy white, contrasting beautifully with brick and tile. Contractors bid lower, do better work and make more profit with Carney. The final cost of a Carney wall is always lower.

Carney is the perfected cement for brick and tile mortar.

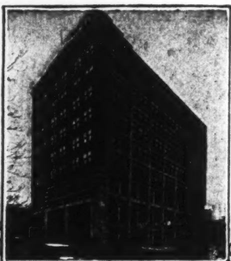
The Carney Company
Cement Makers Since 1883
Mankato, Minn.

Mills: Mankato, Minn., Carney, Minn.

District Sales Offices:
Leader-News Building, Cleveland; Chamber of Commerce Building, Chicago; Omaha National Bank Building, Omaha; Syndicate Trust Building, St. Louis; Book Building, Detroit; Builders' Exchange, Minneapolis.

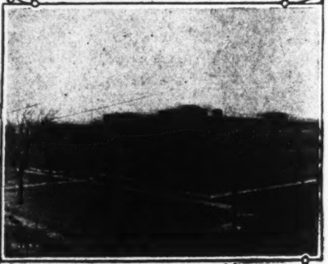
Specifications: **1 part Carney to 4 parts sand.**

SOUTHERN RY. BLDG., Cincinnati, Ohio
Architect, Samuel S. Godley
Contractor, Ferro Concrete Constr. Co.



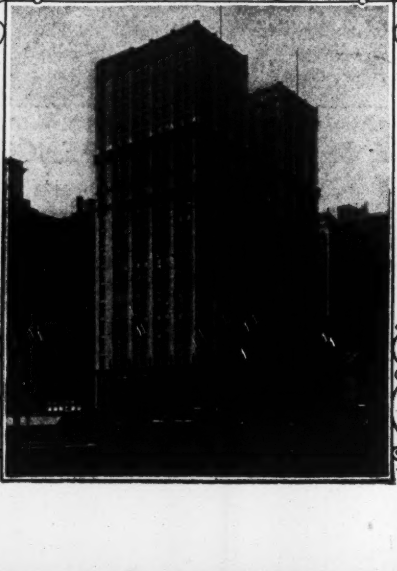
POLK DIRECTORY BLDG., Detroit, Mich.
Architect, Richard H. Marr
Contractor, Martin & Krausmann Co.

STANDARD OIL CO. COMMUNITY HOUSE, Whiting, Ind.
Architect, Shattuck & Layer
Contractor, Great Lakes Constr. Co.

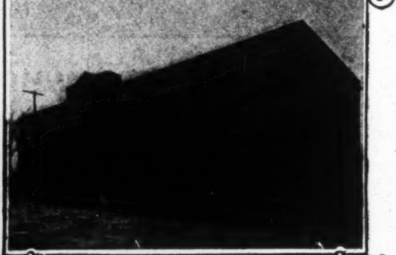


ROOSEVELT SCHOOL, St. Paul, Minn.
Architect, F. X. Tewes
Contractor, Gauger-Korsmo Constr. Co.

PEOPLE'S TRUST & SAVINGS BANK BLDG., Chicago, Ill.
Architect, Jarvis Hunt
Contractor, J. B. French

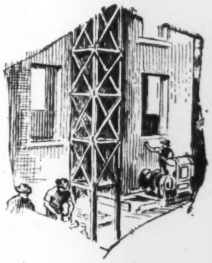


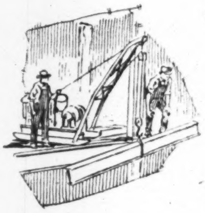
CONSOLIDATED HIGH SCHOOL, Shelby, Ia.
Architect, Jno. Latenser & Sons
Contractor, Jno. E. Wakefield Company

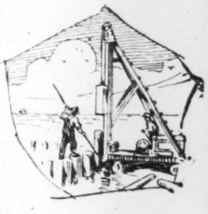


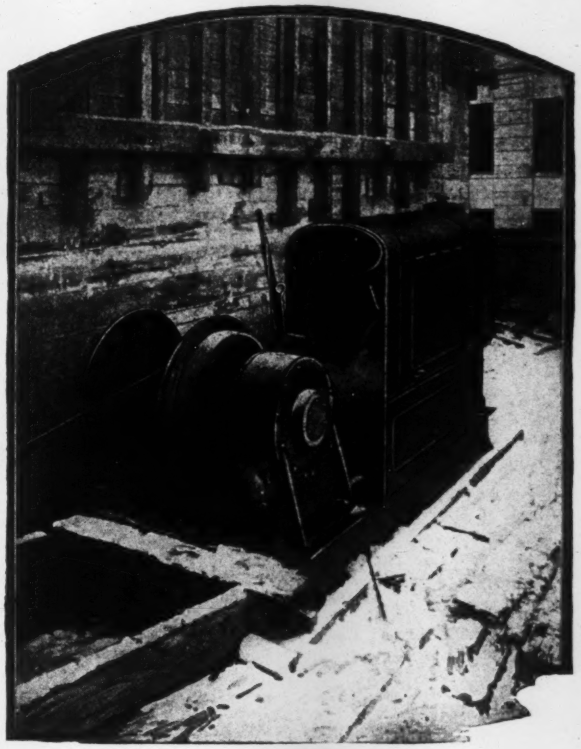
MCKINLEY SCHOOL, W. Park, Ohio
Architect, Fulton, Taylor & Cahill
Contractor, Chas. Peterson Co.

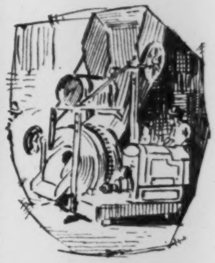
Another OTIS Labor-Saver

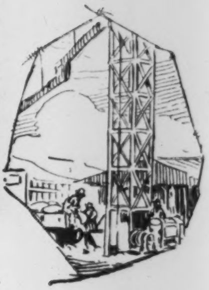












A Husky Gasoline Hoist For All Around Work

Capacity—3500 lbs. on a single line at 150 ft. per min.

(Average speed for full drum)

1 speed faster up to 500 ft.—1 speed slower down to 20 ft. per min.

Note These Revolutionary Advantages:

Flexible as a steam hoist—speedy as an electric, with full 25 horsepower, available at exact line speed required.

100% safety assured by single lever control. Load cannot be dropped accidentally.

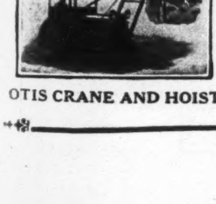
Serviced at 20,000 Fordson Service Stations.

Side Power Take-off to drive other equipment essential to most contracting jobs, full horsepower available.

Heavy Worm Drive and Gearing on Ball Bearings, enclosed in Oil Bath, guarantees constant service.

Heat-treated Alloy Steel throughout.

Write today for illustrated booklet containing full details about this remarkable hoist, and showing how it may be adapted with ease to a variety of "difficult" jobs.



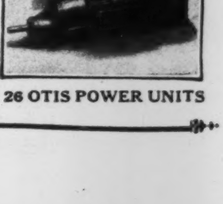
OTIS CRANE AND HOIST

OTIS ENGINE CORPORATION

"Haulage, Hoisting and Power Units for Every Job."

247 Park Avenue, New York City

TELL US YOUR PROBLEM



26 OTIS POWER UNITS

TELSMITH IS *STEEL*—

GUARANTEED AGAINST BREAKAGE BY TRAMP IRON

"Oho," sings the hammer-head as he slips into the crusher! "Just see what I'm going to do to this chap! I'll bend his shaft and I'll crack his frame! What I don't break, the scrap man will buy cheap." But, unfortunately for Mr. Hammer-head, that particular machine is a modern Telsmith Crusher of the 1923-1924 crop, with ***steel*** frame, ***steel*** crown and ***rigid*** shaft, all guaranteed against breakage by tramp iron. Too bad! The pleasant little plot falls flat. Telsmith just squeezes and chews the foxy hammer beyond recognition. After a short but decisive engagement, that hunk of steel is glad to escape onto the conveyor and beat it for the bins.

But, if the crusher is iron instead of steel — an ordinary breaker instead of a Telsmith — the tale is then quite a bit different. Picture a frantic master mechanic — a rush message for a new frame — anxious days of waiting and then strenuous hours of night work, putting the old wreck back into shape again.

You take your pick of these situations when you buy a crusher. Buy a Telsmith and you have "crusher insurance"— otherwise you carry your own risk. Better look into it. Glad to send you catalog No. 155 (Telsmith Primary Breaker) and bulletin No. 2-F-2 (Telsmith Reduction Crusher).

SMITH ENGINEERING WORKS
3198 Locust Street, Milwaukee, Wisc.
Canadian Representatives: Canadian Ingersoll-Rand Co., Montreal, P. Q.

Old Colony Bldg.
Chicago, Ill.
50 Church St.
New York City
816 Otis Bldg.
Philadelphia, Pa.
110 W. Park Way, N. S.
Pittsburgh, Pa.

325 W. Main St.
Louisville, Ky.
141 N. Front St.
Columbus, O.
2540 University Ave.
St. Paul, Minn.
Franklin and Channing Aves.
St. Louis, Mo.

Bunting Hardware Co.
Kansas City, Mo.
J. W. Bartholow Co.
Dallas, Tex.
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Salt Lake Hdw. Co.
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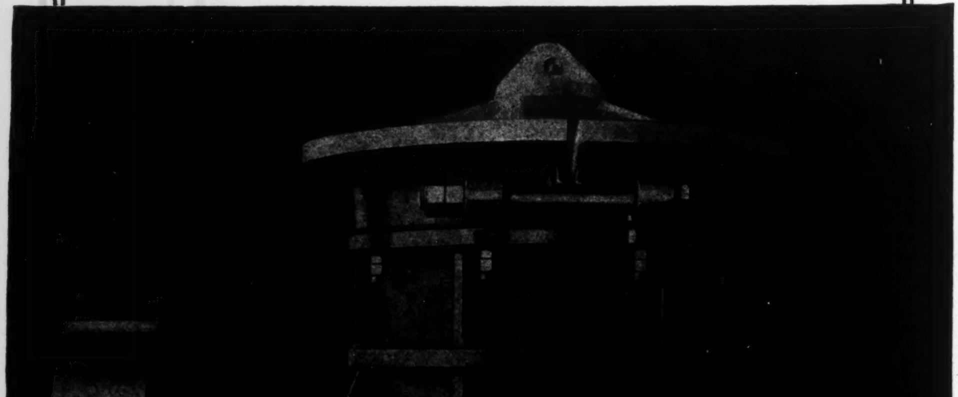
Brown, Bevis Co.
Los Angeles, Calif.
Road Builders Eq. Co.
Portland, Ore.



Nine Years' Service Demonstrates the Value of P & H Construction

The Mierswa Construction Co. of Oshkosh, Wis., have used a P & H Trench Excavator since 1916. Nine years' experience has well demonstrated the lasting worth and economy of P & H design and quality construction.

To take care of increased business an additional Trencher was needed this year.

The fact that another P & H was purchased, again emphasizes the point that the best test of an excavator is actual field performance over an extended period.

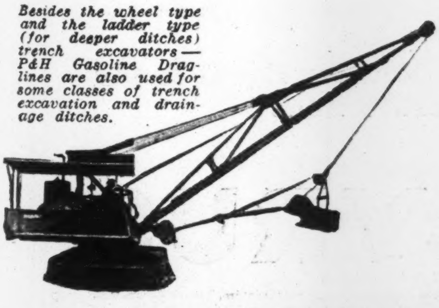
And the aggregate experience of these many years of service of hundreds of P & H Machines,—is built into the P & H you buy today.

The largest plant in the country devoted to the manufacture of gasoline excavating machinery insures prompt delivery. Bulletins on Trenchers (18-X) or on Shovels, Draglines, mailed on request.

CORDUROY

Follow the Corduroy Trail —the "Tread" Mark of the P&H

Besides the wheel type and the ladder type (for deeper ditches) trench excavators — P&H Gasoline Draglines are also used for some classes of trench excavation and drainage ditches.



Excavating Machinery Division

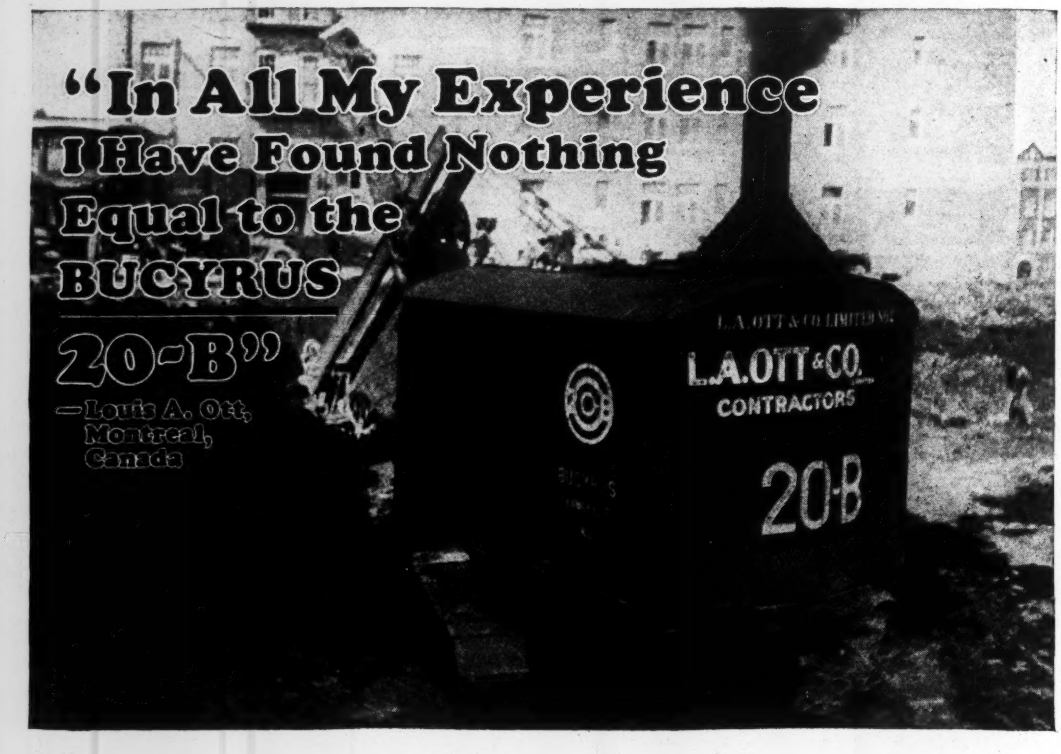
Pawling & Harnischfeger Co.

Established in 1884

3804 National Avenue, Milwaukee, Wis.

New York San Francisco Memphis	Chicago Portland Dallas Detroit	Pittsburgh Seattle Atlanta	Philadelphia Los Angeles St. Louis Kansas City

P&H TRENCH EXCAVATORS


"In All My Experience
I Have Found Nothing
Equal to the
BUCYRUS
20-B"
—Louis A. Ott,
Montreal,
Canada
L. A. OTT & CO. LIMITED
L.A. OTT & CO.
CONTRACTORS
BUCYRUS
20-B

Louis A. Ott of Montreal began his career operating a steam shovel on the Chicago Drainage Canal in 1894.

With this great project the history of the modern steam shovel began.

It was there that the world first learned what steam shovels could do in rock.

It was then that the foundation of Mr. Ott's long experience was laid.

He has learned about shovels in the hard school of experience.

He now enjoys the esteem, won through success, as a first ranker among Canadian contractors.

He has owned or operated nearly every make of shovel, but he now stakes his reputation on Bucyrus — four of them — this is why he says:

"I Have Found Nothing Equal to the BUCYRUS 20-B"

Send for these Bulletins:

20-B — ¾-yard.
- Steam C-201-N
- Diesel B-201-N
- Gasoline F-201-N

30-B — 1-yard.
- Steam C-304-N
- Diesel and Gas.F-302-N

**Also as Draglines, Cranes, etc.
Steam, Diesel, Electric
or Gasoline.**

586

BUCYRUS

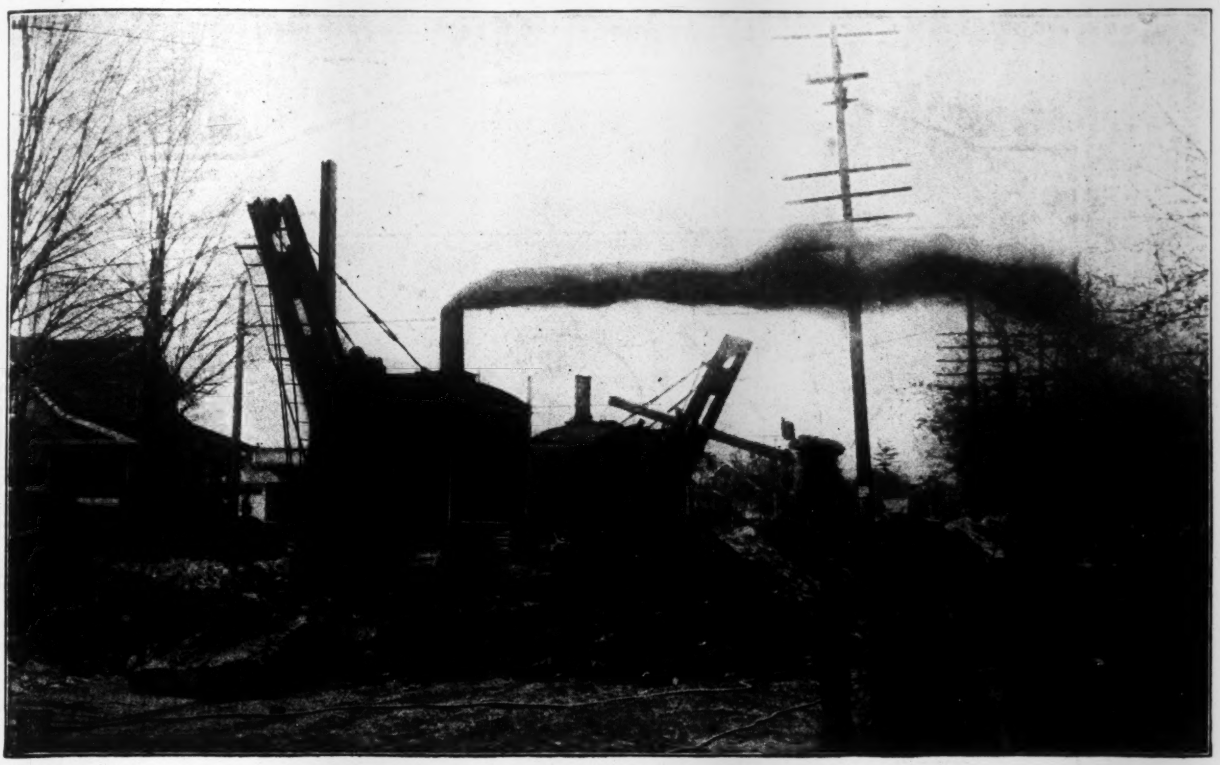
Established in 1880

Railroad Type and Revolving Shovels of All Sizes, Dragline Excavators, Trench Excavators, Dipper, Hydraulic and Placer Dredges, Spreader Plows, Wrecking Cranes, Etc.

Bucyrus Company, South Milwaukee, Wis.

New York Chicago Birmingham San Francisco Portland Denver Tokyo London

Special Plant at Evansville, Ind., Devoted Exclusively to SMALL REVOLVING SHOVELS



Team Work

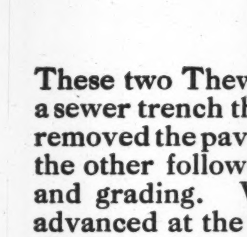
These two Thews made quick work of a sewer trench through solid rock. One removed the pavement and overburden, the other followed in the rock digging and grading. Working together they advanced at the rate of 60 feet per day digging a 6 foot wide by 15 foot deep trench. And the shovels are only ¾ yard Type O Thews at that.

They are owned by K. P. McMahon and Gantose Construction Company, of Cleveland. The one on the follow up, owned by Gantose, not only shovels but digs the rock with the aid of an occasional pot shot to start it.

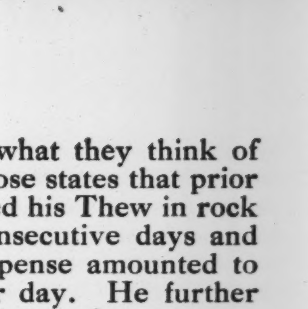
Ask either owner what they think of Thews. Mr. Gantose states that prior to this job he worked his Thew in rock digging for 300 consecutive days and his total repair expense amounted to less than 4 cents per day. He further states, "That shovel doesn't owe me a cent. It's as good as new yet, but I could scrap it right now and figure that I had more than my money's worth."

That is how owners everywhere talk about their Thews—Isn't that how you want to talk? You will if you use a Thew.

THE THEW SHOVEL COMPANY, LORAIN, OHIO



Thew
Power Shovels



In Forty States and Every Province

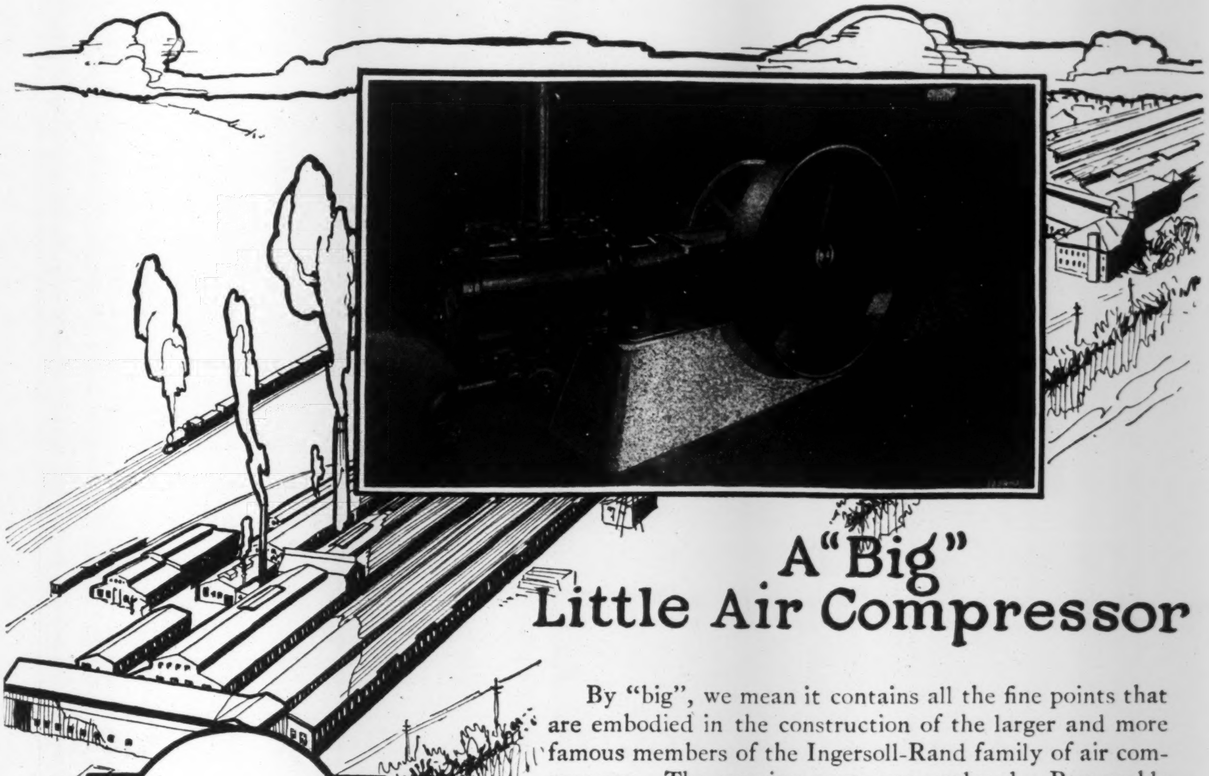
WE have built and installed pipe in forty of the forty-eight states of the Union and in every one of the provinces of Canada.

In practically every instance, this has meant that we have manufactured at the spot, necessitating that we have faced nearly every type of local condition as regards materials, transportation, labor, topography and climate. We have operated in Canada on the North and Florida on the South; in Washington on the West and Virginia on the East; and in Colorado in the middle.

Such wide experience is of vital importance when it is a matter of pipe which is to be permanent — to function thirty, sixty, a hundred years.

LOCK JOINT PIPE CO., 9 Rutledge Ave., Ampere, N. J.

LOCK JOINT
Reinforced
Concrete Pipe



A "Big" Little Air Compressor

By "big", we mean it contains all the fine points that are embodied in the construction of the larger and more famous members of the Ingersoll-Rand family of air compressors. The running parts are enclosed. Removable covers afford instant access for inspection. Running parts and main bearings are lubricated by an automatic flood system. The inlet and discharge valves are of the Ingersoll-Rand plate type, with large valve area and noiseless in operation. Reliable regulators automatically load and unload compressor.

These Small Air Compressors are built in two classes, —Class "ER" (belt driven) as shown above, and Class "FR" (steam driven). Both are straight line, single stage units.

Every I-R Branch Office and Service Station has competent engineers who will gladly co-operate with you in selecting compressor equipment that will prove the most economical for your requirements.

—for

Pneumatic Drilling, Grinding, Chipping and Riveting; Air Hoists; Car and Locomotive Repair Shops; Foundries; Forges for Heating Rivets; Paint Sprays, Etc.

Let us send you bulletin No. 3050. It is new.

INGERSOLL-RAND COMPANY
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Offices in All Principal Domestic and Foreign Cities
For Canada refer Canadian Ingersoll-Rand Co., Limited
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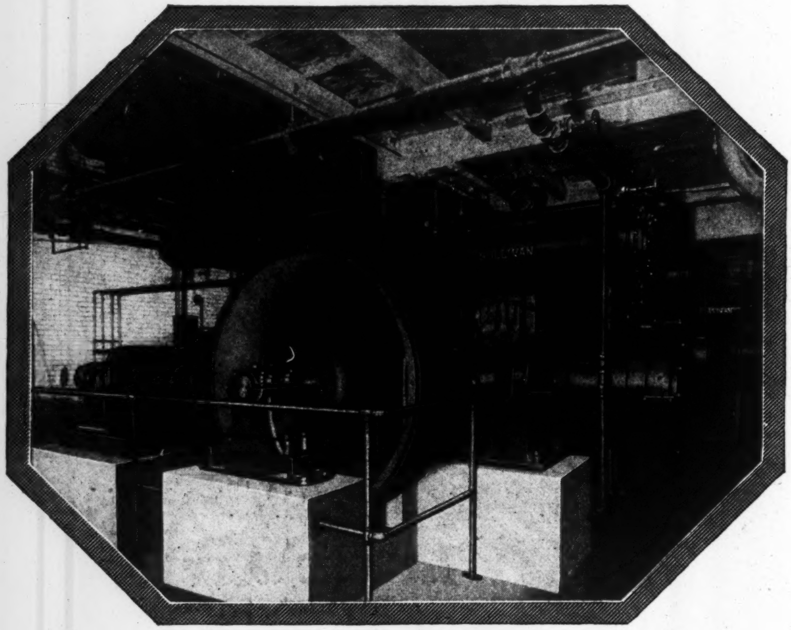
Ingersoll-Rand



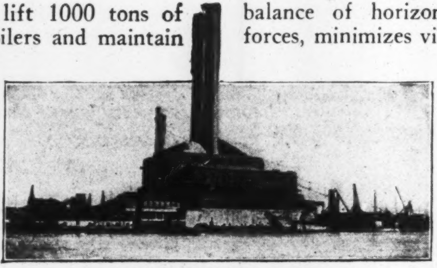
Compressed Air Transports Powdered Coal at Cahokia Station

COMPRESSED Air Transport is the novel method employed at the Cahokia Station of the Union Electric Light & Power Co., East St. Louis, Illinois (McClellan & Junkersfeld, Inc., Engineers and Constructors), for elevating the powdered coal to the overhead bunkers above the boilers. From that point the coal is delivered to the feeders by gravity and blown into the furnaces.

The total lift is 160 feet.

Some conveying problem to lift 1000 tons of coal a day for eight 1800-hp. boilers and maintain a steady and adequate supply.

The problem was solved by the engineers by using compressed air at 100 lbs. pressure. For this purpose they installed **3 Sullivan Angle Compound Compressors,** size 20-12x14, short belt connected to motors. One unit is maintained as a standby in case of emergency.



Cahokia Power Station

Angle Compounds are noted for their ability to render year-in-year-out continuous service. Equipped with "wafer" air valves, force feed plus gravity lubrication, and Sullivan automatic load control, they require the minimum of attention and care, and practically take care of themselves over long periods.

The angle compound design, with its accurate balance of horizontal and vertical reciprocating forces, minimizes vibration, reduces wear, and holds down power input per 100 cu. ft. of free air to a remarkably low point.

Angle compounds are built in single units from 400 to 1,700 cu.ft. capacity; in twin units to 2,700 cu.ft. for belt drive or direct motor connection.

Ask for new Catalog No. 477H

DOMESTIC SALES OFFICES

Birmingham, Boston, Butte, Claremont, N. H., Cleveland, Dallas, Denver, Duluth, El Paso, Huntington, W. Va., Joplin, Juneau, Knoxville, New York, Pittsburgh, St. Louis, Salt Lake, San Francisco Spokane.

COMPRESSORS AID LIFT DIAMOND DRILLS SHARPENERS FORGES FORGE HAMMERS COAL CUTTERS ROCK DRILLS DRILLING CONTRACTORS

SULLIVAN
TRADE MARK
MACHINERY COMPANY
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GOLDEN-ANDERSON

Patent Automatic Cushioned Controlling Float Valves

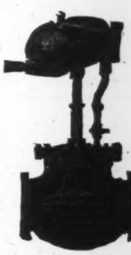
They carry a constant water level in feed water heaters by perfectly controlling the flow of makeup water.

Operated by protected enclosed copper float.

Cushioned by both air and water.

Operate without hammering, sticking or chattering. No metal-to-metal seats. Made angle or straightway.

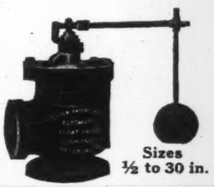
Sizes 1 in. to 30 in.



GOLDEN-ANDERSON
Pat. Automatic Cushioned Water Float Valves

1. Automatically Maintain Uniform Water Levels in Tanks, Standpipes, etc.
2. Instantly Adjusted to Operate Quickly or Slowly.
3. Floats Swivel to any Angle—Most Satisfactory Float Valves Known.
4. No Metal-to-Metal Seats — No Water, Hammer or Shock.
5. Cushioned by Water and Air.

Sizes ½ to 30 in.



GOLDEN-ANDERSON
Pat. Automatic Double Cushioned Check Valves

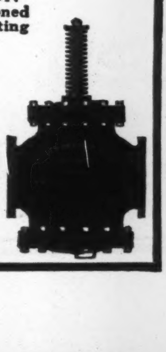
1. Especially adapted for Water Service.
2. For High or Low Pressure.
3. Thoroughly Cushioned, No chattering, Hammering, or Sticking.
4. Globe or Angle Patterns up to 30 in.
5. Especially adapted for hydraulic elevator service.

GOLDEN-ANDERSON
Pat. Cushioned Water Relief Valves

1. Automatically relieve excess pressure.
2. Prevent stress, strain and bursting of mains.
3. Correct mechanical construction.
4. Perfect air and water cushioning.
5. No metal-to-metal seats. No hammering or shocks.
6. Angle and globe pattern. Sizes 3 to 30 in.

GOLDEN-ANDERSON
Pat. Automatic Cushioned Water Pressure Regulating Valves

1. Maintain a constant reduced pressure regardless of fluctuations on high pressure side.
2. Perfectly Cushioned by water and air. No metal-to-metal seats.
3. The best valve made for maintaining a constant low pressure where consumption is continuous.
4. Operates quickly or slowly as required—No attention necessary.
5. Positively no hammering or sticking. Sizes to 24 in.



For even pressure throughout the entire system—

Golden-Anderson

Patent Automatic *"Cushioned"* Controlling Altitude Valves

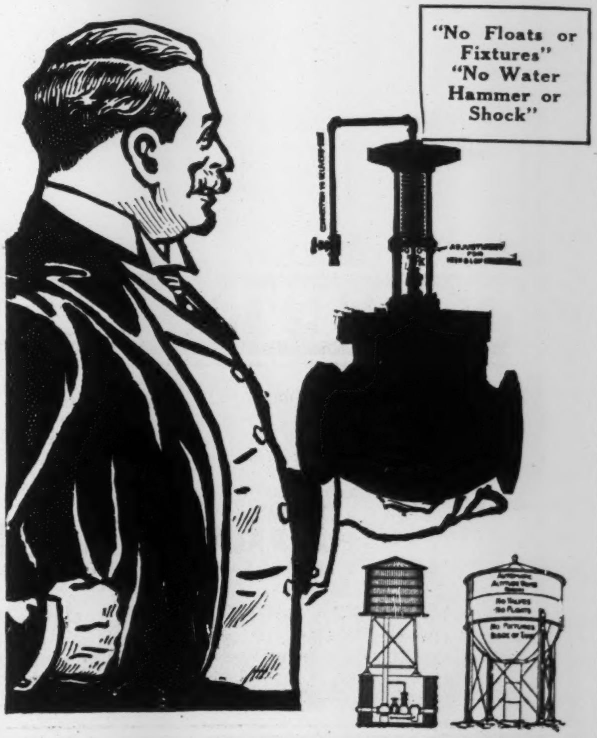
These five features are GUARANTEED

1. They keep the water level constant in reservoirs, standpipes, tanks, etc., under all conditions.
2. Very simple in design. Contain no floats or fixtures inside or outside of tanks.
3. A perfect cushion by water and air absolutely prevents water hammer, surges and broken mains. No metal-to-metal seats.
4. Can be closed in three ways, by hand, or automatically by water if a pipe breaks and by electricity from distant points.
5. When desired can be connected to work "both ways" on a single pipe line.

"Made with Stop-Starter Attachment for Centrifugal Pumps."

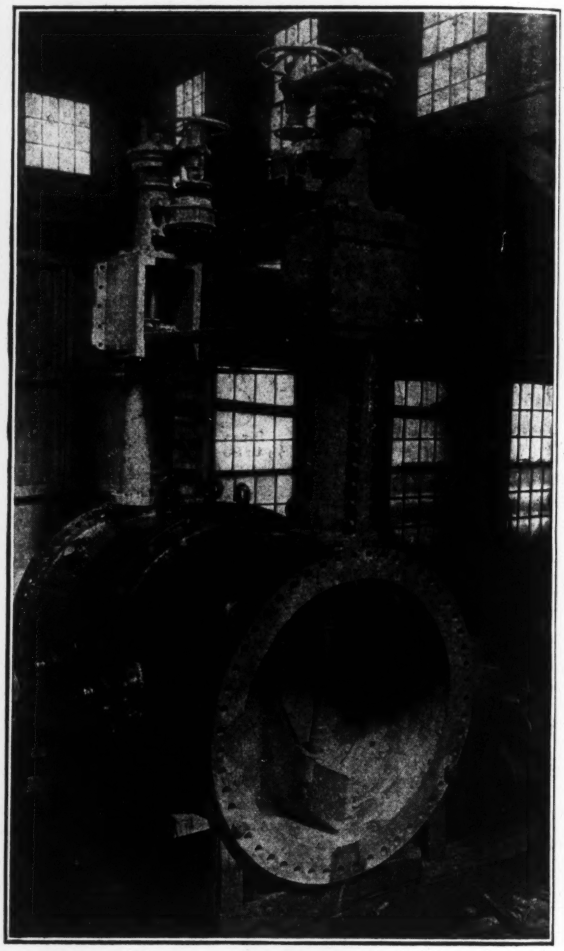
Full details on request. Write us.

Golden-Anderson Valve Specialty Co.,
1202 Fulton Bldg., Pittsburgh, Pa.



"One of the famous Coffin Products"

Investigate Dow Disc-Arm Pivot Valves



These are our new type butterfly valves, with arm on the disc. Tests show them practically as tight as gate valves. For free discharge under 110 ft. head. Velocity thru valves 85 ft. per second. The photograph shows two of these valves bolted together for testing.

Not long ago we shipped six 72-inch, electrically operated, Dow Disc-Arm Pivot Valves for the United Hudson Electric Corporation, Sturgeon Pool Development. Under the supervision of the J. G. White Engineering Corporation.

Patent applied for

COFFIN VALVE COMPANY,

Makers of the largest Sluice and Gate Valves in America

Check Valves
Flap Valves
Foot Valves
Sewer Gates

Office and Works, Neponset, Suburb of

BOSTON, MASS.

Sluice Gates
Gate Valves
Butterfly Valves
Fire Hydrants

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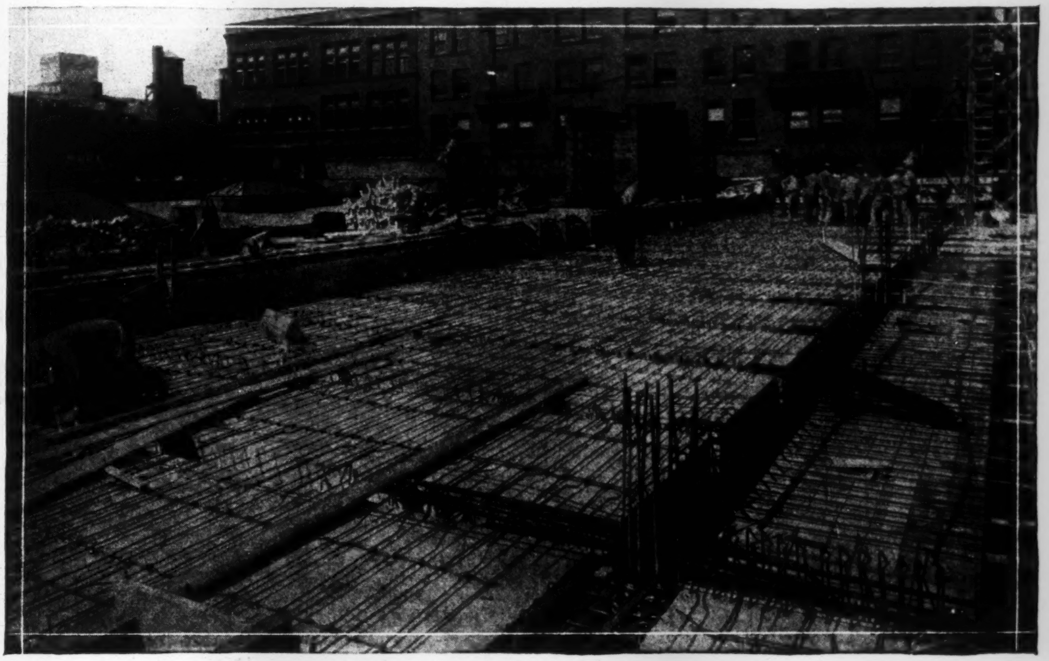
San Francisco, Cal.: Theo. F. Dredge, Monadnock Building
Toronto, Ont.: The Arthur S. Leitch Co., Ltd., 1001 Kent Building
Montreal, Que.: Sterling Engineering Co., 232 St. James St.



LaSalle Hotel Garage, Chicago—Geo. A. Fuller Co., General Contractors

An Exacting Job—

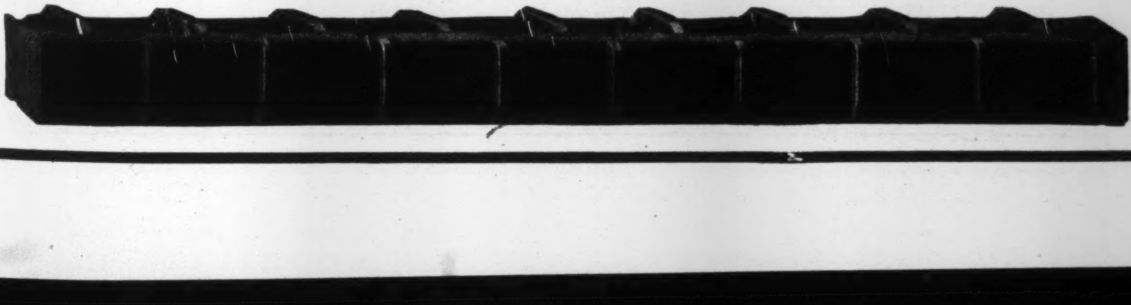
IN ORDER that the business of this garage might go on without interruption, the reinforcing had to be delivered on the job before 9 A.M. each day as needed. Where the new addition connected to the old building it was necessary for us to send a draftsman to take actual measurements as each part of the old structure was exposed. We then prepared our details, cut and fabricated the reinforcing and made delivery the following morning.

This is but one example of the service we are prepared to give in addition to furnishing everything required in concrete reinforcement. We carry complete stocks of bars, mesh, etc., and can fabricate to any specifications. Get our price—it will save you money and worry too.

Write for booklet—"Reinforcing for Concrete"—it is yours for the asking

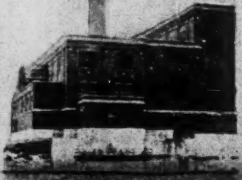
JOSEPH T. RYERSON & SON INC.
ESTABLISHED 1842

PLANTS: CHICAGO ST. LOUIS CINCINNATI DETROIT BUFFALO NEW YORK
BRANCH OFFICES: DENVER HOUSTON JERSEY CITY
MILWAUKEE MINNEAPOLIS NEWARK SAN FRANCISCO TULSA



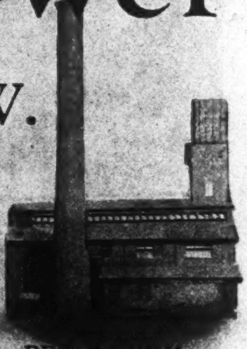
Industrial Power

500 KW. TO 12000 KW.



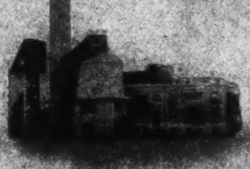
PITTSBURGH PLATE GLASS COMPANY

ST. JOSEPH LEAD CO.



BETHLEHEM STEEL COMPANY

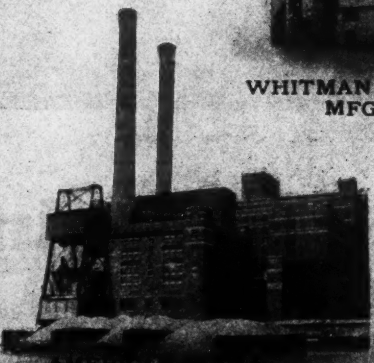
WESTINGHOUSE LAMP COMPANY



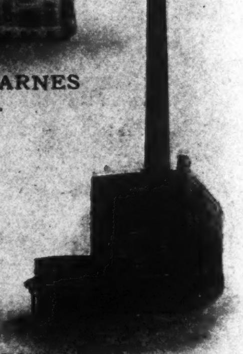
WHITMAN & BARNES MFG. CO.

THE MANHATTAN RUBBER MFG. CO.

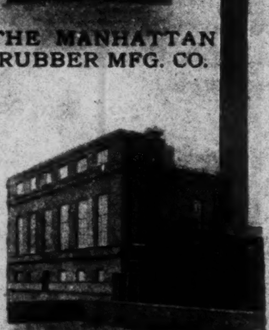
MERRIMAC CHEMICAL CO.



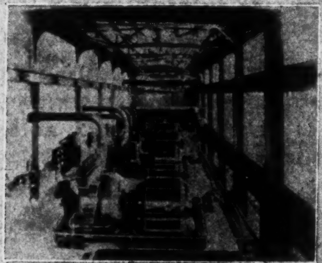
AMERICAN SUGAR REFINING CO.



PIERCE-ARROW MOTOR CAR CO.



BOSTON WOVEN HOSE AND RUBBER CO.



REMINGTON ARMS AND AMMUNITION CO.

DESIGN · BUILD
MANAGE
FINANCE

STONE & WEBSTER

INCORPORATED

BOSTON PHILADELPHIA NEW YORK SAN FRANCISCO. CHICAGO

You don't sign the dotted line

WHEN YOU SIGN a contract with the Linde Company, you don't sign the dotted line, but the line of no trouble.

A Linde contract means all the oxygen you need whenever you need it. It is a contract for dependable delivery. And Linde delivery is dependable because its 115 plants and warehouses are backed by a will to serve, without which, ability to deliver would be useless to you.

A contract with Linde also includes help in the efficient use of your oxy-acetylene apparatus. A part of this help is given monthly in "Oxy-Acetylene Tips." Write for it.

THE LINDE AIR PRODUCTS COMPANY
General Offices: Carbide & Carbon Bldg.
30 East 42d Street, New York
38 PLANTS—77 WAREHOUSES

A Linde Text Book

The index to "Gas Welded Pipe Joints" reads like that of a text book—and that's what it is.

• • •

This book covers welding costs, cutting costs, laying costs, pipe line total costs, pipe pattern cutting, etc. It has more than fifty pages chock full of instructions, information, tables, diagrams, and illustrations.

• • •

It is a text book, indeed, published by the Linde Air Products Company as a part of Linde Service.

• • •

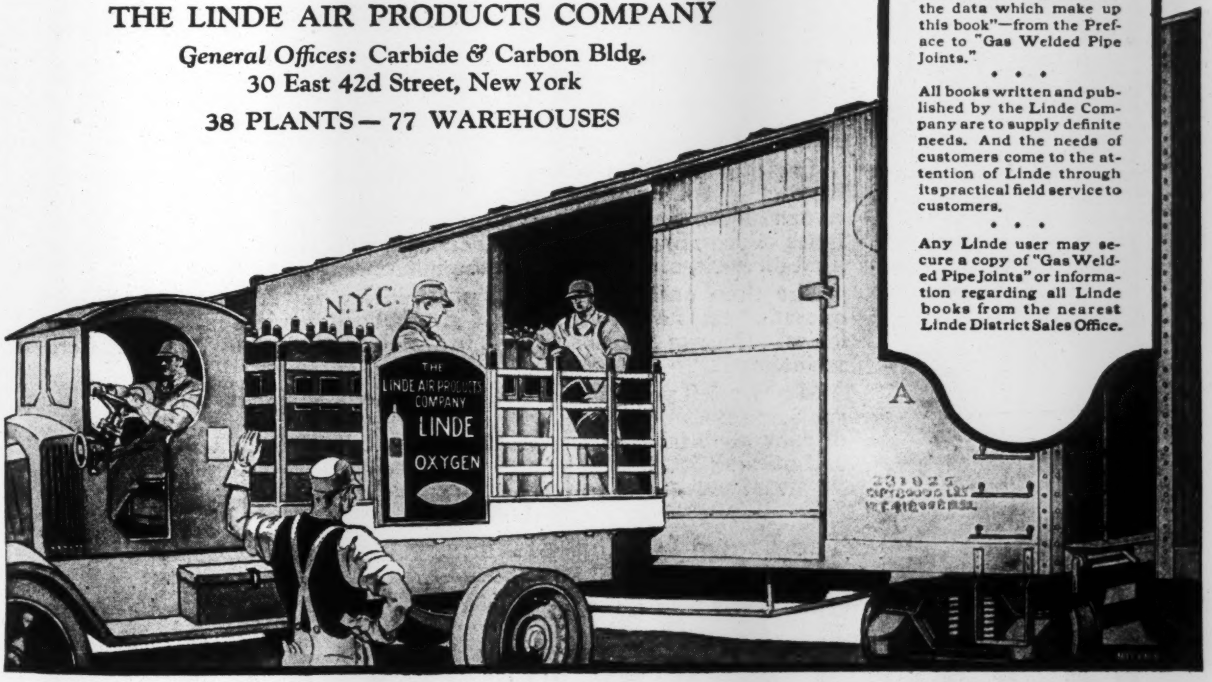
"There has been such a call for detailed information with regard to the costs of welded pipe installations of various kinds, that it has led to the compilation of the data which make up this book"—from the Preface to "Gas Welded Pipe Joints."

• • •

All books written and published by the Linde Company are to supply definite needs. And the needs of customers come to the attention of Linde through its practical field service to customers.

• • •

Any Linde user may secure a copy of "Gas Welded Pipe Joints" or information regarding all Linde books from the nearest Linde District Sales Office.


N.Y.C.
THE LINDE AIR PRODUCTS COMPANY
LINDE
OXYGEN
A

LINDE OXYGEN

YOU CAN DEPEND ON THE LINDE COMPANY

WESTINGHOUSE ELECTRIC

Westinghouse

Has Proved their Worth

The crane in the illustration is one of the No. 4 Brownhoists owned by the Westinghouse Electric & Mfg. Co. This crane is in use at the Trafford, Pa. plant.

The Westinghouse Electric and Manufacturing Co. is a recent addition to the long list of industrial leaders who have bought one Brownhoist crane, proved its worth, and expressed their satisfaction by purchasing additional Brownhoists.

There are definite reasons why such companies as Westinghouse have chosen Brownhoist cranes. The high rate that these machines return on the capital invested, their wide range of adaptability to all types of handling service and their ability to stand up on the hardest kind of work, are but a few of the influencing factors.

The time and labor saving possibilities, lower maintenance and operating costs and longer life of Brownhoist equipment, make it the logical selection for those plants in which high economy standards are maintained.

May we tell you of plants with conditions similar to your own that are using Brownhoists successfully? May we help you in the solution of your material handling problems as we have helped Westinghouse and others?

The advice of our engineers is available without cost or obligation. Just write us for further information.

The Brown Hoisting Machinery Company, *Cleveland, Ohio*

Branch Offices: New York, Chicago, Pittsburgh, San Francisco, New Orleans, London, Eng.

BROWNHOIST

MATERIAL HANDLING MACHINERY

Bids: July 7

Plumbing

NURSES' HOME AND EMPLOYEES' DORMITORY

White Plains, N. Y.

Sealed bids will be received for labor and material for plumbing work of the Nurses' Home and Employees' Dormitory on premises at Grasslands Hospital, in the Town of Mount Pleasant, County of Westchester and State of New York, at the office of the Clerk of the Board of Supervisors, at the Court House, White Plains, New York, until eleven o'clock a.m. (Daylight Saving Time), July 7th, 1924.

Specifications, drawings and all information relative to the same may be procured either from Walker & Gillette, Architects, No. 128 East 37th Street, New York City, or from Fred L. Merritt, Clerk of Board of Supervisors, Court House, White Plains, N. Y., on making a deposit of the sum of Ten dollars ($10.00), Five dollars ($5.00) of which will be returned to the bidder making such deposit upon returning such plans and specifications to the Clerk of the Board of Supervisors within ten days after the opening of bids for such work. Each bid or proposal must be accompanied by a certified check in the sum of three per cent (3%) of the amount bid made payable to the Treasurer of the County of Westchester, same to be forfeited to the County of Westchester as liquidated damages in the case of failure on the part of the successful bidder to enter into a contract for the execution of the work awarded to him and to furnish a satisfactory bond within five days after notice of such award. The successful bidder will be required to execute the contract and furnish a surety company bond in a sum equal to fifty per cent of the amount of the contract awarded to him guaranteeing the faithful performance of the work, said contract and bond to be in the form required by the County Attorney.

The Board of Supervisors reserves the right to reject any and all bids, or to accept any proposal which it may deem for the best interest of the County of Westchester.

BOARD OF SUPERVISORS.
By FRED L. MERRITT, Clerk.
Dated, White Plains, N. Y., June 16th, 1924.

Bids: July 10.

Road Work

New Brunswick, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of Middlesex County for the construction of Old Bridge-Matawan Road in the Township of Madison, in the County of Middlesex, with a reinforced concrete pavement, estimated amount of concrete pavement required is 56,712 square yards, and opened and read in public at the County Record Building, New Brunswick, N. J., on July 10, 1924, at 2.30 p.m. Standard Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work, prepared by Morgan F. Larson, County Engineer, and approved by the State Highway Commission, have been filed in the office of said Engineer at 175 Smith Street, Perth Amboy, N. J., and of said State Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the Standard Proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to the Board of Chosen Freeholders of Middlesex County, and must be accompanied by a certificate of a Bonding Company agreeing to furnish bond in the amount of 100% of the Contract, and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00, and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to engineer.

By order of the Board of Chosen Freeholders of Middlesex County.

THOMAS J. MULVIHILL,
Clerk.

Bids: July 7.

Garage and Dairy Barn

White Plains, N. Y.

Notice to Contractors—Including Plumbing and Heating Contractors.

Separate sealed bids or proposals for the following work:

(a) For the erection and completion and electrical work (exclusive of plumbing and heating) of Garage and Dairy Barn required in connection with the County Hospital in the Town of Mount Pleasant, County of Westchester and State of New York, and known as Grasslands Hospital.

(b) For the plumbing work required for Garage and Dairy barn.

(c) For the heating work required for Garage and Dairy Barn; will be received at the office of the Clerk of the Board of Supervisors at the Court House, White Plains, New York, until eleven o'clock a.m. (D. L. S.), Monday, July 7, 1924. Specifications, drawings and all information relative to the same may be procured either from Walker & Gillette, Architects, of No. 128 East 37th Street, New York City, or from Fred L. Merritt, Clerk of the Board of Supervisors, Court House, White Plains, N. Y., on making a deposit of the sum of Ten Dollars ($10.00), Five Dollars ($5.00) of which will be returned to the bidder making such deposit upon returning such plans and specifications to the Clerk of the Board of Supervisors within ten days after the opening of bids for such work. Each separate bid or proposal must be accompanied by a certified check in the sum of three per cent of the amount bid, made payable to the Treasurer of the County, same to be forfeited to the County of Westchester as liquidated damages in the case of failure on the part of the successful bidder to enter into a contract for the execution of the work awarded to him and to furnish a satisfatcory bond within five days after notice of such award. Each successful bidder will be required to execute the contract and furnish a surety company bond in a sum equal to fifty per cent of the amount of the contract awarded to him guaranteeing the faithful performance of the work, said contract and bond to be in the form required by the County Attorney.

Pursuant to the provisions of the statutes, separate bids must be submitted for items (a), (b) and (c). No bid will or can be considered that combines any two or more of such items.

The Board of Supervisors reserves the right to reject any and all bids, or to accept any proposals which it may deem for the best interest of the County of Westchester.

Dated, White Plains, N. Y., June 19, 1924.

BOARD OF SUPERVISORS.
By FRED L. MERRIT,
Clerk.

Bids: June 30.

Plumbing

White Plains, N. Y.

NOTICE TO PLUMBING CONTRACTORS.

Sealed bids or proposals for additional plumbing to be installed in the County Jail, adjoining the Westchester County Court House, at White Plains, N. Y., will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, N. Y., until 11 o'clock a.m. (Daylight Saving Time), June 30th, 1924.

Plans and specifications and all information relative to the same may be procured from the County Superintendent of Buildings, Court House, White Plains, N. Y.

Each proposal must be accompanied by a certified check in the sum of 5 per cent of the amount bid, made payable to the Treasurer of the County of Westchester, same to be forfeited to the County of Westchester as liquidated damages in case of failure on the part of the successful bidder to enter into a contract for the execution of the work awarded to him and to furnish a satisfactory bond within 5 days after notice of such award.

The successful bidder will be required to execute the contract and furnish a Surety Company bond in a sum equal to 50 per cent of the amount of the contract awarded to him, guaranteeing the faithful performance of the work, said contract and bond to be in the form required by the County Attorney. The board of supervisors reserves the right to reject any and all bids, or to accept any proposal which it may deem for the best interest of the County of Westchester.

BOARD OF SUPERVISORS,
By FRED L .MERRITT, Clerk.

Bids: July 9.

REINFORCED CONCRETE SUPER-STRUCTURE AND PILE FOUNDATIONS FOR SOUTH PARK BOULEVARD VIADUCT

South Park Commissioners

Chicago, Ill.

Sealed proposals will be received by the South Park Commissioners, 57th Street and Cottage Grove Avenue, until 12:00 o'clock noon, Wednesday, July 9, 1924, for the complete construction of Reinforced Concrete Super-Structure for the "South Park Boulevard Viaduct," and the East and West Approach Structures and the Pile Foundations for the West Approach, in accordance with drawings and specifications, copies of which may be obtained at the office of the Consulting Engineers, Condron Company, on and after June 20, 1924, upon depositing therefor the sum of $50.00 for the complete set or for the set of "Item B," and the sum of $25.00 for the set of any one item except "Item B," which deposits will be returned to bidders upon return of drawings and specifications.

Proposals must be enclosed in opaque sealed envelopes marked "Proposal" and bearing title of the work bid upon, and the name of bidder.

The right is reserved to reject any or all bids, or to accept any bid or "item" of any bid which, in the judgment of the Commissioners, will be for the best interest of the public.

Any one of the following "items" of the work may be bid upon, and separate contracts or a general contract may be let, at the option of the Commissioners:

Item (A)—Piling and Footings. (In specification No. 3.)

Item (B) — Concrete Super-Structure. (Specification No. 3.)

Item (C)—Gunite Protection of Steel. (Specification No. 4.)

Item (D) — Waterproofing Walls and Decks. (Specification No. 5.)

Item (E)—Drains and Sewers. (Specification No. 6.)

Item (F)—Electric Conduits, Wiring and Ornamental Lamp Posts. (Specification No. 7.)

Item (G)—Ornamental Concrete. (Specification No. 8.)

Each proposal should be accompanied by a certified check for a sum not less than five (5%) per cent of amount of proposal, payable to South Park Commissioners, as a guarantee of the good faith of the bidder, which check will be returned to the bidder unless forfeited under conditions stipulated in proposal.

Proposals shall be made on "Proposal Form" accompanying specifications.

ELMER J. WHITTY,
Secretary.

Bids: August 4.

Morwell Power Scheme

SPECIFICATION NO. 24/25
STATE ELECTRICITY COMMISSION
OF VICTORIA

Melbourne, Victoria, Australia.

Tenders are hereby invited for the supply, delivery, etc., of the following for the Morwell Power Scheme.

Copies of Tender Form and Specification will be available upon application to:

Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, Room 830, 76 West Monroe St., Chicago, and Office of the Bureau of Foreign & Domestic Commerce, United States Department of Commerce, 734 Customs House, New York City.

SPECIFICATION NO. 24/45—66,000-VOLT INSULATORS

CHARGE: £2 2s. 0d. for the first three copies of Tender Form, Conditions of Contract and Specification complete. This charge will be returned on receipt of a bona fide tender. A fourth copy and any further copies will be supplied for the sum of 10s. 6d. each. This charge is not returnable.

PRELIMINARY DEPOSIT: A Preliminary Deposit of £50 0s. 0d. is to be lodged with Tender.

The Specification may be inspected at the above mentioned offices.

The Commission does not bind itself to accept the lowest or any tender.

Tenders on prescribed form, properly endorsed and addressed, must be delivered to the undersigned in Melbourne not later than 5 p.m. on August 4, 1924.

R. LIDDELOW,
Secretary.

OFFICIAL PROPOSALS

Bids: July 9.

Boulevard Construction

Atlantic City, N. J.

Sealed bids will be received by the Board of Chosen Freeholders of Atlantic County, N. J., at 12 o'clock, noon, (Daylight Saving Time), on July 9th, 1924, during a regular meeting of said Board at its Assembly Room in the Guarantee Trust Bldg., Atlantic City, N. J., for reconstruction of a certain County Road, known as the Absecon Boulevard, joining Absecon and Atlantic City with a standard, sheet-asphalt pavement on a 6", 1-3-5, concrete base; the approximate area of the sheet asphalt being 104,800 sq.yds. and of the concrete base 109,000 sq.yds., together with gravel shoulders, excavation and embankment, drainage provisions, reconstructed guard rail, additions to 9 existing bridges and other incidental construction items. The bids will be opened and publicly read at the aforesaid time and place.

Plans, specifications and forms of bid, certificate of surety, contract and bond, covering the proposed work, are on file at the offices of the State Highway Commission in Broad St. Bank Bldg., Trenton, N. J., and at 503 Market St., Camden, N. J., and at the office of the County Engineer of Atlantic County, 741 Guarantee Trust Bldg., Atlantic City, N. J. At any of the above offices the plans and specifications may be inspected and a prospective bidder may secure a printed copy of the specifications and blueprints of the plans from the office of the County Engineer in consideration of a deposit of $10.00 which will be refunded provided the plans and specifications are returned to the office of the County Engineer, in good condition, by noon of July 9th, 1924, (Daylight Saving Time); otherwise the plans and specifications will become the property of the prospective bidder and the deposit will be forfeited. Each bid must be made on the standard proposal form in the manner required by the specifications and must be accompanied by a certified check, or cash, in the amount of $20,000. A satisfactory bond in the full amount of the contract price will be required of the contractor and a contract will be awarded, if awarded at all, within one month of the date of receiving bids, but such award will be made subject to the sale and delivery of bonds to be issued for the purpose of financing the work; the award of contract will also be subject to approval by the State Highway Commission.

The right is reserved to reject any or all bids.

By Order of the Board of Chosen Freeholders of Atlantic County, N. J.

F. W. WILLETTS, Clerk.

Bids: July 15.

Subway Construction

DEPARTMENT OF CITY TRANSIT
CITY OF PHILADELPHIA
11TH FLOOR, 1211 CHESTNUT STREET
Philadelphia, Pa., June 9, 1924.

Sealed Proposals, addressed to the undersigned, at the offices above mentioned, will be received until 11 o'clock a.m., (Eastern Standard Time), on Tuesday, July 15, 1924, and publicly opened and read immediately thereafter, for construction of about 10,131 linear feet of 4-track subway in Broad Street, from north of Stiles Street to the south side of Clearfield Street.

Plans and Specifications can be seen at the office of the Department on the 12th floor, 1211 Chestnut Street, and copies of same, with blank forms for proposals, will be supplied to intending bidders upon deposit of $50.00, which will be refunded upon return of the Plans and Specifications in good condition.

Bidders must be skilled and regularly engaged in the class of work for which they are competing.

No bid will be considered unless accompanied by a certified check on a responsible Bank or Trust Company in favor of the City of Philadelphia, to the amount of five (5) per centum of the sum of such bid, in accordance with the provisions of an ordinance approved March 7, 1924, and reprinted in full in the Specifications.

Proposals will be received upon the entire work, designated as Contract No. 105, and separately upon approximately equal sections of the work designated as Contracts No. 105-A and No. 105-B respectively.

The Director reserves the right to contract for the work as a whole or in two sections, and to reject any or all bids, as he may deem best for the interest of the City of Philadelphia.

H. E. EHLERS,
Director.

OFFICIAL PROPOSALS

Bids: July 9.

Highway Work

STATE OF MARYLAND
STATE ROADS COMMISSION
Baltimore, Md.

Sealed proposals for building nine sections of State Highway, as follows:

Montgomery Co. Cont. M-52. One section of State highway from Colesville toward Ashton for a distance of 1.0 mile. (Concrete.)

Montgomery Co. Cont. 169-8. One section of State highway from Kensington to Chevy Chase Lake, a distance of 2.03 miles. (Concrete shoulders.)

Prince George's Co. Cont. P-53. One section of State highway from Bladensburg to East Riverdale, a distance of 2.0 miles. (Concrete.)

Howard Co. Cont. Ho-48. One section of State highway from end of Cont. Ho-42 to Jonestown, a distance of 1.3 miles. (Concrete.)

Howard Co. Cont. Ho-25. One section of State highway between West Elkridge and Millers Corner, for a distance of 1.48 miles. (Concrete.)

Baltimore Co. Cont. B-12-C. One section of State highway through Catonsville, for a distance of 0.46 mile. (Concrete.)

Queen Anne's Co. Cont. Q-30. One section of State highway from Centerville to Centerville Landing, a distance of 0.7 mile. (Concrete.)

Cecil Co. Cont. Co-39. One section of State highway between Calvert and Fade Hill for a distance of 1.0 mile. (Concrete.)

Calvert Co. Cont. C-17. One section of State highway from Huntingtown toward Plum Point for a distance of 1.5 miles. (Gravel.)

will be received by the State Roads Commission, at its offices, 601 Garrett Building, Baltimore, Maryland, until 12 M. on the 8th day of July, 1924, at which time and place they will be publicly opened and read.

Bids must be made upon the blank proposal form, which, with specifications and plans will be furnished by the Commission upon application and cash payment of $1.00, as hereafter no charges will be permitted.

No bids will be received unless accompanied by a certified check for the sum of Five Hundred ($500) Dollars, payable to the State Roads Commission.

The successful bidder will be required to give bond, and comply with the Acts of the General Assembly of Maryland, respecting contracts.

The Commission reserves the right to reject any and all bids.

By order of the State Roads Commission this 19th day of June, 1924.

JOHN N. MACKALL,
Chairman.

L. H. STEUART, Secretary.

Bids: July 8.

Pavements—Concrete and Bituminous Bound Macadam

Wallingford, Conn.

Notice is hereby given that sealed bids will be received by the Court of Burgesses of the Borough of Wallingford, Connecticut, New Haven County, for the construction of the following estimated pavements:

1,200	sq.yds. of concrete pavement.
5,950	sq.yds. of Bituminous Bound Macadam (Penetration method).
4,135	lin.ft. of combined concrete curb and gutter.
450	lin.ft. of blue stone curbing.
145	sq.yds. concrete gutters.

A certified check for 5% of the contract shall accompany each proposal and a Surety Co. bond of 50% of the contract price will be required of the successful contractor.

Bids will be opened and read in public at the Borough Clerk's office on Tuesday, July 8th, 1924, at 6 p.m., standard time. Forms of Proposals, specifications and contract for the proposed work may be secured from Wm. A. MacKenzie, Borough Engineer, Wallingford, Conn.

The Court of Burgesses reserves the right to reject any or all proposals or to accept any proposal for one or more sections or for the concrete curbs and gutters as a separate unit.

Signed, JOHN P. BRIDGETT,
Warden.

WM. A. MACKENZIE, C. E.

OFFICIAL PROPOSALS

Bids: July 14.

Sewage Treatment Works and Appurtenances

Borough of Bergenfield, N. J.,
Borough of Dumont, N. J.

The Mayor and Council of the Boroughs of Bergenfield and Dumont, Bergen County, New Jersey, request proposals for the construction of a Sewage Treatment Works and Appurtenances.

The foregoing works are more particularly described and set forth in the plans and specifications on file with Thomas F. Bowe, Consulting Engineer, and with the Borough Clerks.

The plan and specifications, form of proposals, contracts, form of bonds required may be seen at the offices of Thomas F. Bowe, Consulting Engineer, 110 William Street, New York City. Copies of such plans and specifications may be obtained on making a deposit of twenty-five dollars ($25.00) (cash or certified check), fifteen dollars ($15.00) of which deposit will be refunded upon return of the plans and specifications five (5) days after the receipt of proposals complete and in good condition.

All bids must be made upon a form of proposal to be obtained from the Consulting Engineer and must give the prices both in writing and figures and must give such other information and be signed in the manner indicated by the form of proposal. Each bid must be accompanied by a certified check on some solvent bank; in the amount of five (5%) per cent of the bid price. The certified checks shall be made payable to the Boroughs of Bergenfield and Dumont; checks of the unsuccessful bidders will be returned immediately upon the award of the contract. The check of the successful bidder will be returned to the bidder upon the execution of the contract and the furnishing of the bond required, within ten days after the date of the award thereof, or within such extended time as may be determined by the Borough Councils. In case of failure to execute the required contract and furnish the required bond within such time, such check shall be forfeited to the Boroughs of Bergenfield and Dumont as liquidated damages.

The proposals hereing required shall be presented to the Mayor and Council of the Boroughs of Bergenfield and Dumont, Bergen County, New Jersey, at the Council Chamber, Madison Avenue, Dumont, Bergen County, New Jersey, on Monday, July 14, 1924, at 8:00 p.m. Daylight Saving Time. No bids will be received prior to said hour and none thereafter. The proposals shall be submitted in sealed envelopes or packages and endorsed respectively as follows:

Proposal for the construction of a Sewage Treatment Works and Appurtenances.

The right is expressly reserved to reject any or all bids, to waive any informality in the bids received and to accept any bid which is deemed the most favorable to the interests of the Boroughs of Bergenfield and Dumont, Bergen County, New Jersey.

Dated June 16, 1924.

Mayor and Council of the Borough of Bergenfield, N. J.

By OTTO E. DOLAINSKI,
Borough Clerk.

Mayor and Council of the Borough of Dumont, N. J.

By HENRY J. BERSCH,
Borough Clerk.

THOMAS F. BOWE,
Consulting Engineer.

Bids: June 30.

Sanitary Sewers

TOWN OF ADAMS
OFFICE OF SELECTMEN
Adams, Mass.

Sealed proposals addressed to the Board of Selectmen, Adams, Mass., and endorsed "Proposal for Sanitary Sewer Construction" will be received by the Board of Selectmen at its Office until 4 p.m., Monday, June 30, 1924, and at that time and place will be publicly opened and read.

Work includes furnishing all labor and material and constructing approximately two miles of sanitary sewers in sizes ranging from eight inches to twenty-two inches.

Plans may be seen and forms of specifications and contract may be obtained at the office of the Selectmen.

Each bid must be accompanied by a certified check for two thousand dollars ($2,000.00) payable to the Town of Adams.

Board of Selectmen, Town of Adams.

By H. L. HARRINGTON.
D. A. MURPHY.
A. F. BAILOT.

Bids: July 3.

Channel Dredging

DEPARTMENT OF PUBLIC WORKS
Buffalo, N. Y.

Sealed proposals for work and supplies as set forth below, will be received at the office of this Department, Room 5 Municipal Building, until 11 o'clock a.m., July 3rd, 1924.

No proposal will be considered unless it be accompanied by a certified check, payable to the order of the Department of Public Works, in the amount specified in specifications or by a bond conforming to law; such bonds to be fifty per cent of the sum named in the proposal.

Plans and specifications and estimate of quantities can be seen, and printed forms of proposals, and any desired information, can be had on application at the Bureau of Engineering on and after this date.

This Department reserves the right to reject any and all bids, and to waive any informalities.

A separate proposal must be made for the work and supplies included in each descriptive paragraph following:

RE-ADVERTISEMENT

For the completion of subdivision "B" of Section No. 2 of the Buffalo River and Cazenovia Creek Improvement, including the channel of Buffalo River from the westerly line of Babcock street to the westerly line of Seneca street and the channel of Cazenovia Creek from the Buffalo River channel to about 100 feet easterly of South Park avenue.

Work consists in the removal of about 950,000 cubic yards of earth excavation.

Bid and contract will be on a price per cubic yard place measurement.

Formal advertisement will be found in the Buffalo Commercial, Buffalo Express and Buffalo Times on June 13th, 14th, 20th and 21st, 1924.

This is not a complete formal advertisement.

Bids: July 1.

Bridge

Norristown, Pa.

Sealed proposals will be received at the office of the County Controller, Court House, Norristown, Penna., on July 1, 1924, at 10 o'clock Standard Time and opened at 11 o'clock Standard Time for furnishing tools, machinery, labor and materials necessary for the construction complete of a reinforced concrete bridge over the Schuylkill River on DeKalb Street, between Norristown and Bridgeport, Montgomery County, Penna., in full accordance with plans and specifications on file in the office of the County Commissioners.

The bridge consists of seven spans 115 ft. each and a total width of 60 ft.

All proposals must be for the work complete in full accordance with plans and specifications and must be made on the form of proposal attached to and forming a part of the specifications.

Copies of the plans and specifications may be obtained in the office of the Consulting Engineer, J. B. Long, 59-61 Boyer Arcade, Norristown, Penna., on payment of five dollars per set.

Each bidder must accompany his proposal with a certified check for $15,000.00 made payable to the Commissioners of Montgomery County, Penna., as a guarantee of good faith and to protect the County from any loss by failure to comply with the terms of the proposal. This check shall be handed to the Chief Clerk to the County Commissioners at least one hour before the time set for opening the bids.

The right is reserved to reject any or all bids.

WM. C. IRVIN.
County Controller.

Bids: July 1.

Highway Work

Harrisburg, Pa.

Pennsylvania Department of Highways, Harrisburg, Pa. Bids will be received July 1, 1924, for the construction of thirteen projects, totaling seventy-four miles, construction to be either bituminous surface on a concrete base or reinforced concrete. Projects situated in the following counties:

Berks, Bradford, Wyoming, Chester, Dauphin, Indiana, Luzerne, Lycoming, Monroe, McKean, Schuylkill, Westmoreland, York.

Full particulars upon application to Paul D. Wright, Secretary of Highways, Harrisburg, Pennsylvania.

Bids: July 18.

Canal Terminal Construction

STATE OF NEW YORK
DEPARTMENT OF PUBLIC WORKS
BUREAU OF CANALS

Albany, N. Y.
June 18th, 1924.

Sealed proposals will be received by the undersigned at his office, 55 Lancaster street, Albany, N. Y., until twelve o'clock noon (daylight saving time), of Friday, July 18th, 1924, at which place and hour they will be publicly opened and read, for the construction of Barge canal terminals, pursuant to the provisions of Chapter 746, Laws of 1911, and amendatory laws, Chapter 698, Laws of 1920, and Chapters 146 and 225, Laws of 1923, as follows:

—1—

TERMINAL CONTRACT NO. 81-C.

For furnishing and installing bagging garners, marine leg pushers and hoists and miscellaneous equipment in the grain elevator at Gowanus Bay, Borough of Brooklyn, New York City.

Contract plans, sheets 1 to 16 inclusive.

—2—

TERMINAL CONTRACT NO. 82-H.

For installing a heating system in the administration building on the terminal pier at Oswego.

Contract plans, sheets 1 and 2.

—3—

TERMINAL CONTRACT NO. 82-P.

For installing a plumbing system in the administration building on the terminal pier at Oswego.

Contract plans, sheets 1 and 2.

—4—

Also, for constructing a dry-dock and an approach channel thereto, at Waterford, N. Y., pursuant to the provisions of Chapter 106, Laws of 1922, and Chapter 450, Laws of 1923, and amendatory laws.

Sheets 1 to 12 inclusive.

Plans may be seen, and detailed specifications, engineers' estimates of quantities, proposal blanks, form of contract and bonds required and other information for proposers may be had at the office of the Bureau of Canals, Albany, N. Y.; at the office of the Division Engineer, Department of Public Works, at Utica, Syracuse, Rochester and Buffalo; and at the Terminal Warehouse, Pier 6, East River, New York City.

Blueprint copies of plans will be furnished by the State Engineer and Surveyor upon the receipt at his office in the Telephone Building, Albany, N. Y., of payment at the rate of fifteen cents (15c.) per sheet. Refund will not be made for any blueprints which may be returned.

Monthly estimates will be paid of ninety per centum (90 per cent) of the work done at the contract price. Every proposal for said work must be accompanied by a money deposit in the form of a draft or certified check upon some good banking institution in the city of Albany or New York, issued by a national or state bank (or trust company, in the case of terminal contract), in good credit, within the State and payable at sight to the Commissioner of Canals and Waterways for five per centum (5 per cent) of the amount of the proposal.

The person whose proposal shall be accepted will be required to execute a contract and furnish bonds within ten days from the date of notice of award delivered to him or them in person or mailed to the address given in the proposal.

Upon execution of the contract and approval of bonds, the certified check or draft will be returned to the proposer unless the same shall have been presented for collection prior to such time in which case the amount of the deposit will be refunded by the Commissioner of Canals and Waterways.

The deposits of bidders other than the one to whom the award of contract shall be made will be returned immediately after the award has been made.

The bond required for the faithful performance of the contract shall be in such sum as shall be fixed by the Commissioner of Canals and Waterways, which sum shall not be less than twenty per centum (20 per cent) of the estimated cost of the work, according to the contract price, and an additional bond known as the labor bond, in the sum of ten per centum (10 per cent) of the amount of the estimated cost of the work, according to the contract price, will be required as security that the contractor will pay in full at least once in each month all laborers employed by him upon the work specified to be done in the contract.

In the event that more than one surety company is offered as surety on said bonds co-insurance only will be accepted.

Each proposal must be addressed to the Bureau of Canals, State Department of Public Works, Albany, N. Y., and must be endorsed on the envelope with the name of the construction for which the proposal is made.

Award, if made, will be made to the person or persons whose proposal shall be lowest in cost to the State for doing the work, and which shall comply with all provisions required to render it formal. Before any award shall be made the lowest bidder will be required to satisfy the Commissioner of Canals and a Waterways of his ability to provide suitable equipment and materials for the proper performance of the work.

The right is reserved to reject any or all proposals and readvertise and award the contract in the regular manner it, in the judgment of the undersigned, the interests of the State will be enhanced thereby.

ROYAL K. FULLER,
Commissioner of Canals and Waterways.

Bids: July 8.

Bids for Sidewalk Construction

Lakeland, Fla.

Sealed proposals will be received by the City of Lakeland, Florida, until 7:30 p.m., Tuesday, July 8th, 1924, for paving sidewalks with widths of 5 and 6 ft. and lengths totaling about 130,000 lin.ft. The type of sidewalk to be bid upon is portland cement concrete on sand foundation, and includes grading and necessary connections with existing work.

Blank forms of proposal and specifications will be furnished prospective bidders. Plans for the same are on file in the offices of the City Manager and City Engineer of said City, where they may be examined.

Certified check for $4,000.00 is required with each bid and bond for 50% of the contract price will be required of the successful bidder, such bond to be a bond with reputable and responsible Surety Company as Surety written through their resident Agent and who has been their such **resident Agent in the City of Lakeland for** six months.

The City reserves the right to reject any and all bids.

The City reserves the right to increase or decrease the amount of work included in these specifications without affecting in any way the contract prices and without affecting the specifications or contract in any other respect.

The City reserves the right to group the work in units as set forth in Instructions to Bidders, and to let separate contracts for any one or more units.

The City reserves the right to purchase concrete materials and furnish them to the contractor to be placed by him under the specifications at prices bid by him.

ANTON SCHNEIDER,
City Manager.
J. L. DAVIS,
City Clerk and Auditor.
CHARLES CARROLL BROWN,
City Engineer.

Bids: July 9.

Sewage Pumping Station

Jackson, Mich., June 16, 1924.

Sealed proposals will be received by the City Clerk of the City of Jackson up to 12 o'clock noon, Eastern Standard Time, of Wednesday, the 9th day of July, 1924, for the construction of a sewage pumping station comprising a reinforced concrete, steel and brick structure about 27 feet square in plan, with a pump pit, rack chamber, motor room, steel rocks, sluice gates, and cast iron piping and valves.

The Plans and Specifications under which the work is to be done may be examined at the office of the City Clerk or of the City Manager at Jackson, and copies may be obtained by making a deposit of Ten Dollars, which will be refunded upon their return in good condition, within ten days after the date of receiving proposals.

A certified check in the sum of One Thousand Dollars will be required with each proposal.

The right to accept any proposal, to reject any or all proposals, and to waive defects in proposals, is reserved by the City.

J. E. WHITTAKER,
City Manager.

OFFICIAL PROPOSALS

Bids: July 16.

Delaware River Bridge

CONTRACTS 17 AND 18
PHILADELPHIA AND CAMDEN
APPROACH SUPERSTRUCTURES

Philadelphia, Pa.

Sealed proposals will be received by the Delaware River Bridge Joint Commission at Room 806 Widener Building, Philadelphia, Pa., until 1.30 o'clock p.m., Eastern Standard Time, July 16, 1924, when they will be publicly opened and read, for Contracts Nos. 17 and 18, for the construction of the superstructures of the Philadelphia and Camden approaches of the bridge over the Delaware River between the cities of Philadelphia and Camden.

Contract No. 17 is for the construction of the superstructure of the Philadelphia approach, located between Front Street and Fourth Street in Philadelphia.

Contract No. 18 is for the construction of the superstructure of the Camden approach, located between the Camden anchorage, west of Delaware Avenue, and Third Street, in Camden.

The work under each contract will include the furnishing, fabricating, painting and erecting of the steel superstructure complete as shown on the drawings. The work comprises approximately 11,600 tons of steelwork in Philadelphia and 13,500 tons of steelwork in Camden. The contract time for the entire work is twenty-two months. Unit price bids are asked for each contract.

Attention is called to the forms prescribed for bidders on these two contracts, in that they are invited to bid under either or both of two forms in each contract. In Form "A" the bidder is to state his prices for the work proposed without dependence upon the award of the other contract. In Form "B" the bidder is to state his prices for the work proposed, upon the express condition that he also be awarded the other contract. The proposal in Form "B," in order to be valid, must be made in the proposals for both contracts.

Copies of the contract and contract drawings may be obtained at the office of the Joint Commission upon deposit of Twenty-five dollars for each contract, which deposit will be returned upon receipt of bid or return in good condition of the contract books.

Each proposal must be accompanied by a certified check for the sum of Fifty Thousand Dollars ($50,000) payable to the Delaware River Bridge Joint Commission, and Surety's consent must be shown. The bidder or bidders to whom the contracts are awarded will be required to give bond in the sum of 50 per cent of the amount of the contract.

The right is reserved to reject any or all bids.

Delaware River Bridge Joint Commission.
GIFFORD PINCHOT,
Chairman.
JOSEPH K. COSTELLO,
Secretary.

Bids: July 7.

Water Supply

Victor, N. Y.

Sealed proposals will be received by the Board of Trustees of the Village of Victor, N. Y., until 8 o'clock p.m., on the 7th day of July, 1924, for the additional water supply consisting of about three miles of eight-inch supply main, intake, pump house and accessories.

Plans and specifications may be seen at the office of the Board at Victor, N. Y., or at the office of Hopkins & Field, Engineers, 349 Cutler Building, Rochester, N. Y. Plans may be obtained from the engineers upon a deposit of ten dollars.

The Board hereby reserves and has the right to reject any or all bids, or to accept any that in its judgment will be for the best interests of the Village.

A surety bond satisfactory to the Board in form and amount will be required of him to whom a contract may be awarded.

A certified check, made payable to the Board of Trustees of Victor, N. Y., to the amount of $1,000, must be deposited by each bidder and accompany his bid, as a guarantee that in case the contract is awarded to him he will, within ten days thereafter, execute such contract and furnish his bond.

Bids must be sealed and addressed to the Board of Trustees, Victor, N. Y., and marked on the outside of the envelopes "Proposal for Additional Water Supply."

EDGAR B. CASE, Village President.
MICHAEL KEATING, Clerk.
Dated, Victor, N. Y., June 2, 1924.

OFFICIAL PROPOSALS

Bids: July 21.

Pipe Sewers and Disposal Works

Hasbrouck Heights, N. J.

Sealed proposals will be received and opened publicly by the Mayor and Council of the Borough of Hasbrouck Heights, N. J., at the Borough Municipal Hall, at 8:15 p.m. (Daylight saving time), Monday, July 21, 1924.

Proposals are to cover construction (both materials and labor) of certain pipe sewers and disposal works, according to plans and specifications filed with the Borough Clerk.

Copies of plans and specifications may be seen also at office of the engineers, City-Wastes Disposal Company, 45 Seventh Avenue, New York City. Sets may be borrowed upon deposit of $15 of which $10 will be refunded if papers are returned in good condition before August 1, 1924.

Approximately the proposed work consists of:

About 72,000 feet of vitrified pipe sewers, 8-inch to 20-inch, with manholes and flush-tanks.

About 3,800 feet of iron pipe sewers with appurtenances, 8-inch to 16-inch.

An indeterminate amount of drain-tile laid in sewer trench.

Sewage tanks, trickling filters and sand-beds with appurtenances.

Each bid must be made on blank forms obtained from the Borough Clerk or the Engineers, and must be accompanied by a certified check for $10,000 as a guarantee of good faith.

The Borough reserves the right to reject any or all bids.

JOSEPH P. BREEZE,
Borough Clerk,
Hasbrouck Heights, N. J.

Bids: July 12.

Street Paving and Storm Sewer Construction

Cold Spring, N. Y.

Sealed proposals will be received by mail by the President and Trustees of the Village of Cold Spring, New York, at the Hose House in Cold Spring, New York, until three o'clock (standard time), July 12, 1924, for street improvements and storm sewer line.

The work will consist of about 6,000 square yards of reinforced cement concrete pavement; 3,700 linear feet of curb, and 3,000 linear feet of concrete storm sewer pipe 18" to 30" in size and concrete box culvert.

All bids must be upon blanks provided in the proposal furnished to bidders.

Bids must be accompanied by a certified check for three per cent (3%) of the amount of the bid. Plans and specifications will be on file at the Village Clerk's office in the Village of Cold Spring, New York, and at the office of the Engineer, H. Eltinge Breed, 507 Fifth Avenue, New York City.

Copies of the plans and specifications may be obtained on and after June 28, 1924, for three dollars ($3.00) per set. No refund for blanks returned. Bidding blanks will be furnished free.

The right is reserved to reject any or all bids.

CHARLES HASENMAILE,
Village Clerk.

ENGINEER,
507 Fifth Avenue,
New York City.

Bids: July 31.

Sanitary Out-Fall Sewers

Tulsa, Okla.

Bids will be received by the City of Tulsa on July 31st, 1924, for the construction of sixteen miles of sanitary out-fall mains, with two disposal plants. Estimated total cost $450,000.00. Ninety per cent of monthly estimates in cash.

CHARLES SCHULTZ,
City Engineer.

If we had no faults we should not take so much pleasure in noting those of others. (Old adage.) But even so "Swart Service Really Serves" *unusually well.*

SWART—Insurance
92 William St., N. Y. C.

OFFICIAL PROPOSALS

Bids: July 11.

Reconstruction of Roads

Mount Holly, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Burlington, N. J., for the reconstruction of the following roads: Road known as the Coopertown Road from State Highway Route No. 2 to Penna. Railroad tracks in Beverly City; estimated amount of surface pavement required is 13,800 sq.yd. Riverton-Moorestown Road in the townships of Moorestown, Cinnaminson and Riverton Borough; estimated amount of surface pavement required is 54,348 sq.yd. Said roads to be reconstructed of sheet asphalt surface upon a macadam foundation; and opened and read in public in the Freeholder's Room, County Collector's Office, Mt. Holly, N. J., on Friday, July 11th, at 10:30 A.M., Eastern Standard Time.

Drawing and specifications and forms of bid, contract and bond for the proposed work, prepared by H. B. Smith, County Engineer, has been filed in the office of the said Engineer, Court House, Mount Holly, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue print of the drawings by the engineer on proper notice. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of bidder and the name of the road on the outside, addressed to Alfonza Adams, Clerk, Mount Holly, N. J., and must be accompanied by a certificate from a surety company and a certified check for not less than 10 per cent of the amount of the bid and be delivered at the place and on the hour above named. The standard proposal form is attached to the specifications, copies of which will be furnished upon application to engineer.

The Board reserves the right to reject any or all bids.

By order of the Board of Chosen Freeholders of the County of Burlington.

ALFONZA ADAMS, Clerk.

Bids: July 15.

Road Construction

Harrisburg, Pa.

Pennsylvania Department of Highways, Harrisburg, Pa. Bids will be received July 15, 1924, for construction of fifteen projects, totaling thirty-seven miles, construction to be either bituminous surface on a concrete base or reinforced concrete. Projects situated in the following counties:

Allegheny, Beaver, Blair, Chester, Clarion, Fayette, Indiana, Jefferson, Perry, Somerset, Warren, Washington.

Also for the construction of a reinforced concrete bridge lying between Northumberland, Snyder and Union Counties.

Full particulars upon application to PAUL D. WRIGHT, Secretary of Highways, Harrisburg, Pennsylvania.

Bids: July 15.

Reinforced Concrete Bridge

Norristown, Pa.

Bids will be received by the Controller of Montgomery County, at his office in the Court House, Norristown, Pa., up until 10 o'clock a.m. (Standard Time), July 15, 1924, for the reinforced concrete bridge No. 278 over the Perkiomen Creek at Schwenksville in Perkiomen Township.

The Commissioners reserve the right to reject any or all bids.

Checks accompanying proposals must be handed to the Clerk to the County Commissioners one hour before the time for the opening of bids, which will be done publicly at 11 o'clock a.m., July 15, 1924, (Standard time), in the County Commissioners' office.

WM. C. IRVIN,
Controller.

Construction Bonds

taken by contractors in payment for **Municipal Improvements.**
(BOUGHT AND SOLD)

D. D. F. YARD, Investment Securities
120 Broadway, New York.
H. H. Sears, Counsel.

OFFICIAL PROPOSALS

Bids: **July 17.**

Tenders for Water Pipe Line

ESSEX BORDER UTILITIES COMMISSION

Windsor, Ontario.

Sealed tenders addressed to the Secretary of the Commission will be received by the Essex Border Utilities Commission, Heintzman Building, WINDSOR, ONTARIO, up to 4 p.m. on Thursday, 17th of July, 1924, for:

(a) Supplying and laying of approximately 10,000 feet of 42 inch, 36 inch and 24 inch steel pipe or alternately;

(b) Supplying and laying of approximately 10,000 feet of 42 inch, 36 inch and 24 inch reinforced concrete pipe.

(c) Supplying 42 inch, 36 inch and 24 inch flanged valves and air valves.

Plans and specifications can be obtained and further information secured from J. Clark Keith, Chief Engineer of the Commission, Windsor, Ontario, or from Gore, Nasmith & Storrie, Consulting Engineers, 625 Confederation Life Building, Toronto, Ontario.

A cheque for $10 must be submitted before plans and specifications can be obtained for contract (a) or (b) which will be returned on tenders being submitted.

A marked deposit cheque for 5 per cent of the tender sum must accompany all tenders.

The Commission reserves the right to accept any or reject all tenders.

R. B. BRAID, Secretary.

Bids: July 17.

Pumping Station and Water Treatment Plant

Westerville, Ohio.

Sealed proposals for construction of a pumping station and a 0.5 M.G.D. water treatment plant will be received by the Commission of the Village of Westerville, Ohio, at the office of the City Manager until 12 o'clock noon, July 17, 1924, at which time they will be publicly opened and read.

Plans and specifications may be seen at the office of the City Manager, or may be obtained upon depositing ten ($10.00) dollars, five ($5.00) dollars of which will be refunded upon return of the plans on or before the day of the letting.

The Commission reserves the right to reject any or all bids.

RICHARD BIEHL,
City Manager.

Bids; **July 7.**

Paving

White Plains, N. Y., June 11, 1924.

Sealed bids or proposals for the improvement of the following roads with reinforced concrete pavement will be received at the office of the Clerk of the Board of Supervisors, Court House, White Plains, New York, until 10 a.m. (Daylight Saving Time), July 7th, 1924.

County Road No. 22, Lexington Avenue, Village of Mt. Kisco, 0.96 mi.

County Road No. 25, Main Street, Village of Peekskill, 1.03 mi.

Plans, specifications, proposal sheets and all information relative to same may be procured at the office of the County Superintendent of Highways, Court House, White Plains, New York, upon making a deposit of Five dollars ($5.00) for each set of plans.

BOARD OF SUPERVISORS,
FRED L. MERRITT, Clerk.

Hauling Contracts Wanted

Road work, Material Handling, etc. Have several fleets of trucks ready for service anywhere. No job too large. Special equipment for any kind of dump truck hauling or unloading. Unlimited referenes. Glad to estimate.

HAMBRIDGE CONTRACTING CO.
68th and Greenway Ave., Philadelphia, Pa.

EXCAVATION

Steam Shovels for rent with crews or work taken by contract.
Dinkeys and cars or teams furnished.

H. C. AMBLER
3717 Old York Road, Philadelphia, Pa.

OFFICIAL PROPOSALS

Bids: July 3.

Road Improvement

Newton, N. J.

Notice is hereby given that sealed bids will be received by the Board of Chosen Freeholders of the County of Sussex for the improvement of the Tranquility Andover Road in the Township of Green in the County of Sussex with a gravel surface, estimated amount of grading required is 9,887 cu.yds. and estimated amount of gravel pavement required is 42,908 sq.yds., and opened and read in public at the Freeholders Office, Newton, N. J., on July 3, 1924, at 11:30 a.m. Daylight Saving Time.

Drawings, specifications and forms of bid, contract and bond for the proposed work prepared by Harvey Snook, County Engineer and approved by the State Highway Commission, have been filed in the office of the said Engineer at Newton, N. J., and of said Highway Commission, Trenton, N. J., and may be inspected by prospective bidders during business hours. Bidders will be furnished with a copy of the specifications and blue prints of the drawings by the Engineer on proper notice and payment of cost of preparation. Bids must be made on the standard proposal forms in the manner designated therein and required by the specifications, must be enclosed in sealed envelopes, bearing the name and address of the bidder and name of road on the outside, addressed to The Board of Chosen Freeholders of the County of Sussex and must be accompanied by a certificate from the Bonding Company and a certified check for not less than ten (10) per cent of the amount bid, provided said check shall not be less than $500.00 nor more than $20,000.00 and be delivered at the place and on the hours above named. The standard proposal form is attached to the specifications, copies of which will be furnished on application to the Engineer.

By order of The County of Sussex.
(Signed) NORMAN B. ANDERSON,
Clerk.

Bids: July 2.

Pavement, Curb and Storm Sewer

Pine Bluff, Ark.

Ark., Pine Bluff, July 2nd at 11:00 a.m. at Chamber of Commerce. Furnish and place 29,000 sq.yds. reinforced or vibrolithic concrete pavement; 18,000 lin. ft. combination curb and gutter; 6,500 lin. ft. of 12 in. to 30 in. storm sewer. GUEST ENGINEERING COMPANY, Pine Bluff, Engrs. Bonds have been sold and approved.

Bids: July 1.

Concrete Pavement

Pekin, Ill.

Bids desired July 1st at two p.m., at City Clerk's office, improving Court Street with compacted concrete pavement. 12,300 sq.yds., 18 ft. width, 7 in. slab, 3,000 cu. yds. excavation and constructing shoulders. Plans and specifications on file with City Clerk. Certified check for ten per cent of bid required.

EXCAVATION AND GRADING

O. S. HOCH
Allentown, Pa.

We Dig and Refill Trenches

for water, sewer, gas, conduits and drains.

Pipe laid by contract and installation of water systems.

Trench Machines and Backfillers For Rent

W. G. Fritz Co., Inc., *Contractors*
258 Valley Road, West Orange, N. J.

OFFICIAL PROPOSALS

Bids: July 22.

Court House Building Improvement

Norristown, Pa.

Bids will be received by the Controller of Montgomery County, at his office in the Court House, Norristown, Pa., up until 10 o'clock a.m. (Standard time), July 22, 1924, for the Renovation and repairing of the Court House Building, Norristown, Pa., in accordance with plans and specifications on file in the County Commissioners' office.

The Commissioners reserve the right to reject any or all bids.

Checks accompanying proposals must be handed to the Clerk of the County Commissioners, one hour before the time for the opening of bids, which will be done publicly at 11 o'clock a.m. (Standard time), July 22, 1924, in the County Commissioners' office.

WM. C. IRVIN,
Controller.

Railroad Construction, Calumet, Mich.

Calumet, Mich.

Bids are invited at once by the Calumet and Hecla Consolidated Copper Company, Calumet, Michigan, for construction of a single track railroad about 9.3 miles long, near Calumet, Houghton County, Michigan, involving approximately 302,000 cu.yds. earth excavation, 45,000 cu.yds. rock excavation, 247,000 cu.yds. earth borrow, 3,200 cu.yds. concrete, placing 9,000 lineal feet of culvert pipe, 9.3 miles track laying, ballasting and fencing.

U. S. GOVERNMENT

SEALED PROPOSALS will be received by the U. S. Veterans Bureau, Room 791, Arlington Building, Washington, D. C., until 11:00 A.M., July 22, 1924, and then and there publicly opened for the construction of New Bituminous Macadam roads, and resurfacing and patching of existing roads at U. S. Veterans Hospital No. 78, North Little Rock, Arkansas. Proposals will be considered only from individuals, firms, or corporations possessing satisfactory financial and technical ability, equipment and organization to insure speedy completion of the contract and in making awards the records of bidders for expedition and satisfactory performance on contracts of similar character and magnitude will be carefully considered. Drawings and specifications may be obtained upon application to the Construction Division, U. S. Veterans Bureau, Room 791, Arlington Building, Washington, D. C., or to the Medical Officer in Charge, U. S. Veterans Hospital No. 78, North Little Rock, Arkansas. Deposit with application of a check or postal money order for $10, payable to the Treasurer of the United States, is required as security for safe return of drawings and specifications within ten days after date of opening proposals. FRANK T. HINES, Director, June 23, 1924.

TREASURY DEPARTMENT, Supervising Architeet's Office, Washington, D. O., June 20, 1924. SEALED PROPOSALS will be opened in this office at 3 p.m., July 11, 1924, for removing the present boiler, etc., and furnishing and installing one horizontal smokeless fire-box heating boiler, etc., at the United States Post Office, Pontiac, Mich. Drawings and specifications may be obtained from the Custodian, U. S. Post Office, Pontiac, Mich., or from this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 20, 1924.—SEALED PROPOSALS will be opened in this office at 3 P.M., July 21, 1924, for the construction including mechanical equipment and approaches of a (one story brick and tile non-fireproof) Post Office Building (approximately 75 ft. x 51 ft. in size) at Jerseyville, Ill. Drawings and specifications may be obtained from the Custodian of the site at Jerseyville, Ill., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE, Nashville, Tenn. Sealed proposals will be received here until 11 a.m., July 7, 1924, and then opened, for one steel steamboat hull. Further information on application.

U. S. GOVERNMENT

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 16, 1924.—Sealed proposals will be opened in this office at 3 p.m., July 14, 1924, for the construction of a one-story brick and tile non-fireproof Post Office building (61 feet 6 inches by 69 feet) at St. Johnsbury, Vt. Drawings and specifications may be obtained from the Custodian of the site at St. Johnsbury, Vt., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

U. S. ENGINEER OFFICE Florence, Ala. Sealed proposals will be received here until 11 a.m., Aug. 5, 1924, and then opened, for furnishing and erecting a bascuel bridge across the navigation lock of Wilson Dam. Further information on application.

PROPOSALS FOR LEVEE WORK.—Office, Mississippi River Commission, 1st & 2nd Districts, 1006 McCall Building, Memphis, Tenn.—Sealed proposals will be received here until 11 a.m., July 8, 1924, and then opened, for constructing about 5,315,000 cubic yards of earthwork in the Upper and Lower St. Francis, Reelfoot and White River Levee Districts. Further information on application.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., June 16, 1924.—Sealed proposals will be opened in this office at 3 p.m., July 15, 1924, for the construction of a one-story brick nonfireproof Post Office building, approximately 75 by 50 feet in size, at Waterloo, N. Y. Drawings and specifications may be obtained from the Custodian of the site at Waterloo, N. Y., or at this office in the discretion of the Supervising Architect. Jas. A. Wetmore, Acting Supervising Architect.

UNITED STATES ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2:00 p.m., central time, July 24, 1924, and then opened, for furnishing and delivering approximately 750 tons of Hydrated Lime for Dams Nos. 44, 45 and 46, Ohio River. Further information on application.

UNITED STATES ENGINEER OFFICE, P. O. Box 72, Louisville, Ky. Sealed proposals will be received here until 2:00 p.m., central time, July 22, 1924, and then opened, for furnishing and delivering Structural Steel, Castings, etc., for Locks Nos. 49 and 50, Ohio River. Further information on application.

EMPLOYMENT

POSITIONS VACANT

DRAFTSMAN—Experienced man on gas works design. Write giving outline of experience, salary expected and time available. All correspondence confidential. P-209, Engineering News-Record, 10th Ave. at 36th St., New York.

EXPERIENCED structural detailers wanted. Single men preferred. Only experienced men need apply. Application should give telegraphic address. State experience and accompany sample drawing of work. State salary desired. Address Box 654, Havana, Cuba.

EXPERIENCED engineer and estimator on building construction of all kinds, familiar with work in the vicinity of Newark, N. J. Reply stating experience, reference and salary expected. P-250, Eng. News-Record, 10th Ave. at 36th St., N. Y.

FOREMEN and subforemen wanted immediately for construction work on large dam. Experienced men capable of handling crews of concrete, form and steel workers, riggers, mechanics, and common labor. Apply by letter to Consumers Power Company, Qoline Dam, Mesick, Michigan.

GRADUATE engineer wanted to teach mechanics and assist in testing laboratory; teaching experience desired. Box 483, State College, Pa.

MAP draftsman, for tax maps, experience, neatness, accuracy and speed essential. Location, Eastern Ohio. Submit samples of work and state salary. P-240, Eng. News-Record, Leader-News Bldg., Cleveland, O.

ONE assistant engineer and two instrument men with highway construction experience wanted. Apply J. R. Hunt, Road Engineer, Williamson, W. Va.

RESIDENT engineers on highway construction, salaries $180 to $200 per month. State age, education, experience and references first letter. R. D. Jordan, Div. Engr. State Highway Commission, Selma, Alabama.

REINFORCED concrete designing engineer wanted. Must have executive ability and be accustomed to handle a drafting room. Location Japan. Requirements are thorough technical training of at least five years, two of which should include executive experience, in charge of design. Application must state age, experience, nationality, habits, and whether married or single. References required, preferably from previous employers. No application will be considered that fails to follow above instructions exactly. Wanted also a reinforced concrete engineer with sales experience for Rangoon, Burma. Submit same information as above. Truscon Steel Co., Youngstown, Ohio.

SEVERAL experienced draftsmen on stairs, elevator inclosures, marquise, and and the general line of ornamental iron work wanted. In replying state experience and salary expected. Address Richmond Structural Steel Company, Inc., Richmond, Va.

Learn Estimating and Construction Management

through practical spare time study course. Full particulars and first lessons sent for free examination.

TYREAN INSTITUTE
15 Grove St., Palmer, Mass.

SEVERAL detailers and checkers experienced on shop drawings for structural steel work. Excellent opportunity for first-class men. Whitehead & Kales Co., Detroit, Mich.

STRUCTURAL steel detailers and checkers wanted. Only experienced men need apply. J. Cutler Iron Works Inc., 95 Lombardy St., Brooklyn, N. Y.

STRUCTURAL steel detailer and checker, experienced in building work. State in application age, nationality, education, experience, references, salary expected, and date available. The James H. Tower Iron Works, Providence, R. I.

STRUCTURAL steel and railroad bridge draftsmen wanted. State age, nationality, education, experience in full, salary expected and the date you can report for work. Address P. G. Lang, Jr., Engineer of Bridges, Baltimore and Ohio Railroad Company, Baltimore, Md.

SURVEYOR with actual experience in sectionizing, subdividing and city lot surveying. Permanent position at good salary for registered surveyor who has been in business for himself in Chicago district. James Anderson Company, Lake Forest, Ill.

WORKING sub-foremen capable of sheathing, excavating and concreting small foot bridge abutments and building dry retaining walls. Wages $6.00 to $7.00 per day. Apply by letter or in person to Superintendent, Bronx Parkway Commission, Bronxville, N. Y.

EMPLOYMENT AGENCIES

GENERAL Engineering Agency, Allegheny Building, Pittsburgh, require proposals for transcontinental connections, Boston, New York, Philadelphia, Birmingham, St. Louis, Detroit, etc. Mechanical superintendents, production, power, electrical divisions. Master mechanics, plant draftsmen, chemists, for architectural, structural; office, shop and field work. Office structures, factory buildings, automotive, steel, mining, smelting and chemical industries. Chief draftsmen, checkers, detailers, sixty bonafide topographical map or constructional draftsmen for highways, railways. Assistant City Engineers, small cities. Professors, instructors, teachers for colleges, high schools. Latin-American connections. Commission, 3 per cent. Employers served freely.

WANTED immediately: Bridge designer, middle west, $185; chief of party, highway work, south, $175 and expenses; structural and field engineer, speak Spanish, Mexico, $200, transportation; structural draftsman, Texas, $175; highway draftsman, east, $150; highway instrumentman, east, $100 and expenses; instructor in C. E. and director athletics, $2,400; concrete highway inspector, $150. Apply Business Mens Clearing House, Denver, Colorado.

EMPLOYMENT SERVICE

SALARIED men seeking tentative offers of new connections, are invited to communicate confidentially with the undersigned, who will negotiate overtures without jeopardy to present connections. A professional, ethical service, restricted to high grade positions; established 1910. Retaining fee refunded as provided in our "Refund Contract" if service is not satisfactorily rendered as per contract, and such refund be requested within three months from date remitted. Send name and address only for particulars. R. W. Bixby, Inc., 701 Lockwood Building, Buffalo, New York.

SPECIALIZED SERVICE

for placement of men with technical training for all branches of manufacturing, commercial and engineering lines, negotiations strictly confidential, no advance obligations required. Many thousands of satisfied clients can testify as to the merit of our eighteen years of service.

INTERSTATE EXCHANGE
658 Rose Bldg., Cleveland, O.

***Wilson Courses* (by mail)**

Called the most "Practical Courses" in existence. The courses called by students "Men Makers. With just sufficient theory to make the practice work *understandable.* No re-hashing of college work: We aim to help you apply your college taught theory in the most interesting manner possible. The price of such a course should not hold any ambitious man from subscribing because the difference in salary will quickly cover the item; we have found this to be true in all cases where the student was in earnest. IMMEDIATE promotion upon acquisition of more earning power, following a period of studying our courses. Wilson trained men are finding it easier to secure and hold positions.
Send for our literature and learn WHY. It IS FREE.

Courses are
Reinforced Concrete Engineering,
Structural Steel Designing, Estimating, Drafting
Bridge Design, Estimating
Concrete Drafting and Estimating

Preparatory course for men who lack a technical education, leads right into the higher courses. Write NOW:

Wilson Engineering Corporation
College House Offices, Harvard Sq., CAMBRIDGE, MASS.

EMPLOYMENT

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E.N R.

EMPLOYMENT SERVICE

THE Employment Division, Oregon Chapter, American Association of Engineers offers a service whereby the qualifications of competent engineers are placed before employers of California and the Pacific Northwest. Let us tell you about it. Employment Division, Oregon Chapter, A.A.E., 612-13 Couch Building, Portland, Oregon.

EXECUTIVES, engineers, $3,000-$25,000, will find our individual, confidential service an effective medium in making new connections. Personally conducted by Mr. Jacob Penn, the eminent employment authority, known to leading business men throughout America. Our refund agreement protects you. Not employment agency. Jacob Penn, Inc., 305 Broadway, New York.

EXECUTIVES, engineers and other qualified men whose salary requirements are over $2,500 per year, find our confidential direct service to specific employers extremely satisfactory. An inquiry entails no obligation. The National Business Bourse, Inc., H. H. Harrison, President, Association Building, Chicago.

POSITIONS WANTED

Civil Engineers

BY graduate W. P. I., civil engineering, age 28, married. Seven years' field and office experience all phases of hydro-electric development. Available at once. PW-230, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL engineer, age 30, university graduate. Six years' experience in railroad maintenance work. Desires permanent connection with a railroad where ability and hard work is required. PW-70, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

CIVIL engineer with thirty years' contractor's experience in structural steel, reinforced concrete and general building construction, would purchase interest in firm in Piedmont section of Virginia. PW-257, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL engineer, graduate, 15 years' experience; design construction, sewers, railroads, subways; power and industrial plants; hydro-electric development. PW-256, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL engineer, structural fitter and inspector. Plant engineer experience. Young, married. Desires change. West preferred. PW-245, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS WANTED

CIVIL engineer, Dane, 23, graduated from Royal Technical College, Copenhagen, with one year's experience as draftsman in structural steel, and some experience as surveyor. Knud B. Nielsen, 1160 Hoe Ave., Bronx, N. Y.

CIVIL engineer, age 27, 5 years' varied experience, highway, tunnel and mine surveys; designing, detailing and estimating steel and reinforced concrete structures, desires position with engineer or contractor. PW-249, Eng. News-Record, 10th Ave. at 36th St., New York.

CIVIL engineer, graduate, ten years' experience, surveys and reinforced concrete design, desires position. Anything considered, railroad or state highway department preferred. PW-237, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

CIVIL engineer with fifteen years' experience as general superintendent and field engineer building steel tower transmission lines and converting steam operated railways to electric with modern construction, is open for position. PW-229, Eng. News-Record, 10th Ave. at 36th St., New York.

EXPERIENCED civil engineering graduates, now on engineering staff of prominent reinforcing bar company. Will design, detail reinforced concrete. Structural details all types concrete buildings especially. PW-238, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

GRADUATE civil engineer, age 38, married, wants permanent position. South or Southwest preferred. 8 years' experience in city work, estimates, design, layout and supervision of sewers, pavements and waterworks, sub-division planning and computation. Heavy mill foundations. References. Available immediately. PW-235, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

GRADUATE civil engineer, age 28, six years' field and office experience in construction and design of industrial and office buildings. Capable designing engineer, construction superintendent or field engineer. Location immaterial. Now employed, report on short notice. PW-233, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

PLANT engineer, graduate civil and mechanical, age 28, single. Six years' field and office experience in design, layout and construction of industrial plants and equipment. Location immaterial. Now employed, report on short notice. Salary $260. PW-234, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

POSITIONS WANTED

RAILWAY civil engineer; Cornell graduate, Assoc. M. Am. Soc. C.E., age thirty-three years, single; six years' experience with same company on railway maintenance and construction work, with field and office duties, including one year of bridge design. References. Permanent position desired offering good opportunity for advancement with railroad or contractor. PW-255, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

SITUATION as assistant city engineer in a growing Western city desired by a young municipal engineer who can deliver the goods. A skilled draftsman. Salary $175. Write PW-216, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

UNIVERSITY connection desired by graduate civil engineer. Two years' graduate work at leading university. Twelve years' varied civil engineering experience in practice and teaching. Available this Fall. PW-236, Eng. News-Record, 10th Ave. at 36th St., New York.

Drafting and Designing

DRAFTSMAN and field man, 22, single. Transitman on extensive surveys; draftsman on mapping and large structures. Computor. Foreign experience. Foreign service preferred. Available after June. PW-66, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

REINFORCED concrete designer; graduate engineer, 12 years' experience office, mill buildings, power stations, etc. Field experience. Location New York City. $60. PW-262, Eng. News-Record, Tenth Ave. at 36th St. N. Y.

Mechanical and Electrical

MECHANICAL structural engineer, technical education; fifteen years' experience design, construction, maintenance, sales; responsible charge of work. PW-39, Engineering News-Record, 10th Ave. at 36th St., New York.

Estimators

ESTIMATOR-Superintendent: Graduate engineer. Twelve years' experience with large contractor in executive, estimating organizing, superintending and office management. Age 34, married. Salary $350. G. G. Jones, 610 Court St., Fort Worth, Texas.

EXPERIENCED, reliable building estimator and manager, having excellent record, wishes offers from sound established contracting firms. PW-201, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

STOP *Feeding Your Men!*

We operate boarding camps anywhere.

Laborers furnished free where we conduct commissaries.

No need for you to bother with the details of housing and feeding the gang. Forget it. It's just another burden for you, but

It's Our Business

We have been boarding men on large out-of-the-way construction jobs for 20 years in all parts of the United States and Canada—and under all conditions. We know the needs and all the little details in connection with such camps that keep labor contented and on the job. It will pay you to turn your labor problem over to us.

Central Boarding & Supply Company
Coca Cola Building, Kansas City, Mo.

Gen'l Superintendent

Structural Steel Fabricating Shop can furnished first class reference, employed at present. Age 32. Good organizer and can get results. Will go any place and consider a moderate salary.

PW-241, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

TECHNICAL GRADUATE

Mem. Am. Soc. C. E.

Twenty years' broad experience field engineering and construction for owners and for contractors. Hydro-electric developments, reinforced concrete, heavy cofferdams. Expert in pressure grouting. Open to temporary or permanent connection.

PW-170 Eng. News-Record,
Real Estate Trust Bldg., Philadelphia, Pa.

POSITIONS WANTED

Instructors

ASSISTANT professor, civil engineer. Assoc. M. A.S.C.E. Licensed engineer. Ten years' practical experience, three teaching, on staff technical college, desires change. PW-251, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

TEACHING, position as assistant professor or equivalent desired by civil engineering graduate, class 1917, age 28. 2 years in 25th Engrs., U. S. Army, on varied construction work in France. 1½ years instructor in mathematics and surveying, followed by 2 years teaching statics, kinetics and strength of materials. Past year as structural steel draftsman. PW-260, Eng. News-Record, 10th Ave. at 36th St., New York.

Superintendents

CONTRACTOR'S superintendent and engineer, available July 1st. Age 42. Experienced in water works, dams, sewers, subways, foundations, underpinning and general construction work. A-1 reputation and a thorough knowledge of the contracting business. Location immaterial. PW-173, Eng. New-Record, 10th Ave. at 36th St., New York.

GRADING superintendent wants position, earth, rock, general grading experience. American, age 40. PW-191, Eng. News-Record, 10th Ave. at 36th St., New York.

HIGHWAY construction superintendent, fifteen years' experience, best of credentials to ability and character; complete organization ready, particularly competent to handle the job in all details. Available immediately, PW-95, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

HIGHWAY and municipal engineer, construction superintendent, twelve years' practical experience, eight years responsible charge street, road, sewer construction of all types; executive ability; capable of handling all details for contractor —office, field, purchase, handling subcontractors; location immaterial; at present in complete charge road construction in South; salary $325. PW-223, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

SUPERINTENDENT of construction; first-class executive; have had responsible charge of large projects for years; first-class references and following; experienced on building, industrial plant, filtration plants, deep foundation work and power house construction. PW-175, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT, wanted position as superintendent, or general superintendent. Have been general superintendent on highway paving and construction for the past five years with one firm, have always produced satisfactory results. Will accept nominal salary and percentage, making up own estimates. Address PW-179, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

SUPERINTENDENT, erection, ornamental, 25 years' experience take measurements, estimate costs; go anywhere. PW-247, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT, experienced in asphalt, asphaltic concrete paving, curb, gutters, grading, asphalt plant. Married. Now employed; change desired account climate. PW-239, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT, general foreman; whole life practical experience, carpenter by trade, 20 years in charge various different projects, all classes concrete, buildings, foundations, piers, coffer dams, bridges, water lines and sewers. PW-244, Eng. News-Record, 10th Ave. at 36th St., New York.

SUPERINTENDENT of highway construction; an old timer and a live one. A practical road contractors man, that has worked his way up from waterboy to superintendent, possessing common sense and the qualifications that bring results. Experienced in New York State, New Jersey, Pennsylvania, Ohio, West Virginia and Kentucky. Available immediately. Get busy. Speak quick. PW-231, Eng. News-Record, 10th Ave. at 36th St., New York.

POSITIONS WANTED

SUPERINTENDENT desires engagement, long experience, railroad, bridge foundation, tunnels, sewerage, water supply, concrete, crushing plant, heavy excavations, rock excavation and steam shovel operations. Available; location anywhere. References. PW-259, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

Surveyor

INSTRUMENTMAN on highway location desires permanent position; five years' experience; minimum salary $125 and expenses; available immediately. PW-263, Eng. News-Record, Leader-News Bldg., Cleveland, Ohio.

Miscellaneous

CIVIL - mechanical engineer, graduate; thorough business training; capable executive; age 37; broad power, hydraulic and industrial plant experience with well-known organizations—design, construction and management. PW-221, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

FOREMAN, experienced, with great followers of Italian, Spanish, Portuguese and Slavonian laborers, desires position with or without men. PW-226, Eng. News-Record, 10th Ave. at 36th St., New York.

FOREMAN, experienced sewers, water, roads, concrete, general excavation. Matthews, 15 Park Row, Room 628, Phone Barclay, 8143 or Barclay 8176.

GENERAL foreman, 37; eighteen years' experience which includes land development, tunnels, subway, sewers, power houses, industrial plants and oil refineries. Capable of getting results economically. Willing to go anywhere. PW-253, Eng. News-Record, 10th Ave. at 36th St., New York.

GRADUATE engineer, single, age 26, four years' experience highway, sewer and municipal engineering. PW-225, Eng. News-Record, Leader-News Bldg., Cleveland, O.

GRADUATE engineer, 20 years railroad location, construction, investigations. 4 years South America. PW-258, Eng. News-Record, 10th Ave. at 36th St., New York.

HIGHWAY engineer with eleven years experience in the location, design and construction of penetration macadam, bituminous concrete, sheet asphalt, plain and reinforced concrete roads and streets as resident engineer and superintendent wishes to make a connection with a state highway department, consulting highway engineer or paving contractor. PW-192, Eng. News-Record, Real Estate Trust Bldg., Phila., Pa.

INDUSTRIAL engineer, mechanical, 32, sixteen years' experience, building construction, general plant maintenance, rolling mill, special equipment, purchasing, installations supervision, designing, technical; original; present executive capacity. Desires connection assistant or executive. PW-153, Engineering News-Record, 10th Ave. at 36th St., New York.

OFFICE manager or timekeeper. Seven years' experience with large contractor, on highway work in Pennsylvania and tunnel construction; age 30; married; best of reference; available immediately. PW-162, Engineering News-Record, Old Colony Bldg., Chicago, Ill.

STENOGRAPHER typist (female), desires evening or home work. Experienced engineering, legal, commercial. PW-252, Eng. News-Record, 10th Ave. at 36th St., New York.

EVENING WORK WANTED

EVENING work, experienced draftsman, technical graduate wants evening work, mechanical, structural or topographical drafting, computations or designs. EW-254, Eng. News-Record, 10th Ave. at 36th St., New York.

WORK WANTED

Designing, Detailing Checking

For structural steel and reinforced concrete. Industrial, mechanical, structural engineering. Shop drawings. Central States Engineering Company, 28 East Jackson Boulevard, Chicago, Ill.

Typewriting and Duplicating

Specifications, proposals, bills of material, etc., expertly typewritten and duplicated. Low rates. Write for free sample and particulars. S. L. Stevenson, 5512 Thompson St., Phila., Pa.

SALESMEN WANTED

Steam Shovel Salesman

with several years' successful selling experience and with intimate knowledge of standard machines as well as knowledge of sales possibilities in various sections of the country. Write fully giving summary of work during past five years, references, state salary or commissions desired. All correspondence will be kept confidentially. SW-154, Engineering News-Record, Leader-News Bldg., Cleveland, Ohio.

SALESMEN AVAILABLE

DEVELOPMENT, publicity, technical service, and sales engineering; academic and technical education and 15 years' experience in materials engineering and allied professional work; now engaged New York, removing to West Coast about August 1st, headquarters Seattle, branch connections San Francisco, Los Angeles, Canadian Northwest and Orient; your immediate correspondence invited. SA-261, Eng. News-Record, Tenth Ave. at 36th St., N. Y.

ENGINEER-salesman—Graduate engineer, experienced designer, estimator and executive, desires position with a reliable manufacturer or business concern as salesman or office assistant where a knowledge of engineering would be helpful; references. SA-222, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

GRADUATE mechanical engineer, structural draftsman and estimator. Desires sales position west of Chicago. Young, married. SA-246, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

SALES, technical graduate, 29, married, 3 years' construction and design, 3 years' sales; present employed. SA-147, Engineering News-Record, 10th Ave. at 36th St., New York.

PATENT ATTORNEY

PATENTS — Send for form "Evidence of Conception" to be signed and witnessed. Form fee schedule, information, free. Lancaster and Allwine, 272 Ouray Bldg., Washington, D. C.

EDUCATIONAL

Private Practical Instruction

Arithmetic, Algebra, Geometry, Trigonometry, Calculus, Engineering, Draughting, Designing, Architectural, Mechanical, Topographical, Structural, Surveying. Thorough preparation for Colleges, Technical institutions, Civil Service Engineering examinations, Axeman, Rod man, Transitmen, Inspectors, Highways, Sewers, Paving, Masonry, Engineering. L. Mondell, C. E., 50 East 42nd St., N. Y.

BUSINESS OPPORTUNITIES

Contractor

I wish to get in touch with a small contractor who would like to associate with a young civil engineer having a knowledge of accounting and willing to invest a small amount in the business. BO-213, Engineering News-Record, 10th Ave. at 36th St., New York.

Wanted

Well-equipped middle sized machine shop, preferably located in Middle West, for manufacturing patented pulp and paper machinery; acquiring financial interest preferred. BO-232, Eng. News-Record, 10th Ave. at 36th St., New York.

WANTED

Wanted

Several modern used transits and levels, best makes. Name lowest cash price, make, equipment and condition. W-248, Eng. News-Record, Old Colony Bldg., Chicago, Ill.

SALESMAN WANTED

Salesman in Chicago territory to handle a well established, well advertised drafting room necessity. Knowledge of drafting desirable. Give references in application.

AS-228, Engineering News-Record
Leader-News Bldg., Cleveland, Ohio.

GROTON IRON WORKS

The entire plant of the Groton Iron Works, Groton, (New London) Conn. has been purchased by us and is now to be offered for sale, including all real estate, buildings, equipment and material. This plant, modern in every respect —was formerly operated by the U. S. Shipping Board Emergency Fleet Corporation. It occupies 34 acres of land with over 1800 ft. frontage on New London Harbor. Extensive wharves and switch tracks on the New York, New Haven and Hartford Railroad provide unusual shipping facilities. There are 15 buildings providing in excess of 200,000 sq. ft. of manufacturing space. The equipment is all in surprisingly good condition, owing to the fact that it has had very little use, and almost endless variety of machinery is available. Among the principal items are:

Cranes, Overhead Gantry and Jib
Fabricating Shop Equipment
Machine Shop Equipment
Pipe Shop Equipment
Blacksmith Shop Equipment
Joiner Shop Equipment
Electrical Equipment
Hoists, Elec., Steam and Shepard
Transformers, 15 to 667 K.V.A.
Pipe, Great Quantity
Motors 1 to 75 H.P.
Pneumatic Tools
Power Plant Equipment
Switch Board Equipment
Automobile Trucks
Yard Equipment
Pumps
Contractors' Tools

LOCOMOTIVE CRANES

McMyler Locomotive Crane, 8 wheel, 15 ton, 45 ft. boom, fully equipped, manufactured by McMyler Interstate Co., Cleveland, No. 3108.
Same as above—No. 3078.
Same as above—No. 3079.

FLAT CARS

3 Flat Cars, Std. Ga. 50,000 lb. cap., length 36 ft. 10 in.

LOCOMOTIVES

1 Std. Ga. steam 4-wheel, saddle tank, No. 54463, manufactured by Montreal Locomotive Works.

All of this equipment can be bought at very reasonable prices for quick sale. If you have a present need, learn at once what is offered here. It may mean a substantial saving for you. Communicate with us for complete itemized list and prices.

GROTON IRON LIQUIDATING CO.

Groton (New London) Conn.

WILL LEASE

Water Power Dam Site

at Kellys Ford, Va., 58 miles from Washington, 10 to 1500 hp. Preliminary work 40% completed. Land owned on each side of Rappahannock River reaching to Brandy Station. Factory sites at Remington, two miles. Factory sites at Southern Railroad Station and switch suitable for pulp mill, chemical factory, furniture factory or hotel. All kinds of timber. I also own valuable mines adjoining Rappahannock River—cobalt, radium, molybdenum, gold and feldspar. Large mill with machinery and assay office on mines. Also own Culpepper, Va. gold mine—678 acres, 25 ft. fall on Rappidam River. Old dam on mine.

JESSIE I. STEVENS
9 Atlantic Ave., Seagate, Coney Island, N. Y.
Phone: Coney Island 0888.

FOR RENT

Engines
Boilers
Pumps
Hoisters
Air Compressors
Locomotive Cranes

Marvin Briggs, Inc.
167 Sixth St., Brooklyn, N. Y.

Second-Hand Transits and Levels

Guaranteed in Good Order and Adjustment
Write for New Bargain List
WILLIAMS, BROWN & EARLE, INC.
918 Chestnut St., Philadelphia, Pa.
Department D

For Sale or Lease

Crushing Plant and Quarry

Complete. 145 acres—Green Stone—On W. M. R. R. near Gettysburg, Pa. 300-hp. steam power plant. Two gyratories—5 rolls—9 screens—storage bins. In shape ready to go. Will sell whole or part. Bargain for prompt action. Completely equipped for production of stucco or roofing granules.

Sheldon Slate Products Company
Granville, New York.

FOR RENT

½-yd. **Erie Shovel,** with crane boom attachment, Massachusetts standard boiler. Traction wheel.

14-E **Rex Paver,** almost new. Just overhauled. This machine made State record for rapidity.

FOR SALE

No. 6 **Keystone Shovel,** Massachusetts Boiler, recently installed. $1000 worth parts. Ready-to work. $2000 and a bargain.

FRED T. LEY & CO., Inc.
Springfield, Massachusetts.
Phone: River 4160.

LARGEST STOCK OF USED SURVEYING INSTRUMENTS IN THIS COUNTRY

Satisfaction guaranteed or money refunded. Write for complete list and catalogue of our high grade instruments and supplies for civil engineers, surveyors, mining, builders, contractors, etc.; 40 years' experience in repairing instruments of all makes at reasonable prices. Prompt service.

WISSLER INSTRUMENT CO
607 N. Broadway, St. Louis, Mo.

PROPOSALS WANTED

Purchase of Old Cummer Paving Plant

Notice is hereby given that sealed proposals, bearing the number (6298) of the bid and endorsed with the name of the bidder and the date of presentation, will be received at the office of the Purchasing Agent, at the City Hall, Saint Paul, Minnesota, until 2:00 P.M., Tuesday, July 1, 1924, for the purchase of an old Cummer Paving Plant, belonging to the Department of Public Works.

A bond in the sum of 10 per cent of the amount bid with two sureties, residents of the city of St. Paul, or a Surety Company bond in the same amount, or a certified check for ten per cent of the amount bid, must accompany each proposal as surety for the making and execution of a contract. Bidders having a general bond covering all bids on file in the office of the Purchasing Agent must so state on their bid.

The city reserves the right to reject any or all bids, or any part thereof.

Bids are to be submitted in duplicate upon the regular proposal blank, which may be obtained upon request in the office of the Purchasing Agent, and are subject to the conditions stated thereon. All bids will be opened in public, at the time above stated, by the Purchasing Agent, in the presence of the Purchasing Committee.

H. W. AUSTIN,
Purchasing Agent.

FOR SALE

Used Transits and Levels

BUFF, 46 Dey St., New York.

LUMBER AND TIMBER

50 carloads for immediate shipment. Mostly 12x12, in 10 ft. to 30 ft. lengths. Also about 100,000 ft. of 6x8 to 3x12. All heart L.L.Y.P., sound and clean.

Priced Right for Quick Sale

The Atlantic Wrecking Co.
Curtis Bay, Baltimore, Md.

Equipment For Sale

1—Bucyrus, Class 24, Dragline, 100-ft. boom, 3½-yd. Page bucket.
1—1250 yd. Iroquois Asphalt Plant.
1—Foote 21E Paver-Chute Discharge.
2—14-E Pavers.
3000 ft. of 8-in. Metaforms.
1—10-ton, 3-wheel Huber Roller-Scarifier.
1—9-ton and 1—10-ton Tandem Rollers.
1—No. 5 Allis-Chalmers Rock Crushing Plant and Building. (Bargain).
½-yd., ¾-yd., 1-yd. Slack Line Gravel Excavating Plants.
2—Traveling Derrick Outfits.

Carl Dunning Supply Company
825 Lemcke Bldg., Indianapolis, Ind.

CLARK TRUCTRACTORS

4—Clark Tructractors with one-yard dump bodies.

Price $2000 f.o.b cars Chicago.

Robert R. Anderson Co.
625 No. Kedzie Ave., Chicago, Ill.

Philadelphia's Most Extensive Stock of Used Contractor's Equipment

Hoisting Engines, Air Compressors, Pumps, Concrete Mixers, Rock Crushers, Buckets, Engines, Boilers, Motors, Etc.

A large and varied stock to select from at surprisingly low prices.

L. F. Seyfert's Sons, Inc.
Machinery Merchants Since 1878.
437 N. Third St., Philadelphia, Pa.

WATER WORKS EQUIPMENT

17—New Roberts filter tubs, 17 ft. dia. x 7 ft. depth, capacity each 454 gallons per minute.
48—Used tubs, same as above.
5—14-in. Class B Worthington double suction enclosed impeller (volute) centrifugal pumps 16 in. suction 14 in. discharge.
3—Allis-Chalmers 14 in. Type S Centrifugal pumps.
6—Allis-Chalmers 16 in. Type S Centrifugal pumps.

Write for Bulletin No. 22, Waterworks Equipment.

NASHVILLE INDUSTRIAL CORP.
Old Hickory, Tennessee

FOR SALE

Marsh-Capron Mixer

No. 0-¼-yd Rebuilt, complete with gasoline engine, hopper, water tank, etc. on wheels, good as new. *$600 f.o.b., N. Y.*

J. R. WEMLINGER & CO. INC.
149 Broadway, New York.

FOR SALE

DUMP BUCKETS

20—1½-yd. **Controllable Bottom Dump Buckets**, suitable for either concrete or dirt.

RENNOLDS EQUIPMENT CO.
719 Fisher Bldg., Chicago, Ill.
Harrison 2014.

VALVES AND FITTINGS

15—Carload Crane, Chapman, and Walworth valves and fittings, 2 to 16-in.

An Opportunity to Buy Cheap.

NASHVILLE INDUSTRIAL CORPORATION
Old Hickory, Tennessee

FOR SALE

14E Koehring—E. & B. Boom—Rubber Tires.
21E Ransome—E. & B.—Boom—Full Cats.

Subject to inspection any time.

JOHNSON & DEALAMAN
45 Clinton St., Newark, N. J.

TO HELP YOU

SELL USED EQUIPMENT

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G-2

WANTED

WANTED

Stiff Leg Derrick—50 to 60-ft. Boom.

3-Drum Hoist and Boiler.

¾-yd. Clam Shell.

Frissell-Claeys Co. Inc.
Port Jervis, N. Y.

WANTED

6 Cu. Yd. Std. Gauge

DUMP CARS

Must be in good condition and handy for inspection.

E. R. MILLER, Boonville, N. Y.

PUMPS WANTED

Outside end packed duplex pot valve, bronze plunger steam pumps. All sizes.

WICKES MACHINERY CO.
Claremont and West Side Aves.,
Jersey City, N. J.

WANTED

SHEET STEEL PILING

For Hydro Electric Project. 13 to 19 ft. lengths. Also longer piles suitable cutting these lengths.

W-180, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

WANTED

STEEL PILING

any part of
180 piles about 25-30 ft.
360 piles about 40-45 ft.
12 Corner piles.

W-182, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

WANTED IMMEDIATELY

20—4-yd. 36-in. ga. **Dump Cars.**
2—14 or 18-ton, 36-in. ga. **Locomotives.**
1—1½-yd. cat. **Steam Shovel.**
1—**Cat. Gas Crane.**

W-243, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

WANTED

18 Ton 36 in. Gage Saddle Tank Dinkey

Not over 10 years old. Prefer Vulcan.

W-242, Engineering News-Record
1570 Old Colony Bldg., Chicago, Ill.

WANTED

Orange Peel Bucket

1½-yd. Hayward, 3 blade heavy type.

Good condition.

W-227, Engineering News-Record
10th Ave. at 36th St., New York City.

WANTED

LOCOMOTIVE CRANE

On 4 or 8 wheels, with double drums. Also ½-yd. Clamshell Bucket.

BOX 842, NORFOLK, VA.

WANTED

LOCOMOTIVE CRANES

1—40-ton; 1—30-ton, with 70-ft. booms. Late Model.

FRAZIER-DAVIS CONST. CO.
Arcade Building, St. Louis, Mo.

TO HELP YOU

GET WHATEVER YOU NEED

"Searchlight" Advertising

G-4

USED EQUIPMENT

AND NEW, OFFERED FOR RE-SALE

Space for these advertisements is sold by the advertising inch—30 inches to a page. The price per inch is based on total space used—multiply ad space by number of insertions.

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RATES FOR LARGER SPACES, OR SPACE ON A YEARLY BASIS, FURNISHED ON REQUEST.

E. N.-R.

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1—Model 70 Marion. Shop No. 2693, 3-yd. dipper.
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1—10x16 Baldwin Dinkey. Shop No. 34550. Weight 18 tons.
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1—10x16 Davenport 18-ton Dinkey. Shop No. 1026. British Columbia boiler.
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1—Type O Thew, traction wheels with ⅝-yd. dipper—shipper shaft.

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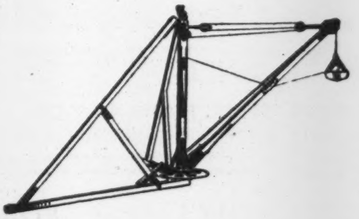

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Marion 37, 36, 32, 30, 28 and 21 Tract. and Cats.
Osgood 18 Tract. and Cats.
Marion 20, 40, 41, 60, 90, 100, R.R. Type.
Bucyrus 70-C R.R. Type.
No. 0 Thew, Model 36 Marion Electrics.
1—22-ft. Erie B. Dipper Handle.

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16—3-yd. 36-in. G. Western Wood Beam.
16—3-yd. 36-in. G. K. & J. Wood Beam.
9—3-yd. 36-in. G. Continental Wood Beam.
8—1½-yd. 24-in. G. Koppel V-Shape Steel.
5—1½-yd. 24-in. G. Western Rotary.
4—1½-yd. 24-in. G. Western two-way Dump.

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1—10x16-18 ton 36-in. G. Porter (New).
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1—1000-ft. span, Lenher Engineering Co., 3-ton stationary, complete with 9x10 Mead-Morrison DD DC skeleton steam hoist.

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30—"U" shaped Koppel 35 cu.ft. concrete cars 30-in. gauge.
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1—Stiff legged Derrick complete with boom 15x13 in.x65 ft. lg., mast 15 in.x35 ft. lg., bull wheel 14 ft. diam.

LOCOMOTIVE CRANE

1—12-ton 8-wheel standard gauge Osgood with 40-ft. boom.

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4—4-ton 30-in. gauge Whitcomb elec. storage battery, complete, batteries.
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2—5x8 Worthington Triplex Plungers with motor base.
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4—7½x5x6 Worthington Duplex piston pattern.
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2—No. 7 Improved **Pulsometer Pumps,** complete. Nos. 70151-70164.

12—Skeleton Frame **Flat Cars,** 24-in. gauge, approximately 5 ft. long over end sills, with center spacer and end stop to take two of the Batch Boxes specified below.

24—Steel **Batch Boxes,** inside dimensions 3 ft. 6 in. long, 2 ft. 0 in. wide, 2 ft. 9 in. deep, made of 1/8-in. plate, with flat bar stiffener around top, cast steel trunions, and reinforcing plate placed between trunion and end of box.

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6—**Rocker Dump Cars,** 27 cu.ft. capacity, 24-in. track gauge, equipped with spring draft rigging, and link and pin coupler, and with twin spring pedestal roller bearings.

4—**Rocker Dump Cars,** same specifications as above, and also equipped with brake acting on all four wheels.

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Quantity of 60 lb. and 65 lb. **Rail.**

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1—"Lidgerwood" Class "B," Steam Dragline Excavator, mounted on four double flanged wheels. Boom is 60-ft. with 15-ft. extension and handles 1½-yd. or 2-yd. bucket.
1—"Marion" Model 21 Dragline Excavator and Crane, mounted on caterpillars; 32-ft. boom, ¾-yd. bucket, entire drag or clam shell.

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2—Weinman steam-driven automatic.
1—Dean, 7½x5x6.
1—Cameron steam piston, 7x6x7.
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1—10-TON HUBER STEAM TRACTOR

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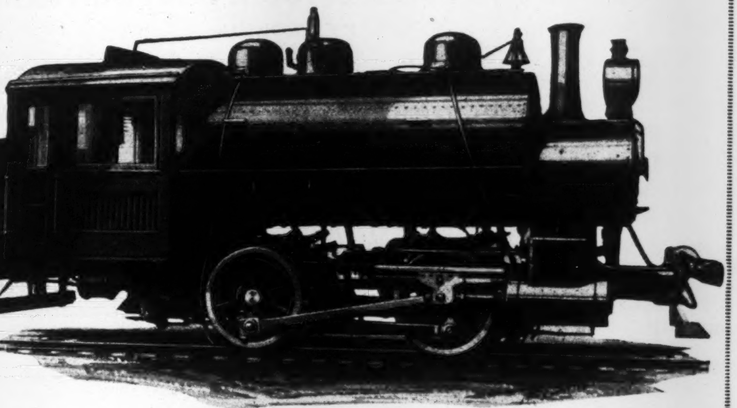

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12-ton, 36-in. ga. Porter, 9x14 cyls.
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1—63 ton, 2-6-0, Mogul type, American. Recently this locomotive was thoroughly overhauled and has passed I.C.C. inspection.

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1200 lin.ft. 7-in. Blaw-Knox Road Forms.
10-ton Austin Road Roller, gasoline.

Above Equipment Located at Chicago

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1—18-B Bucyrus, revolving, Shop No. 1764, traction wheels, ⅞-yd. dipper.
1—14B Bucyrus, revolving, mounted on caterpillars, standard boom, ¾-yd. dipper.
1—70CBucyrus, Railway type, Shop No. 1582, standard gauge, 2½-yd. dipper.
1—Little Giant, Railway type, standard gauge, equipped with standard boom, 1¼-yd. dipper.
1—Model 28 Marion (revolving) Shop No. 2804, traction wheels, standard boom, ¾-yd. dipper.
1—Model 212 Marion (revolving) Shop No. 4620, New Sept. 1923, mounted on trucks, 55-ft. boom, 34-ft. dipper stick, 1¾-yd. dipper.

LOCOMOTIVE

1—Type 060 Brooks, 40-ton, 6-wheel switcher, standard gauge, sloping tender.

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1—Timber Stiff-Leg Derrick complete, 60-ft. boom, with all cables, double cylinder, double drum, Lidgerwood hoist and vertical boiler.

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1—5-ton Troy Trailer.
24—Troy Wagons, 4-yd., reversible spreader type, practically new.

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1—10-ton Austin 3 wheel, gasoline, single cylinder.

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1—Class 14 Bucyrus caterpillars, steam operated, 60-ft. boom, 2-yd. bucket.
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1—Page gasoline driven, mounted on trucks, 100 hp. twin cylinder, Charter Engine (will burn kerosene) 72-ft. boom, 2½-yd. Page bucket.

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3—24-in. gg., 8-ton **Steam Dinkeys.**
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1—Gasoline driven **Portable Saw Outfit.**
2—½ and ¾-yd. **Smith Concrete Mixers.**
8—Standard gauge **Boarding Cars.**
1—Sullivan WG3 **Air Compressor** and **Electric Motor.**
1—10½-in. cross compound **Air Compressor. Portable** with boiler.
5—12-yd. **Western Dump Cars.** Panel doors.
1—¾-yd. Model 18 **Osgood Dragline Machine.**

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4—50-hp. Clyde (new) DD & Sw. 220 v. DC motor.
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1—8¼x10 Clyde DCDD with B & Sw.
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1—8¼x10, 3-dr. **Hoist and Boiler.**
1—6-ton **Kelly-Springfield Roller.**
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Air Compressors For Sale

1—Laidlow Dunn Gordon Air Compressor; steam size 5 in. (Corliss Type Poppet Valve) 15½ in. diameter high pressure cylinder, 25 in. diameter low pressure cylinder, 36-in. stroke. Air cylinder 16 in. high pressure, 26 in. low pressure, 6-in. air line; capacity 2200 cu. ft. at 110 lbs.
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THE SOUTHERN PHOSPHATE CORPORATION

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2—Standard gauge 17x24 cylinder **Schenectady Locomotives.** Good condition.
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2—**Erie City,** 250 hp., 150 lb. steam pressure, **Water Tube Boilers,** equipped with Foster Superheaters.
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1—**Roger-Higgins Fuel Oil Pumping Outfit,** consists of 2—5¼x3½x5 Worthington Duplex Steam Pumps complete with oil heater and pressure governor, all mounted on one frame. Excellent condition.
1—**Worthington-Laidlaw** Feather Valve Air Pump, Crank and Flywheel Type, size 7x12x6. Practically new.
Several **Fairbanks-Morse, Worthington, McGowan, Triple Expansion Pumps,** also **Boiler Feed Pumps.**

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Concrete Mixers, Lakewood Concrete Towers, Hoisting Engines, Derricks, Pumps, Gasoline Tractors, Steam Hammers, Buckets and Compressor outfits.

Edward Ehrbar, Inc., 29-33 Meserole Ave., Brooklyn, N. Y.

FOR SALE

5-yd. **Manganese Steel Dipper.**
No. 2 Sullivan Air Compressor
Ottumwa Box Car Loader.

All good condition, at fraction of value.

TEXAS STONE PRODUCTS CO.,
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250 hp. (Natural Draft) Cross Drum **Watertube Boilers.**
8¼x8 **Lidgerwood Hoists.**
10x6x12 Horizontal **Duplex Pumps.**
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10-in. **Centrifugal Pumps** direct connected to Vertical Engines.
10 kw. Troy and Engberg **Generator Sets.**
1-ton Frick and Triumph **Refrigerator Units.**
Tanks of all sizes.

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1—11-hp. **National Builder's Electric Hoist,** 220 v., 2 or 3 ph., 60 cy. Like New.
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1—**Floating Digger,** 25x58-ft. hull, 60-ft. boom, 1-yd. bucket. A bargain.

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21 ft. dry material. Used to end of last season. Can be seen at our yard.
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in serviceable condition suitable for switching and industrial service. Complete blue prints furnished on request.

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16—19x26, 65-ton Moguls. Built 1906. 190-lb. steam, 13-ft. 4-in. wheel base, 50-in. driving wheel centers. Steel U-Frame tanks.
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4—20x26, 76-ton Consolidations. 180-lb. steam, 14-ft. 11-in. wheel base. 50-in. driving wheel centers. Steel U-Frame tanks.
6—19x26, 69-ton Ten Wheelers. 180-lb. steam, 12-ft. 8-in. wheel base. 62-in. driving wheel centers. Steel U-Frame tanks. Some machines re-built and new fire boxes applied as late as 1920.
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1—17½x26, 50-ton, 8-wheel Standard. 145-lb. steam pressure.

Machines furnished as coal or oil burners. Inspection invited. Write or wire us for further particulars.

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FOR SALE OR RENT

Ready for Immediate Delivery

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ROAD ROLLERS

2—Buffalo Pitts 10-ton 3-wheel steam road rollers.

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1—14-B Bucyrus on traction wheels. ASME boiler—thoroughly overhauled. Can be rented.

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100 tons 90-lb. ASCE relaying rails with angle bars—first class condition.

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6-TON TRACTORS

Rugged and powerful. They are being used

For 10-TON JOBS.

Your Most Critical Inspection Solicited.

$1500.00, subject prior sale

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- 3—Dipper Dredges.
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Excellent Condition

Locomotive **Cranes,** Standard and Narrow Gauge **Flat** and **Box Cars, Machine Tools, Boilers, Engines, Motors, Generators, Contractor's Equipment,** etc. Priced low to move quickly.

Real Opportunities

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ROAD BUILDERS PLANT

1—**Koehring Paver, 21-E half caterpillar, power hoist, batchmeter, all fittings.**
1—**10-ton Monarch 3-wheel Steam Roller.**
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1—1½-in. **Barnes Piston Force Pump** with engine.
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44—**Batch Box Trucks,** 24-in. gauge (Western).
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Also 8 **Seavern's Bin Gates, 2 Road Plows, 1 Belt Conveyor** without engine, 1 85-lb. standard gauge **Turnout,** and 1 90-lb. standard gauge **Turnout.**

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Steam operated—Good condition. Suitable for alley paving. Located at Plainsboro (near Princeton) N. J. *Price* $1000.00.

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- 1—50-ft. Belt Conveyor.

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Road-Rollers; Pavers; Shovels; Keystone Excavators; Locomotives; Track; Dump and Flat Cars; Hoists; Cranes; Graders; Finishers.

All necessary Equipment for complete plant.

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IROQUOIS ROLLER

5-ton tandem steam. Never been used. Will make an attractive price for quick sale.

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CRANES

1—15-ton Brownhoist Locomotive Crane, 8 wheel MCB, 41-ft. boom, double drums, A.S.M.E. Boiler.

1—30-40-ton Brownhoist Locomotive Crane, 8 wheel MCB, A.S.M.E. Boiler, 50-ft. or 70-ft. boom.

1—Electric 15-ton Brownhoist, full revolving crane, mounted on Gantry Tower, 44-ft. boom.

1—Electric Link-Belt, 15-ton full revolving crane, 50-ft. boom.

1—Electric 10-ton Brownhoist 4 wheel Locomotive Crane.

Send for special list on Steam and Electric Hoisting Engines. Steel and Wood Stiff Leg Derricks.

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REBUILT Contractors' Equipment

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STEAM SHOVELS

3—Type "B" Erie, on caterpillar.
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2—10x16 36-in. gauge S.T. Porters.
2— 9x14 36-in. gauge S.T. Vulcans.
1—16x24 Std. gauge Baldwin Switcher.

HOISTING ENGINES

1, 2 and 3 drum, all sizes, steam, gas and electric.

Air Compressors
Pumps
Concrete Mixers
Boilers
Cranes
Derricks
Buckets
Dump Cars

Everything for the Contractor.
Write for List.

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1302 Fulton Bldg., Pittsburgh, Pa.

FOR RENT OR SALE

BUCYRUS SHOVELS

2—18-B, traction wheels, 7/8-yd. dippers. Thoroughly overhauled.

GENERAL EQUIPMENT Company, Inc.
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¾-yd. Type "B" **Erie Shovel.**

10-E **Ransome Paver,** traction wheel, boom and bucket, $1200.00.

7-E High Drum **Rex Paver,** traction wheel, $800.00.

21-E. 1922 **Foote Paver,** caterpillar, new gas engine, $2700.00.

Byers Auto Crane, $1600.00.

3—3½-ton **Garford Dump Trucks, $1800.00** each.

1—10-E **Koehring Paver, $1400.00.**

1—15-hp. **Mead Morrison Car Puller, $800.00.**

10,000 ft. Second hand **Cable.**

36-in. gauge **Fordson Locomotive, $600.00.**

TULLEY EQUIPMENT CO.
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We having purchased the remaining HOISTS and DERRICKS from THE ELECTRIC HOIST AND DERRICK COMPANY, including HOIST PARTS and DERRICK FITTINGS, beg to announce that these HOISTS and DERRICKS are equal to any that were in the original purchase from the HOG ISLAND SHIPYARD, and are offering them to the public at the following prices: **HOISTS, $1600 each f.o.b. Baltimore, Maryland. DERRICKS, $600 each f.o.b. White Hill, Pa., at Harrisburg.**

MALLORY MACHINERY CORPORATION
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¾ YD. OSGOOD STEAM SHOVEL

at Richmond, Va.

This shovel is in first class condition. Its unusually low price is due to the fact that we are not in the used equipment business for profit, but simply to dispose of an occasional "trade-in."

The Austin-Western Road Machinery Co.
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FOR SALE

Type "B" Erie Caterpillar, High Lift **Steam Shovel.**
Type "B" **Erie Crane,** 36-ft. boom, ¾-yd. bucket.

EQUIPMENT CORP. OF AMERICA
855 Land Title Bldg., Philadelphia, Pa.

FOR SALE

Type "B" Erie Traction Shovel

¾-yd. bucket. Mass. Std. Boiler. Just released and in first class condition.

THE HUBBARD-FLOYD CO., Inc.,
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ERIE SHOVEL

Type B, steam, traction, ¾-yd. with mang. teeth, 3 heavy oak mats, many extra parts, new boiler, boom hoist.

Guaranteed in A-1 condition.

Will sell cheap.

CROCKWELL CO.
415 Pine St., St. Louis.

STEAM SHOVELS

Erie A, also B, Traction and Caterpillar.
Osgood, Thew, Marion, Bucyrus, Revolving.
¾-yd. Marion Traction—Sale or Rent.
Marion, Osgood, Bucyrus R.R. Shovels.
Cars—Locomotives—Cranes

W. R. WADDELL
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FOR SALE

STEAM SHOVEL

Osgood 18

J. J. McGARRY,
Edgewater, N. J. Opposite Grants Tomb.

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MARION SHOVEL

No. 40. Perfect condition. Bargain if sold immediately. Convenient payments arranged. Inquire.

COLONIAL SAND & STONE CO., INC.
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FOR SALE

Marion 36—Shovel

Caterpillar traction. Steam power.
1½-yd. bucket.

J. T. WALSH
500 Brisbane Bldg., Buffalo, N. Y.

Shovels For Sale

1—¾-yd., traction type, shipper shaft Thew steam shovel, $3700.

1—¾-yd., similar to the shovel above, with horizontal crowding device, $2400.

Both shovels have just completed an operation and are in excellent working order.

THE EASTERN COMPANY
221 Woolworth Bldg., Lancaster, Pa.

FOR SALE

Bucyrus 225 **shovel** Ohio Delivery.
Marion 251 **shovel** Kansas Delivery..
O. & S. 30-ton **Locomotive crane** 80-ft. boom; new 1920 60-in. ASME **boiler.**
Ore Cars 10-40 ton Wood underframe.

A. V. KONSBERG.
40 No. Dearborn St., Chicago

1—**Erie Shovel,** ¾-yd. Traction, Type B. High Lift, No. 1083.

1—**Fordson Tractor,** with winch attachment.

5—1½-yd. **Eagle Dump Bottom Wagons.**

1—7S Universal Senior Marsh-Capron **Mixer,** LeRoy Gasoline Engine, power loader, water tank.

Used on one job, overhauled and in good condition.

A. W. BOWIE
1001 Press Bldg., Binghamton, New York

Locomotive Cranes

1—25-ton Industrial, 8-wheel, D.D. 50-ft. boom, No. 3523.
1—20-ton Brown Hoist, 8-wheel, D.D. 50-ft. boom, No. 6486.
1—20-ton Link-Belt, 8-wheel, D.D. 50-ft. boom.
1—20-ton Browning, 8-wheel, double drum, 50-ft. booms, No. 1149.
1—22-ton Industrial, 8-wheel, double drum, 40-ft. boom, equipped with 8½-kw. Engine Generator Set, 1717.
1—25-ton Brown-Hoist, broad gauge, 75-ft. boom, electric operated.
1—12-ton O. & S., 8-wheel, 50-ft. boom, DD.

Hoisting Engines

1—50-hp., 3-drum Lidgerwood, electric, (no motor).
1—75-hp., 3-Drum Electric Hoisting Engine, 3 ph., 60 cy., 220 v.
2—75-hp. 2-Drum Electric Hoisting Engines.
2—8¼x10 American Double Cylinder, Boiler Mounted.

BUCKETS

1—1-yd. Williams Clamshell Bucket.
1—¾-yd. O & S.

STEAM SHOVELS

1—Marion 61, 2½-yd. dipper, railroad type.
1—Marion 21, ¾-yd. dipper, cat. mounted.

Tower Cranes

7—Link-Belt, 90-ft. booms, full revolving, self-propelling, A.S.M.E. boilers, mounted on 30-ft. substructures. Perfect condition.

STEEL DERRICKS

18—7½-ton, all steel, Stiff Leg Derricks, 65 to 87-ft. booms, 42-ft., 8-in. masts, 12-ft. dia. Bull-Wheel—complete with steel stiff legs and all fittings.

CATERPILLAR BACKFILLERS

1—Austin with boom and bucket, gasoline operated.

1324 Widener Bldg. **B. M. WEISS** **Philadelphia, Pa.**

PRACTICALLY NEW EQUIPMENT

LOCOMOTIVE CRANES

1—17-ton O&S, 50-ft. boom, 8-wheel, M.C.B., 42-in. magnet and generator.
1—17-ton Industrial, 8-wheel, M.C.B., 50-ft. bm.
1—15-ton Ohio, 40-ft. boom, 8-wheel, M.C.B., 1-yd. bucket.
1—Austin No. 4 caterpillar, 35-ft. boom, ¾-yd. bucket.
2—Northwest 104, 40-ft. booms, new 1922.
1—Northwest 105, 40-ft. boom, ¾-yd. bucket.

DRAGLINES

1—Class 24 Bucyrus, full caterpillar, 100-ft. boom, 3½-yd. bucket.
2—Northwest 104, 40-ft. booms, 1-yd. Paige bkts.

POWER SHOVELS

1—Marion 36, high lift, caterpillar, 1¾-yd. dipper, new 1921.
1—Model 31 Marion, caterpillar, 1-yd. dipper, new 1920.
1—Erie B, caterpillar, ¾-yd. dipper.
2—Erie B, traction wheel, ¾-yd. dippers.
2—70-ton Bucyrus, railroad type, 2½-yd. dippers.

BUCKETS

1—One yard Dreadnaught type Blaw-Knox with teeth, 3 weeks service.
2—Williams, 1½-yd. Hercules type.

The above are only a few of the items we have for sale. No matter what your machinery requirements are, we have it.

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Office Phone: Harrison 3518 *Residence Phone:* Wentworth 0711
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FOR SALE

Locomotive Crane

15 to 18 ton, eight wheel O&S, 40 ft. Boom, with Bucket. Available immediately.

Equipment Corporation of Amer.
Land Title Bldg., Philadelphia, Pa.

FOR SALE

LOCOMOTIVES

1—11x16 (21 ton).
1— 7x12 (9 ton).
Excellent condition.

W. J. GROSE CO.
237 Oliver Bldg., Pittsburgh, Pa.

FOR SALE

BROWNHOIST

8-wheel M.C.B. Loco. Crane, 15 ton, 50-ft. boom, bucket handling. Boiler new, entire crane rebuilt and in excellent condition.

BROWN & LOWE and LAW BROS.
General Contractors, Cohoes, N. Y.

LOCOMOTIVE CRANES

BARGAIN

1—**Browning, 15-ton,** 4-wheel, std. ga., 38-ft. boom, bucket handling.
1—25-ton, 8-wheel **Browning,** 50-ft. boom.

RENNOLDS EQUIPMENT CO.
718 Fisher Bldg., Chicago, Ill.
Harrison 2014.

FOR SALE

1,250-yard **Iroquois Asphalt Plant.**
3—3,000-gal. **Asphalt Tanks with Agitators.**
1—60 hp. Locomotive type **Boiler and Engine.**
1—14-E **4-bag Smith Mixer,** half caterpillar.

Will sell at fifty (50%) per cent of cost, has been used only three months, will make easy terms to purchaser.

B. D. WRIGHT
522 Market Street, Chester, Pa.

FOR SALE OR RENT

LOCOMOTIVE CRANES

15-ton **Industrial,** 40-ft. boom, 7½ kw. generator.
25-ton **Ohio,** 50-ft. boom.
15-ton **Link Belt, Electric,** 50-ft. boom.
15-ton **American Hoist and Derrick,** 40-ft. boom.

Hoisting Machinery Co.
50 Church St., New York City.

LOCOMOTIVE CRANES

15-ton Ohio, 8-wheel, Bucket Handling, $5800.
20-ton McMyler, 8-wheel, Bucket Handling, $5800, fine condition, immediate delivery.
Air Compressors, Pumps, Engines, etc.

H. R. WILSON MACHINERY CO.,
421 Pine St., St. Louis, Mo.

LOCOMOTIVE CRANES

Type 3 Browning 8-wheel Locomotive Crane, built 1917.
18-ton O. & S. 8-wheel, 50-ft. boom, built 1918.

LOCOMOTIVES

78-ton Baldwin 6-wheel Switcher, built 1914.
52-ton American 6-wheel Switcher, built 1909.
60-ton 2-truck Shay geared, built 1920.

Also other locomotives and locomotive cranes, and steam shovels and steel rails. Complete list on request.

Birmingham Rail & Locomotive Co.
Birmingham, Ala.

FOR SALE

Cranes—Shovels

1—No. 45 Bucyrus, 1¾-yd. **R.R. Steam Shovel,** in A-1 used condition. Price, $4500. Located Minnesota.
1—No. 1-T Monighan **Gasoline Dragline,** 1-yd. Page bucket, 50-ft. boom. New walker just installed.
1—7-ton O & S **Crane,** 35-ft. boom, ¾-yd. clam shell; used only 6 months. Price with bucket $4,200.
1—21-E Foote **Caterpillar Paver,** boom and bucket. Used only 9 months, $4,500.
1—Keystone No. 6, just overhauled, $3,200.
1—**Stiff Leg Derrick,** Amer., 7x10 double drum hoisting engine, 60-ft. boom, 36-ft. mast. Located Southern Illinois.

G. C. WILLIAMS
28 East Jackson Blvd., Chicago, Ill.
Phone, Wabash 9327.

IDEAL YARD CRANE

5 Ton, 97-ft. Span.
3—Motor **Overhead Electric Traveling Crane,** 95% new.
Immediate delivery car or boat New York.
Also 375 ft. **Double Steel Runway Girders and Rails.**

N. B. PAYNE & CO.
Crane Specialists
Telephone Rector 9080. 25 Church St., New York.

CRUSHERS

1—Kennedy No. 10.
1—Kennedy No. 6.
Manganese fitted, nickel steel shafts.

LOCOMOTIVE

1—Porter 10x16-in. Saddle Tank, 36-in. gauge.

LOCOMOTIVE CRANE

1—O. & S. 12-ton, 8-wheel, bucket handling.

A. J. O'NEILL CO.
1524 Chestnut St., Philadelphia, Pa.

HOISTING ENGINES

DOUBLE CYLINDER, THREE DRUM WITH BOILER MOUNTED ON SAME BASE
No.
—7½-in.x12-in. Mundy, ASME, 125 lb.
115—8-in.x12-in. Mundy.

DOUBLE CYLINDER, DOUBLE DRUM WITH BOILER MOUNTED ON SAME BASE
No.
75—6-in.x10-in. Mundy.
102—9-in.x10-in. Lidgerwood.

DOUBLE CYLINDER, SINGLE DRUM WITH BOILER MOUNTED ON SAME BASE
No. 38—6¼-in.x10-in. Flory.

DOUBLE CYLINDER, THREE DRUM WITH SWINGING GEAR ATTACHED SKELETON
No. 89—7-in.x10-in. Lidgerwood.

DOUBLE CYLINDER, THREE DRUM SKELETON
No.
64—7-in.x10-in. American, place for Boiler.
74—7-in.x10-in. Flory.
98—8¼-in.x10-in. Lidgerwood.

No. **BUCKETS—Clam Shell**
12—11—1¼-yd. Hayward New. Class E. Regular bowl.

BOILERS
Economic and Locomotive Type
150-hp. Erie Economic, 100 lbs.
9—100-hp. Locomotive H. S. & G.
15—90-hp. Ames, 150 lbs. A.S.M.E. New.
11—3-80-hp. Locomotive on wheels, 125 lbs. A.S.M.E. New.
80-hp. Locomotive, A.S.M.E. 125 lbs.

No. **MISCELLANEOUS**
1—Byers Type C Auto Crane.
1—2—25 kw. Generators, direct connected to 4-cylinder Buffalo Gasoline Engines. New.
1—12-ft. Diameter Steel Bull Wheel.
2—18-ft. Diameter Steel Bull Wheel.
2—2—5 kw. Generators, direct connected to 4-cylinder Winton Gasoline Engines. New.
4—10x16-in. Baldwin, 36-in. Gage Locomotive.

DOUBLE CYLINDER, DOUBLE DRUM WITH SWINGING GEAR ATTACHED SKELETON
No.
71—7½-in.x10-in. Lambert.
72—8½-in.x10-in. Lambert.

DOUBLE CYLINDER. DOUBLE DRUM SKELETON
No.
20—6½-in.x12-in. Mundy.
94—7-in.x10-in. Lambert .
101—7-in.x10-in. Flory.

DOUBLE CYLINDER. SINGLE DRUM SKELETON
No.
7—5-in.x6-in. Lidgerwood, reversing link.
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88—4½-in.x6-in. Mead-Morrison.
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121—5 hp. Fairbanks Bull Dog Engine geared to Single Drum Hoist.

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352 ft. 0 in. Span
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40 other bridges

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21-in. to 28-in. Trench, 7 ft. 6 in. depth,
Wheel Type No. 105.
Steam Shovels, Etc.
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Vulcan, 75-ton—Allis, 70 tons
Marion Models 28, 30, 31, 40-60
75-100-hp. D.D. Elec. Hoists
New 110-hp. Gasoline Engine (Portable)
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10x20 and other Jaw Crushers.

Send Us Crusher and Machinery Inquiries.

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These machines are in perfect condition and may be seen working.

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1—No. 4 Buckeye Wheel, gasoline.
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Might rent on good jobs.

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1—20-ton Brownhoist, 8-whl., bucket operating.
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¾-yd. Erie Traction and Caterpillar.
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Notice to Advertisers

Owing to the holiday, Friday, July 4th (Independence Day)—the *"Searchlight"* pages of the July 3rd issue of *Engineering News-Record* will close for press earlier than usual. Copy should reach us as follows:

Display Ads—Copy required by 10 A. M., Saturday, June 28th.
Want Ads—Copy required by 10 A. M., Monday, June 30th.
Proposal Ads—Copy received up to 11 A. M., Tuesday, July 1st.

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1—Marion high lift, model 36, catr. No. 4730.	15,000
2—Osgoods, model 29, traction wheels, No. 729 and 750, new booms, dippers and sticks.	
2—Thews type O, ⅝-yd. dippers, each......	2,500
1—Thew type special O, long boom and stick, 1-yd. dipper, shipper shaft	3,500
1—Erie type B, traction wheels No. 1111......	3,500
1—Keystone model 3, skimmer and ditcher scoops, just out of our shop..............	1,800
1—Bucyrus 80-B catr., 48-ft. boom, 2-yd. dipper	
1—Marion model 21, catr., No. 4890, ¾-yd. dip.	7,500
1—Marion model 60, 2½-yd. dipper, No. 1463.	6,500

CRANES

1—O&S steam catr., 35-ft. boom, ¾-yd. bucket.	4,500
1—O&S steam trac. wh. 30-ft. bm., ¾-yd. bkt.	2,500

CRANES—Continued

1—Byers Auto Crane, gas ½ catr., 30-ft. boom.	$1,500
1—Little Giant, trac. wh., 35-ft. bm., ¾-yd. bkt.	2,800
1—Koehring, model 3, gas caterpillars, 45-ft. boom, 1-yd. bucket....................	12,000
1—Osgood, model 29, traction wheels, steam, 40-ft. boom, 1-yd. bucket..................	5,500
1—Browning 4-wh. loco. crane, 35-ft. bm., 1-yd. bkt.	2,500
1—Ohio 15 ton, 8 wh., 45-ft. bm., 1-yd. bkt.	5,500
1—McMyler 20 ton, 8 wheel, 50-ft. boom.....	6,000
1—N.W. catr. gas crane, 40-ft. bm., 1-yd. bkt.	7,500

MISCELLANEOUS

3—Whitcomb gas 7 ton, 24-in. ga. loco's, each.	1,900
2—Plymouth gas 6 ton, 24-in. ga. loco's, each.	1,900
2—American gas 4 ton, 24-in. ga. loco's, each.	1,250
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MISCELLANEOUS—Continued

1—Whitcomb gas 12 ton standard ga. loco.....	$2,400
2—American steam 18 ton, 36-in. ga. loco. No. 46,733, and 51,680, each..................	3,500
2—Davenports steam 18 ton, No. 840 and 841.	3,500
40—Koppel batch cars, heavy duty 24-in. ga. Hyatt roller bearings.....................	65
5—Koppel double truck track laying cars, each..	100
120—Koppel & Lakewd. stl. bat. boxes, 37 ft. ea.	32.50
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15,000 ft. black pipe, 2½ in. water line with all fittings, used one season, per ft............	.15
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10—Koppel 5-yd. 36-in. ga. dump cars, all like new.	
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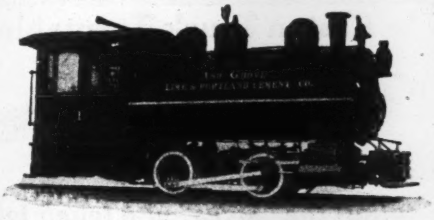

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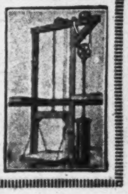
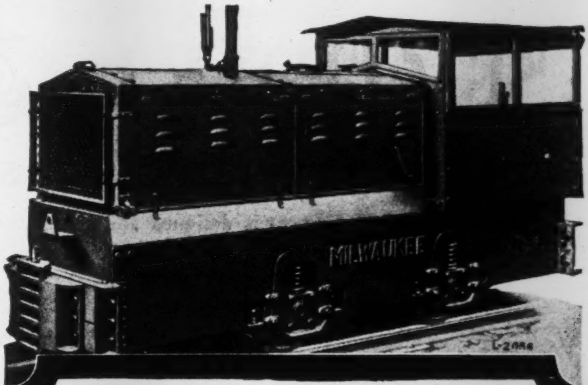
Elevator makers to the folks who know





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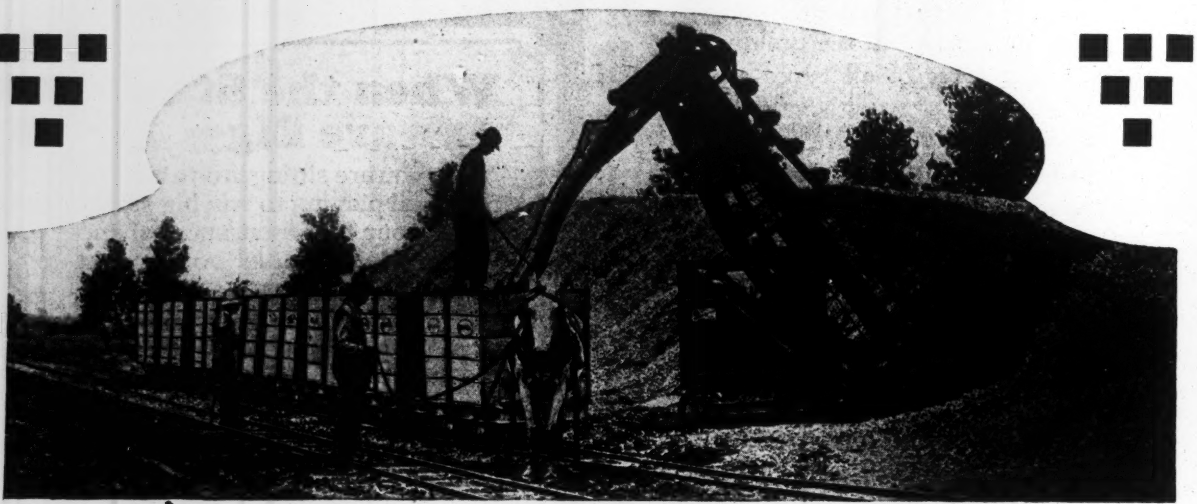

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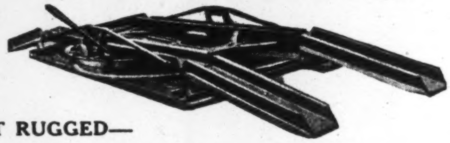

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Gasoline Locomotives
For all Industrial Haulage
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Embraces every need of the Road Builder
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CAST ALUMINUM ALLOY BUILT TO LAST

Pyle-O-Lytes

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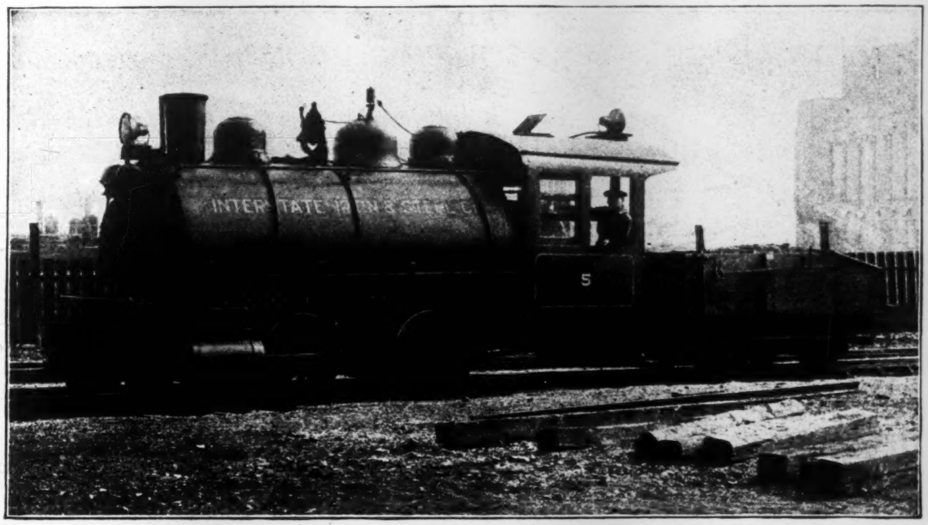

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widely used for yard lighting around iron and steel plants—one of many Pyle-National floodlighting units. It speeds up night work and increases the efficiency of men and equipment. Cases built of long-lived cast aluminum alloy that will outlast many ordinary sheet metal units—storm, rust and gas proof.

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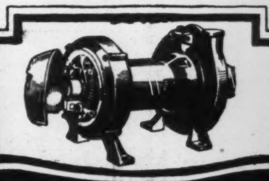

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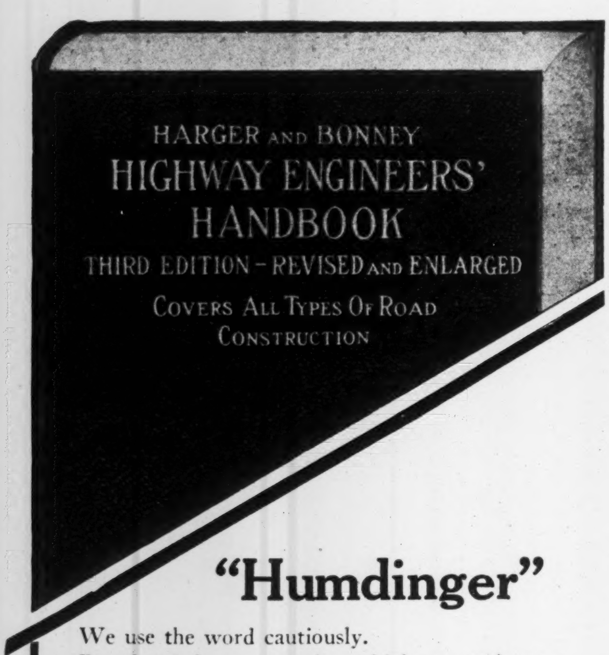
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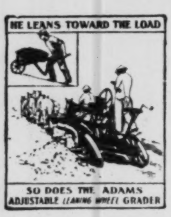
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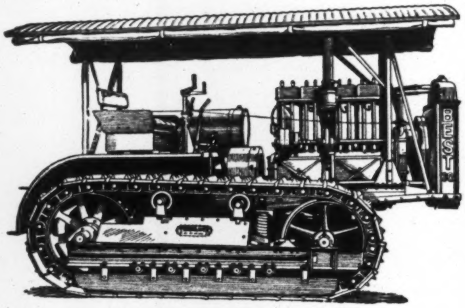

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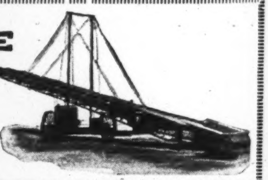

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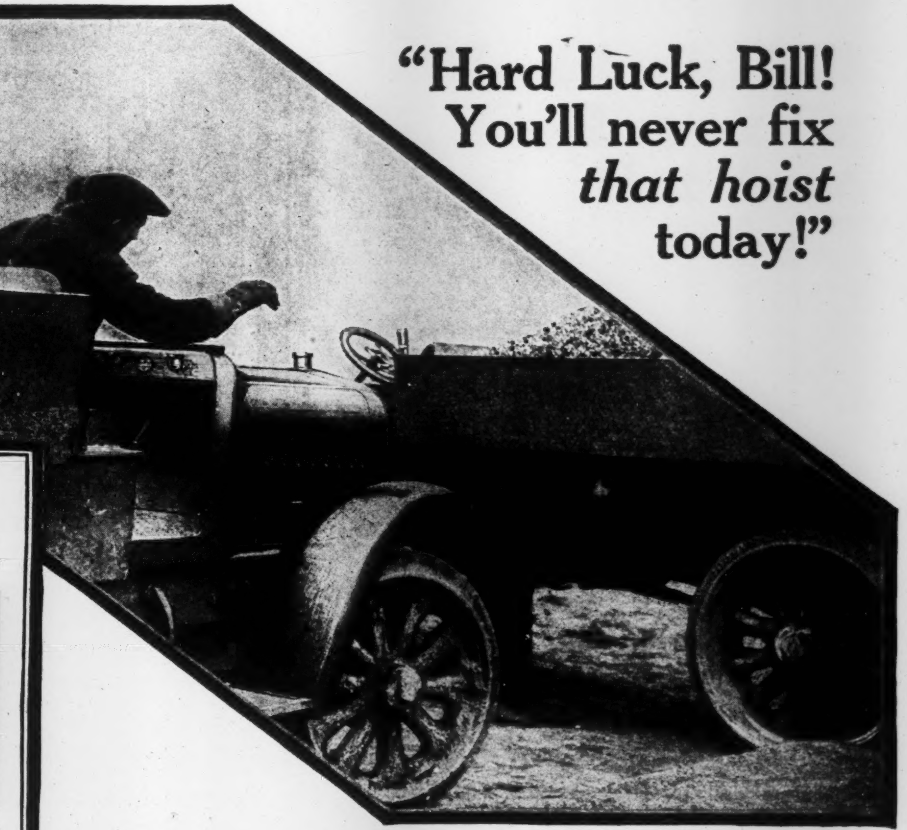

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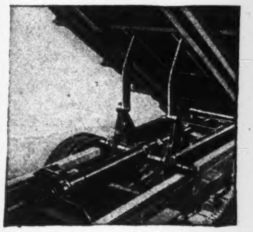

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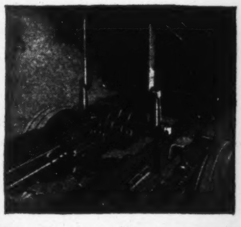

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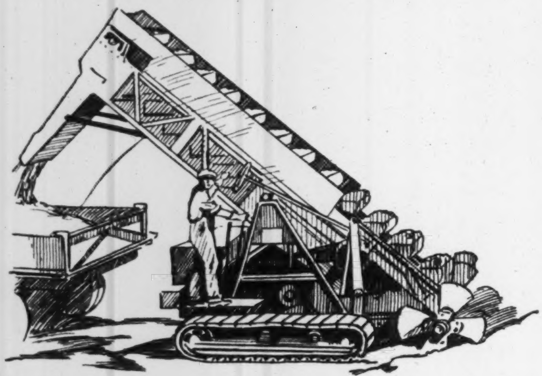

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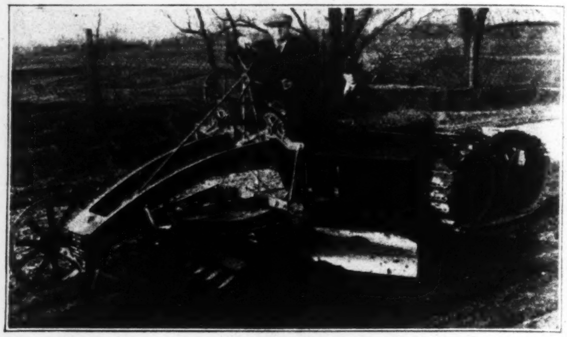

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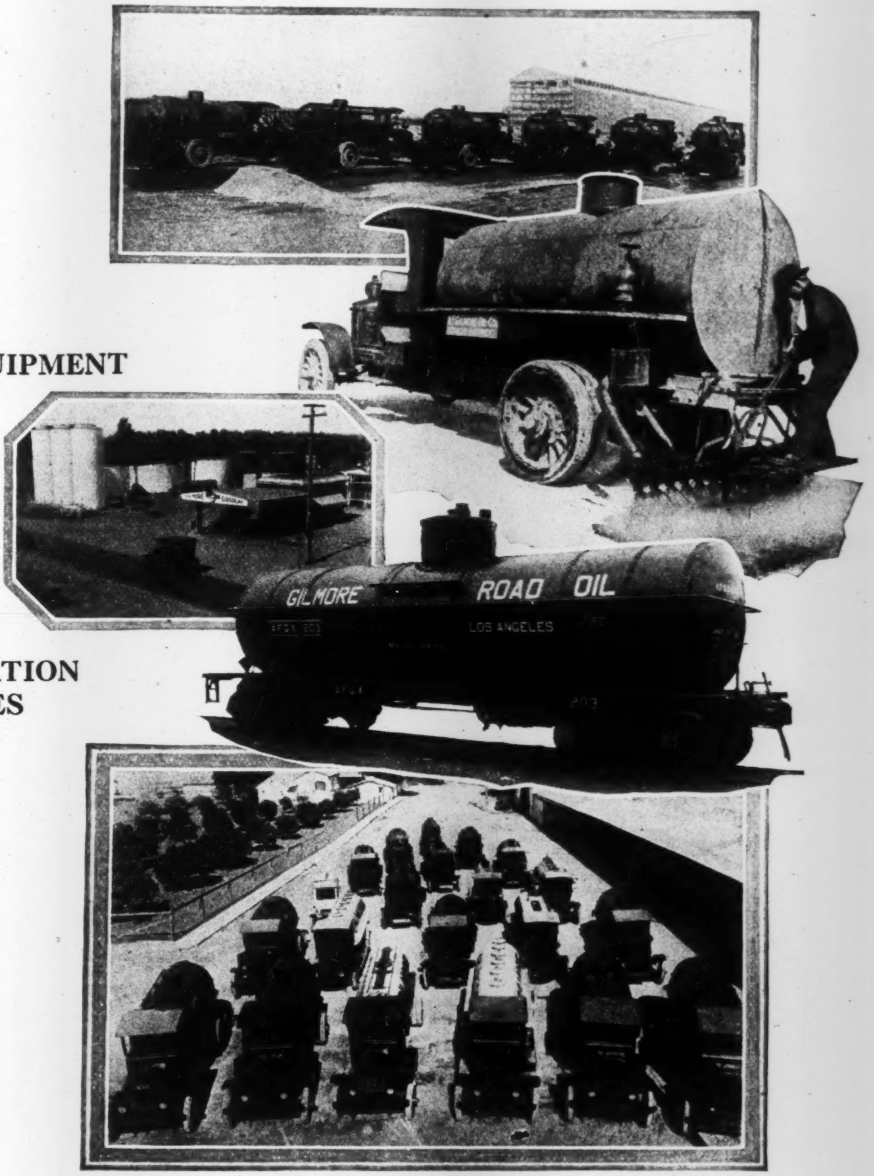

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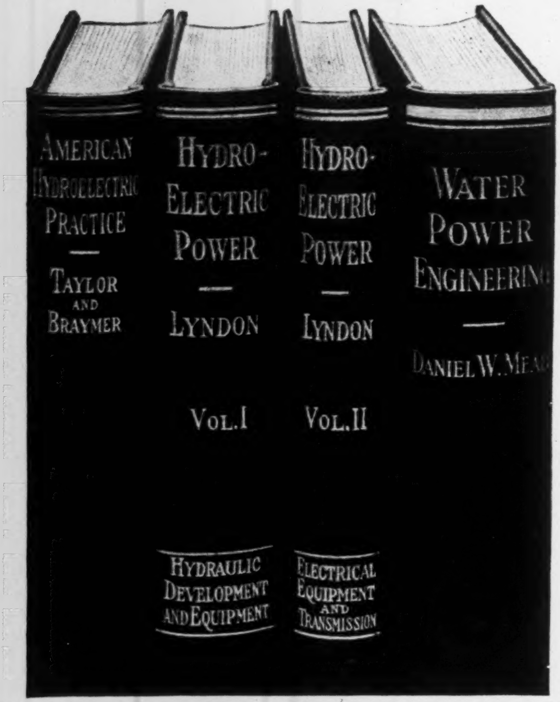

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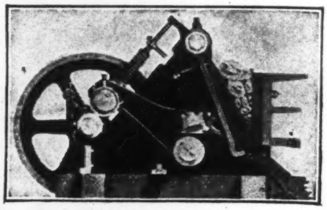

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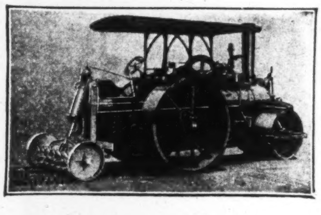

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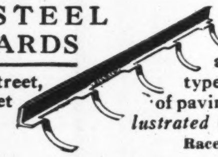

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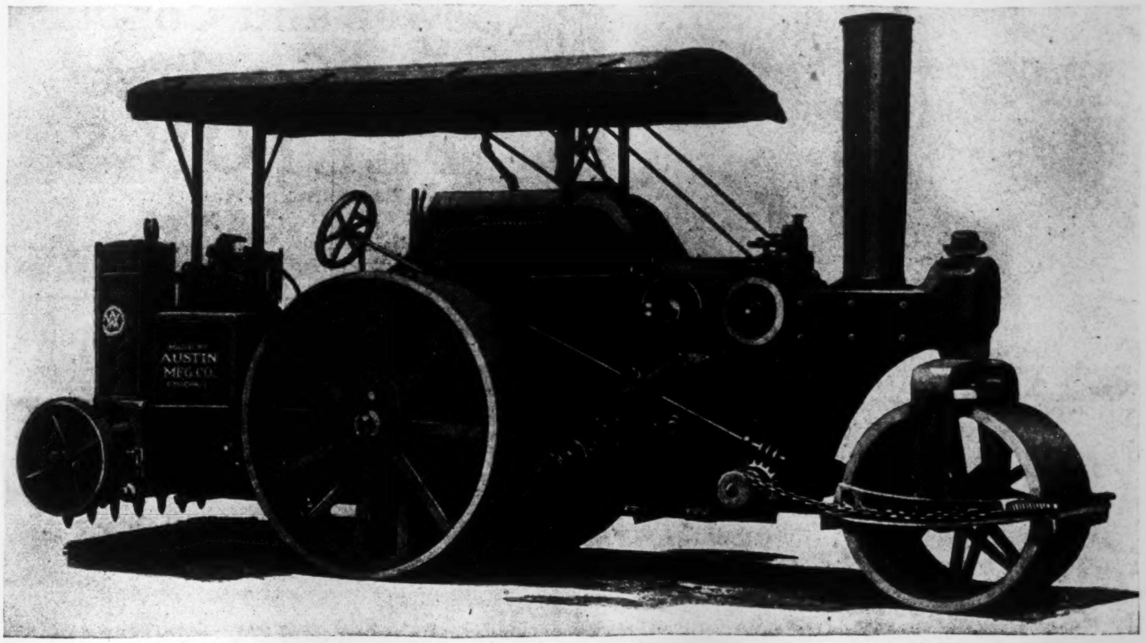

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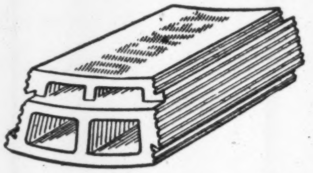

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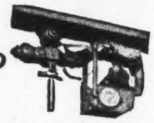

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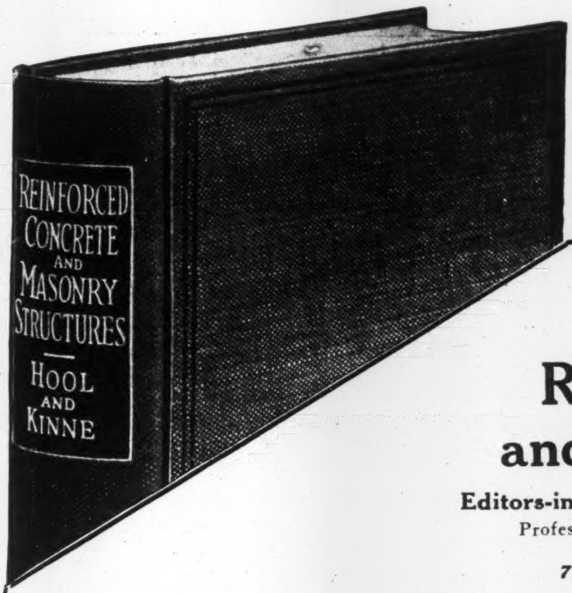

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MISSISSIPPI WIRE GLASS

For protection against Fire and Breakage

Mississippi Wire Glass Co.
218 Fifth Ave.,
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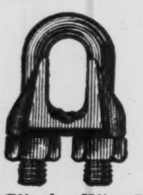
CORRUGATED *ZINC* SHEETS
Pure Zinc

The most economical and durable roofing and siding material for all industrial and railroad buildings. Write for samples and specifications.

ILLINOIS ZINC COMPANY
2 Rector St., New York City 332 So. Michigan Ave., Chicago, Ill.
Smelters and Rolling Mills, Peru, Ill.
Established 1870



Plain Clip for Wire Rope and lap joining round or distorted bars. Universally used and recommended.

This Mark On a Casting

—means that it's made of Marion certified malleable iron, offering great resistance to shock, having high elastic limit, resisting oxidation, wears better, is free from slag holes, shrinkage, cracks, etc., and is not subject to fatigue or crystallization.

Certified malleable castings for every purpose

The Marion Malleable Iron Works
Marion, Indiana

SIDE WALL STEEL SASH

All types for factory, power house and office. Continuous steel sash for monitors and sawtooth construction. Operating devices for all types of movable sash and doors. Steel skylight and ventilators, steel office partitions, hinged steel doors, sliding steel doors.

STEEL CONSTRUCTION FOR LIGHT AND VENTILATION IN BUILDINGS

ALLISON STEEL PRODUCTS CO.
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EXPANDED METAL LATH

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CONCRETE REINFORCING BARS

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Steelcrete

CONCRETE REINFORCEMENT

FLAT SHEETS, readily handled, quickly placed—Steelcrete, the ideal reinforcement. Saves, pays.

The Consolidated Expanded Metal Co's
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FOR PERMANENT CONCRETE
HARDENS WATERPROOFS

FOR HARDENING & WATERPROOFING CONCRETE

A liquid integral hardener makes concrete dustless and waterproof. Used successfully for twenty years. Write for details.

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Kreodone EVERLASTING **WOOD BLOCK FLOORS**

Treated with PURE Creosote Oil — One reason why they are practically everlasting. Ask us to show you all their economic advantages.

REPUBLIC CREOSOTING CO.
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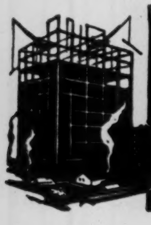
Plants: Indianapolis, Minneapolis, Mobile, Seattle, Norfolk

Only reliable products can be continuously advertised



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BARS OXIDATION

Rust Inhibitive - Gas Holder - Acid and Alkali Coatings

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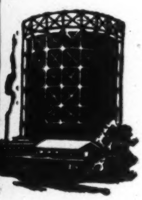
THE TRUSCON LABORATORIES — DETROIT



"Always Attractive"

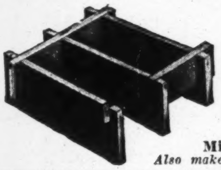
"A.W." Rolled Steel Floor Plates

Wherever a permanent non-slip flooring is essential, "A.W." Rolled Steel Floor Plates should be installed. These plates are rolled from open hearth steel, especially adapted for this purpose; and are furnished in "A.W." Diamond Pattern and "A.W." Ribbed Pattern.

They are unsurpassed for engine room floors, power plants, public buildings, sidewalk doors, manhole covers, trench and duct covers, platforms, stairways, fire escapes and industrial and construction purposes generally. They do not break like cast iron and are unexcelled where a secure foothold is desired.

ALAN WOOD IRON & STEEL CO.
Widener Bldg., Philadelphia, Pa.
New York Boston San Francisco Los Angeles

"A. W." Diamond Pattern Rolled Steel Floor Plates.



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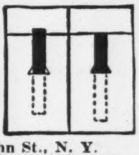
INTERLOCKED GRATINGS

No bolts. No rivets Non-clogging. Every joint locked by metal spread in dovetail. Write for Catalog G-5A.



Mitchell-Tappen Co., 15 John St., N. Y.
Also makers of "S.M.C." for fireproofing Steel Structures.

PEELLE Freight Elevator DOORS

Counterbalanced-Truckable

See our Page Advertisement in the July 3rd issue of this publication.
Write for Catalog
THE PEELLE COMPANY, BROOKLYN, N. Y.
Boston, Chicago, Cleveland, Philadelphia and 12 other cities.

KERLOW

·GRATING PRODUCTS·

KERLOW STEEL FLOORING CO.
222–238 CULVER AVE.
JERSEY CITY, N.J.

Non~Slipping

UNIVERSAL SAFETY TREAD **STEEL OR BRASS FILLED WITH LEAD**

Permanent · Lead · Surface · Durable · Always Safe

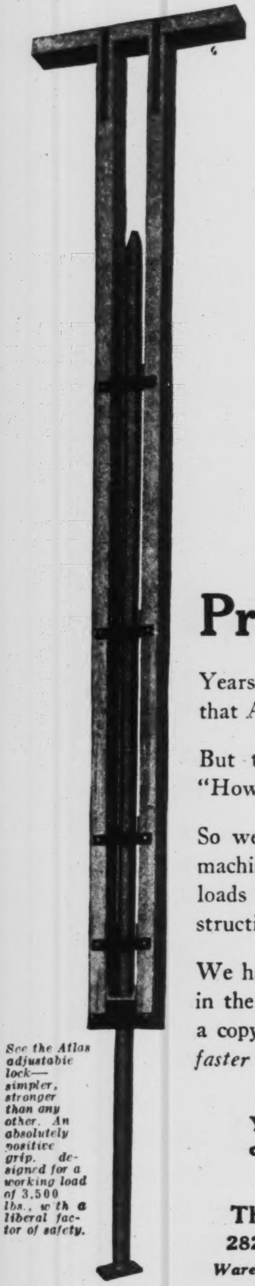
UNIVERSAL SAFETY TREAD CO., 40 COURT ST., BOSTON, MASS.

Keystone Gypsum Fireproofing Corporation

METROPOLITAN SYSTEM

of Floor and Roof Construction

Main Office: Marbridge Bldg., New York City



See the Atlas adjustable lock—simpler, stronger than any other. An absolutely positive grip, designed for a working load of 3,500 lbs., with a liberal factor of safety.

Safe!

5000 lbs.

on a single Atlas Shore at full extension without the slightest slip!

Proved by Test!

Years of practical use long ago proved that Atlas Shores carry the load safely.

But the question is frequently asked: "How much *will* Atlas Shores stand?"

So we put an Atlas Shore in a testing machine, running the test way beyond loads possible to secure in actual construction work.

We have printed the results of this test in the circular shown above. Write for a copy if you are interested in *cheaper, faster* shoring that is also *absolutely safe*.

You won't buy other shores once you try Atlas Shores!

The Roos-Meyer-Hecht Co.
2824 Stanton Ave., Cincinnati, O.
Warehouses and rental stocks in 23 cities.

PAT-MAY 9 1922

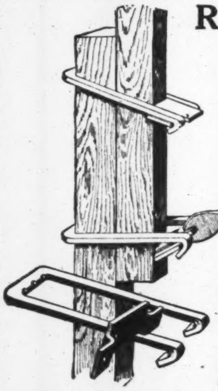
Atlas Adjustable SHORES

A clamp for all jobs

Universal Form Clamps can be applied economically on all concrete work, reducing the cost of tying forms fully 50%. They assure accurate forms, and by preventing spreading, save many extra yards of concrete. Universal Clamps can't slip. Easy to place and remove. Use them on wall, column, spandrel and soffit forms. Write for details and quotations.

Universal Form Clamp Co.
Sheffield Ave. & Montana St.
Chicago, Ill.
51 East 42nd St., New York City

UNIVERSAL
Concrete Appliances



Rogers Timber Clamps

Save their cost
on the first job

The only clamp made which automatically *locks* the timbers together—not requiring a load on the upright to keep the clamps on. Foolproof and simple. We have sold 300,000 clamps for splicing, Shoring, Scaffolding, Bracing and Hoists. Working load—capacity of timbers. Wrenches and extra lockplates gratis. Write for circular. *Agencies All Over the World.*

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53 W. Jackson Blvd., Chicago
Atlantic Coast Agents: Richmond Screw Anchor Co., 243 Bush St., Brooklyn, N. Y.

Roebling Welding Wire

For Electric Welding
For Oxy Acetylene Welding

John A. Roebling's Sons Company
Trenton, N. J.

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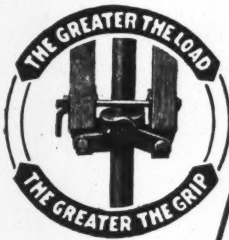
Powerful **LIGHTS** **Portable**

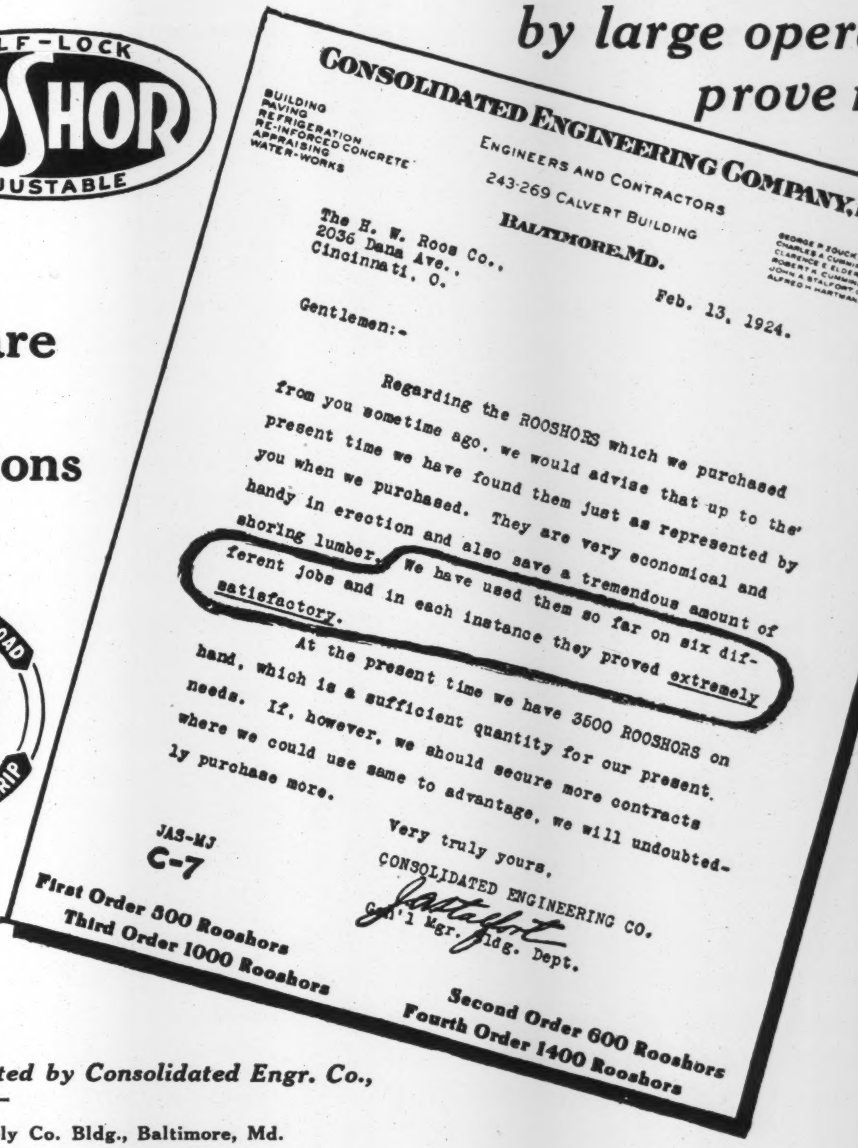
CARBIC MANUFACTURING CO.
DULUTH CHICAGO NEW YORK BOSTON

repeat orders by large operators prove merit

SELF-LOCK ROOSHOR ADJUSTABLE

Beware of Imitations





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BUILDING
PAVING
REFRIGERATION
RE-INFORCED CONCRETE
APPRAISING
WATER-WORKS

ENGINEERS AND CONTRACTORS
243-269 CALVERT BUILDING
BALTIMORE, MD.

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CHARLES A. CUMMINS, VICE PRES & GEN. MGR.
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JOHN A. STALFORT, GENL MNGR BLDG DEPT
ALFRED H. HARTMAN, GENL MNGR ENG DEPT

The H. W. Roos Co.,
2036 Dana Ave.,
Cincinnati, O.

Feb. 13, 1924.

Gentlemen:-

Regarding the ROOSHORS which we purchased from you sometime ago, we would advise that up to the present time we have found them just as represented by you when we purchased. They are very economical and handy in erection and also save a tremendous amount of shoring lumber. We have used them so far on six different jobs and in each instance they proved extremely satisfactory.

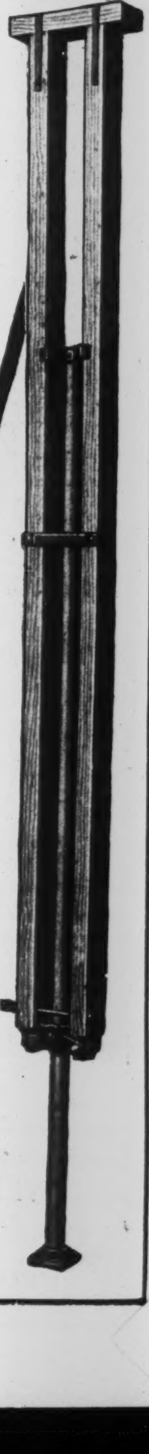
At the present time we have 3500 ROOSHORS on hand, which is a sufficient quantity for our present needs. If, however, we should secure more contracts where we could use same to advantage, we will undoubtedly purchase more.

Very truly yours,
CONSOLIDATED ENGINEERING CO.
J A Stalfort
Gen'l Mgr. Bldg. Dept.

JAS-MJ
C-7

First Order 500 Rooshors
Third Order 1000 Rooshors

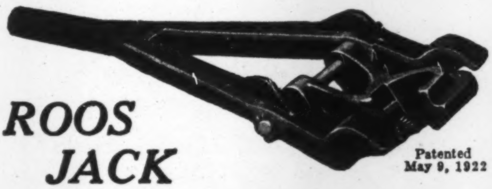
Second Order 600 Rooshors
Fourth Order 1400 Rooshors



Patented
Aug. 22, 1916
Feb. 15, 1921
May 9, 1922

Buildings erected by Consolidated Engr. Co., on Rooshors:—

- Southern Supply Co. Bldg., Baltimore, Md.
- War Memorial Bldg., Baltimore, Md.
- John Hopkins Univ. (Chem. Lab.), Baltimore, Md.
- Emerson Drug Co. Building, Baltimore, Md.
- Eastwick Garage, Baltimore, Md.
- Salisbury State Normal School, Salisbury, Md.
- Wicomico Hotel, Salisbury, Md.
- State Normal School, Towson, Md.



ROOS JACK

Patented
May 9, 1922

Slips Right On and Off Instantly.
One Jack Replaces Thousands of Wedges.

Only one address
We have no interest in any other shore.

THE H. W. ROOS CO.

2036-46 Dana Ave., Cincinnati, Ohio
on N. & W. R. R.

ATTAINMENT

VULCANITE PORTLAND CEMENT CO
30TH ANNIVERSARY
AND THE
CENTENNIAL OF PORTLAND CEMENT

PHILADELPHIA BOSTON NEW YORK

HENDRICK SCREENS
for every purpose

ELEVATOR BUCKETS (plain and perforated) STACKS AND TANKS
GENERAL SHEET AND LIGHT STRUCTURAL WORK
LIGHT AND HEAVY STEEL PLATE CONSTRUCTION

HENDRICK MFG. CO. CARBONDALE, PENNA.
New York Office, 30 Church St. Pittsburgh Office, 544 Union Trust Bldg.
Hazleton, Penna., Office, 705 Markle Bank Bldg.

PENNSYLVANIA
PORTLAND CEMENT

Highest Quality

Manufactured by

Pennsylvania Cement Co.

New York Boston Philadelphia Buffalo

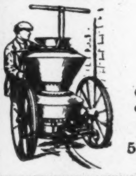
Business Established 1832

The Lawrence Cement Co.
No. 302 Broadway New York, N. Y.

Selling Agents for

Dragon
PORTLAND CEMENT

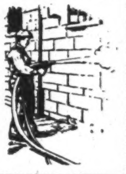
In Successful Use a
Third-Century



We Do the Work
with
CEMENT - GUNS

Get our prices and estimates before contracting, renting, buying or selling.

Cement-Gun Construction Co.
537 So. Dearborn St. *Pittsburgh Branch*
Chicago, Illinois Oliver Building



GUNITE

INDIANA GUNITE & CONSTRUCTION CO., INC.
General Contractors and Engineers
INFORMATION DESIGNS ESTIMATES
Indianapolis, Indiana

CEMENT-GUN COMPANY, Inc.
Allentown, Penna.

We are the sole manufacturers of the "Cement-Gun" (trade mark). But in addition we also maintain a contract department to insure proper prices and economical and efficient work to all users of GUNITE.

Write us for all details, either for purchase of equipment or for contract work.

Specialists in
CEMENT GUN CONSTRUCTION
Engineering—Contracting—Renting—Operating
Estimates Promptly Furnished
Contracts Executed Anywhere

GUNITE CONCRETE AND CONSTRUCTION CO.
BARCLAY A. GREENE, President
114 West Tenth Street, Kansas City, Mo.

CEMENT GROUTING by
WEBER "INTRUSION" Method

CEMENT GUN WORK

WEBER ENGINEERING CORPORATION
Singer Building, New York

for waterproofing concrete
KONAX

Write for literature and address of sales engineer in your territory

General Chemical Co., 40 Rector St., New York, N. Y.

What's YOUR daily yardage?

That's easy! It's 90 to 100 cu. yds. of mixed concrete per 10 hr. day when you use this

O. & S. "Bear" No. 7-S Mixer

Swallows 11 cu. ft. unmixed material per batch. Delivers 7 cu. ft. mixed concrete per batch. Note the low charging platform. O & S. Power Loader and Water Tank may be added if desired. Write for fully descriptive Bulletin 301. Also other Bulletins describing O. & S. Hoists and Hoisting Engines.

Manufactured by

ORR & SEMBOWER, Inc.
READING, PA.
Established 1885

50 Church St.,
New York City

208 N. Clinton St.
Chicago, Ill.

ARCHER

THE AUTO MIXER

A one-bag mixer, moved and driven by a Ford engine, gear driven, rugged and always on the job. It puts the concrete where and when you want it. Ask for Bulletin.

ARCHER IRON WORKS
Western Ave. at 34th Place, Chicago
Representatives in All Principal Cities

DAMS

Dams are successful only when the river is handled properly. Experience and knowledge are vital factors. Send for discussion on **Handling the River**

N. F. AMBURSEN
Consulting Hydraulic Engr.
128 Dewey St., Swissvale,
PITTSBURGH, PA.

Parsons, Klapp, Brinckerhoff & Douglas

84 Pine St., New York
WM. BARCLAY PARSONS
EUGENE KLAPP

Hanna Bldg., Cleveland
HENRY M. BRINCKERHOFF
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Engineers—Constructors—Managers

Design, Estimates, Supervision, Operation and Management, Examination and Reports

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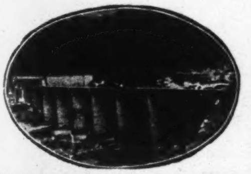


AMBURSEN DAMS

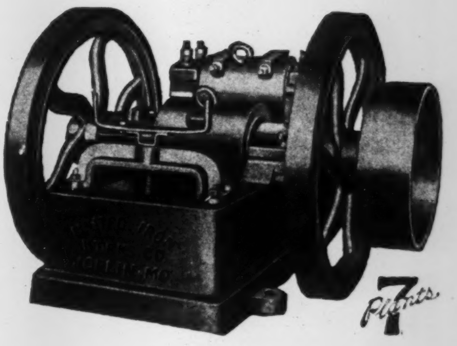
Best for Any Foundation

High Safety Factor **Low First Cost**
Rapid Construction **No Maintenance**

Send for
Cost Data, Literature, Photos.

Ambursen Construction Co., Inc.
New York Atlanta Kansas City

Low Upkeep



—low first-cost

This "United" Blake type crusher both serves you well and saves you money. It saves you on first cost and upkeep and the day after day service it renders increases the contractor's profits.

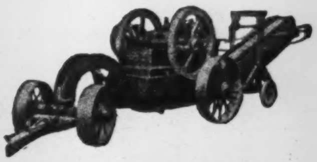
The "United" Crusher is strong, compact, and solidly put together. Heavy bed, heavy balance wheels, and substantial design throughout give it plenty of stamina. The wearing parts are of a special alloy that approximates manganese steel yet at only a third of its cost. Size of crushed product can be regulated while machine is in operation. Well protected against tramp iron.

It is concentrating on one type of crusher that makes the low price of the "United" possible. This crusher can be had unmounted, mounted on skids, or mounted on a truck with elevator.

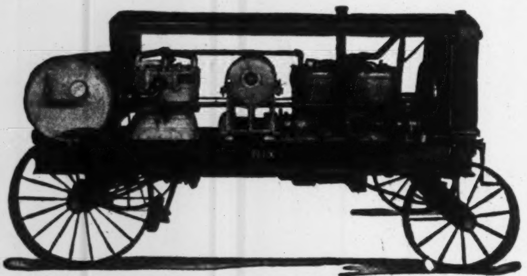
Every contractor with a crushing problem should have a "United" Crusher.

Write for Booklet H.

United Iron Works
Kansas City, Mo.
Manufacturers of Crushers, Hoists, Pumps, Cars, Industrial Track, etc.



"UNITED" IRON WORKS INC.
FOR SERVICE



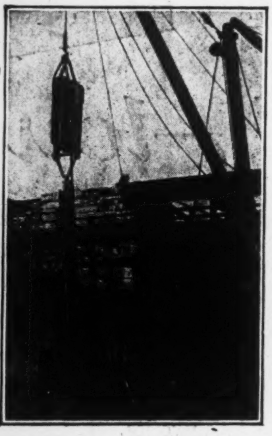
RIX PORTABLE COMPRESSOR UNITS

Standard Sizes—96—160—210—250 cu. ft. per minute.
Distributing Agents
COCHISE ROCK DRILLS

Standard Sizes—96, 160, 210, 250 cu. ft. per minute.
Engine—4 cyl. heavy duty, tractor type.
Direct connected through Twin Disc clutch.
Positive pressure oiling system.
Well balanced—vibration minimized.
Mounted on heavy duty steel wheels or skids.
Can be mounted on any chassis.

Send for Catalogue P. C. 101

Rix Compressed Air and Drill Co.
419 East Third Street, Los Angeles, Calif.
400 Fourth Street, San Francisco, Calif.



What's the life of your Steel Sheeting?

UNION·PILE·HAMMERS
DRIVE AND PULL

THE present cost of steel sheeting prohibits leaving it in the ground after it has served its use for cofferdams, etc.

UNION Pile Hammers

first *Drive* steel sheeting without injury and then *Pull* it so you can use it for the next job.

Photograph shows a typical instance. All you have to do, to pull with a Union, is to insert a one-way valve. Steam or air is used with no change whatsoever.

Have you a NEW Union Catalog?

UNION IRON WORKS
Lackawanna Siding, Hoboken, N. J.

SIMPLEX CONCRETE PILE ASSOCIATION, Inc.
2 RECTOR ST., NEW YORK CITY

NEW ENGLAND FOUNDATION CO., INC.
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Keystone Building, Pittsburgh, Pa.
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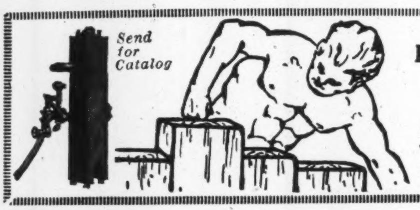
ENGINEERING & CONSTRUCTION
SIMPLEX CONCRETE PILING, OPEN CAISSONS
DIFFICULT FOUNDATIONS



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California Pile Hammers
Warrington-Vulcan Pile Hammers
Vulcan Iron Works
327 N. Irving Ave.
Chicago, Ill.

UNDERPINNING & FOUNDATION CO., INC.
Specialists in
Pneumatic, Steel Cylinder and Concrete Pile Foundations
342 Madison Ave., New York City

SCHRAMM, Inc.
Manufacturers
ENGINES COMPRESSORS PUMPS HOISTS MIXERS
Home Office and Factory—Westchester, Pa.
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TRENCH EXCAVATORS AND BACK-FILLERS
Buckeye
THE BUCKEYE TRACTION DITCHER CO.,
Findlay, Ohio

TRADE MARK KEYSTONE REGISTERED U. S. PATENT OFFICE
WELL DRILLS AND EXCAVATORS

TRADE MARK DOWNIE REGISTERED U. S. PATENT OFFICE
DEEP WELL AND CENTRIFUGAL PUMPS

Manufactured by
KEYSTONE DRILLER CO., Beaver Falls, Pa.
170 Broadway, New York.
Agent, Interstate Mach. Corp., Commerce Trust Bldg., Philadelphia

MAC ARTHUR PILES
Uncased Cast-in-Place Cylindrical Concrete Piles
Cast-in-Place Cylindrical Concrete Piles With Permanent Casing Left in Ground
Pedestal Piles
Open-ended Steel Pipe Piles
Closed-ended Steel Pipe Piles
Composite Piles, (Concrete and Wood)
Complete information on request
MacArthur Concrete Pile & Foundation Co., Inc.
Telephone Beekman 6196
55 John Street, New York City

McKiernan-Terry 9-B driving 80 ft. timber piles

at Keyport, N. J.

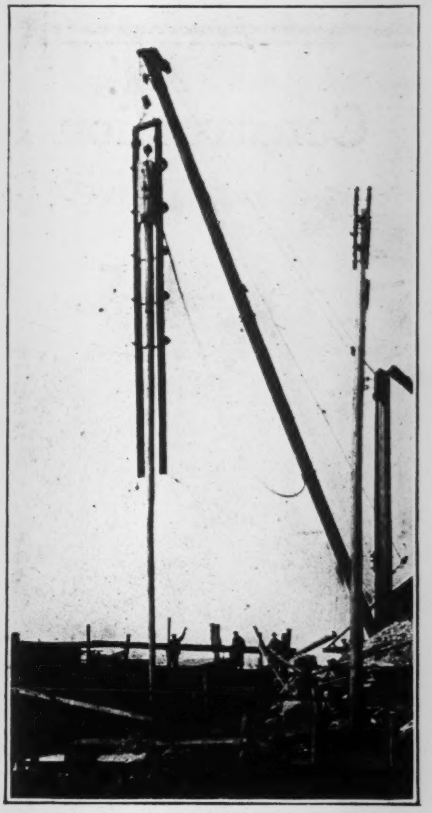
This photo shows the next to the heaviest pile hammer we manufacture, at work for the Bentley-Morrison Corporation. It is putting down timber piles ranging in length from 60 to 80 ft., suspended from a 76 ft. boom, guided by 40 ft. steel hanging leads.

Send for Bulletin 31

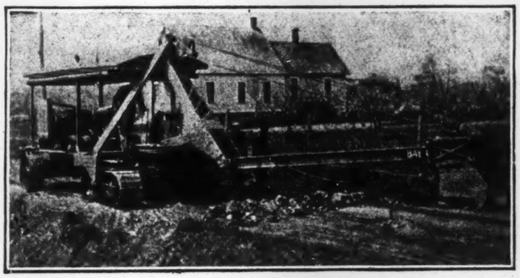
Whether you want a big hammer to handle work like this (or heavy concrete piles, etc.) or whether you want a "little fellow" to cut labor costs on light sheeting work—remember we make a line of double-acting hammers to meet every requirement. No need to ask *experienced* contractors regarding the McKiernan-Terry line!

McKiernan-Terry Drill Company
Rock Drills Pile Hammers Lifting Jacks
Mining and Quarrying Machinery
13 Park Row, New York
Works at Dover, N. J.

Agencies in the following Cities: Boston, Chicago, Pittsburgh, Cleveland, Detroit, St. Paul, San Francisco, Columbus, O., New Orleans, Philadelphia, Portland, Oregon. *Foreign Representatives:* British Steel Piling Co., London, England



Convertible Bay City Model 16-B For Your Next Grading Job



Excavating hard macadamized stone road at rate of 500 cu. yds. per day.

Better Work at Lower Cost.

The Bay City cuts a swath 34 ft. wide. All steel. Alemite Lubricated. Climax Power.

We guarantee that on shallow road or pavement grade excavation, stripping, etc., the Bay City with ⅝-yd. Skimmer Scoop will handle more material than any other type of shovel equipment of same bucket capacity. Bay City operating cost will be less than steam equipment and it will cut a smoother grade and a wider swath.

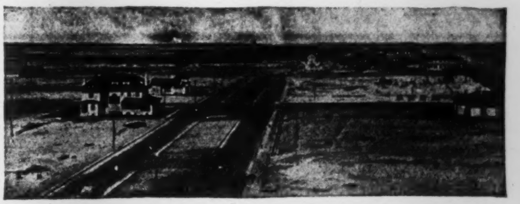
Operates Skimmer—Clamshell—Ditcher—Shovel

Write for New Catalog F.

For 14 Years Builders of Gasoline and Oil Excavators—Cranes—Walking Land Dredges

BAY CITY DREDGE WORKS
BAY CITY, MICH.
New York Office, 302 Broadway

Dredging



Filling, Land Reclamation, Canals and Port Works

River and Harbor Improvements, Deep Waterways and Ship Channels

We are equipped to execute all kinds of dredging, reclamation and port works anywhere in the United States.

CONTRACTORS to THE FEDERAL GOVERNMENT

Correspondence Invited from Southern Officials and Corporate and Private Interests Everywhere.

Largest Plant Longest Experience

Atlantic, Gulf and Pacific Co.
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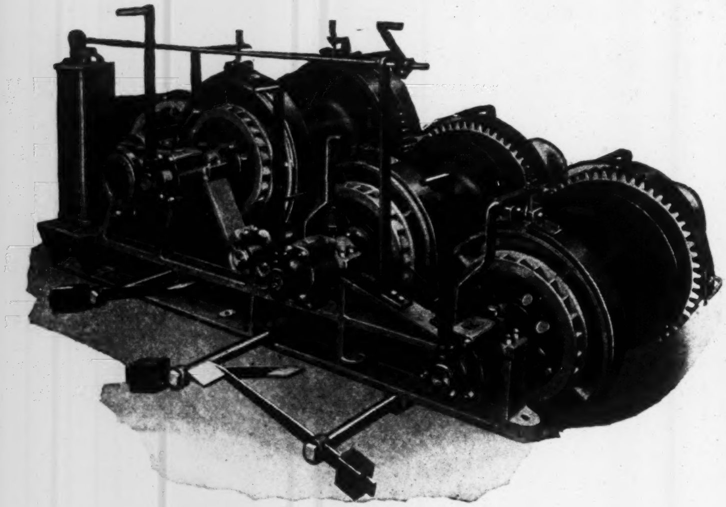
New York: 21 Park Row

TRADE MARK
MUNDY
ESTABLISHED 1869

Construction Held Up!

By Heated Friction on Hoist

Has This Ever Happened to You?



Undue heating of frictions and brakes is now eliminated by use of *Asbestall* non-burn frictions and *Asbestolin* lined brakes as built on Mundy hoists.

Asbestall frictions will not char or burn and are unaffected by moisture and oil. These blocks will wear many times longer than wood, leather and other materials.

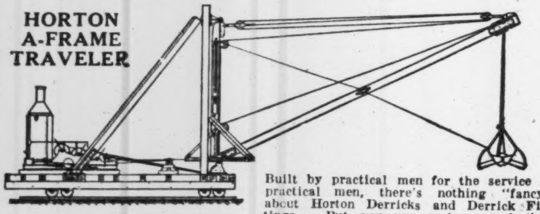
Brakes lined with Asbestolin, composed of woven metallic asbestos, are mounted on flange end of drum, as shown. This gives more radiating service and prevents the brakes from heating.

May we send our new No. 17 Catalog?

J. S. MUNDY HOISTING ENGINE CO.
Newark, New Jersey, U. S. A.
New York Sales and Export Office: 30 Church Street.

HORTON DERRICKS

**HORTON
A-FRAME
TRAVELER**

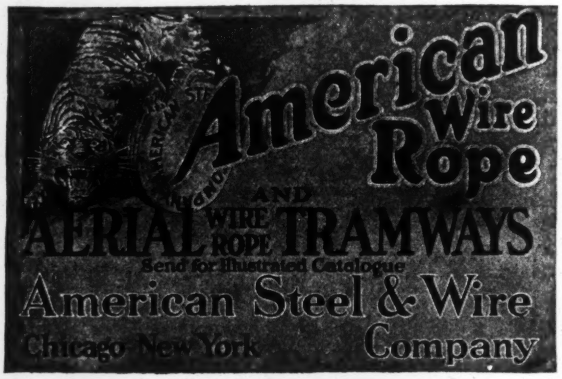


Send for catalog covering Horton Derricks, Winches and Cableways.

Built by practical men for the service of practical men, there's nothing "fancy" about Horton Derricks and Derrick Fittings. But you can rest assured that every part of every Horton Derrick is fully equal to doing its jobs in the most efficient and economical way.

JOHN T. HORTON CO., INC., 242 Bradhurst Avenue
New York City

Manufacturers of Derricks, Cableways, Winches



American Wire Rope

AND

AERIAL WIRE ROPE TRAMWAYS

Send for Illustrated Catalogue

American Steel & Wire Company

Chicago New York

Small in Size, but a Big Money-Maker if you need a machine to move 100 to 300 cu. yd. per day.

Here is just the type of power drag scraper outfit—compact, inexpensive, easily moved from place to place—that owners of small gravel pits, have been looking for. Write for folder.

SAUERMAN BROS.
432 S. Clinton St., Chicago

SAUERMAN PORTABLE POWER SCRAPER

MORETRENCH CONVEYING EXCAVATORS

Dig, backfill, lay pipe, pull sheeting, load trucks.

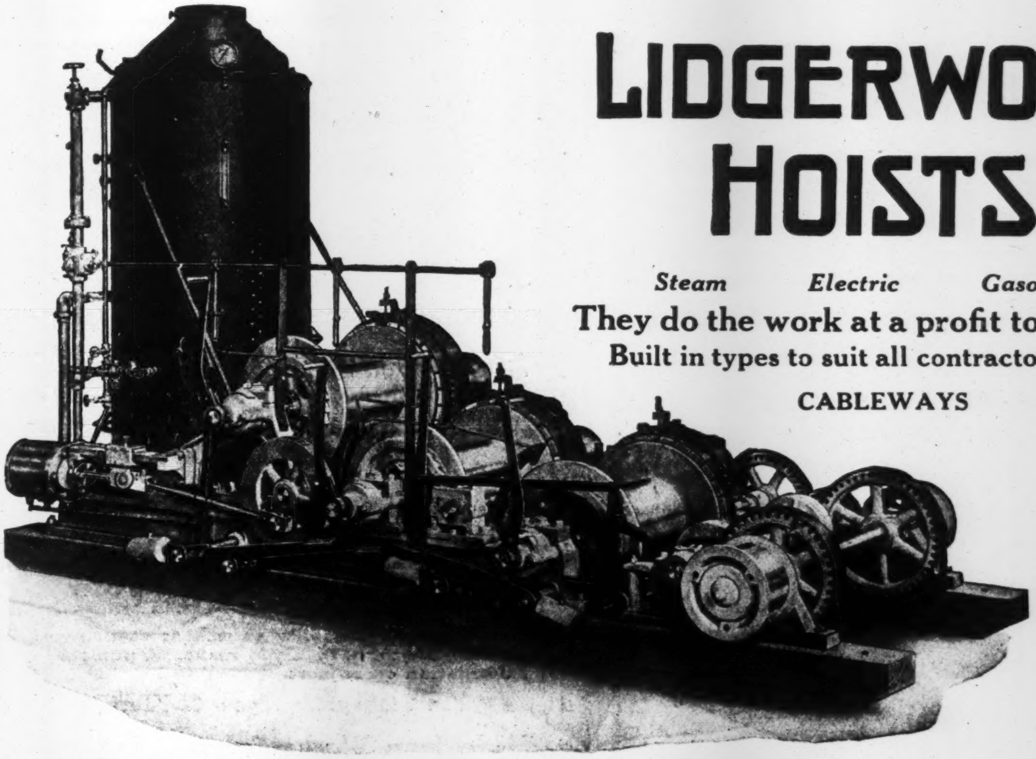
The only way on a wet trench and *the cheapest way* on a dry trench.

MORETRENCH HAMMER CRANES

The easiest way to use the big hammers that have the "sock" to drive sheeting.

ONE MACHINE AND ONE CREW

MOORE TRENCH MACHINE CO.
ROCKAWAY, NEW JERSEY



LIDGERWOOD HOISTS

Steam *Electric* *Gasolene*

They do the work at a profit to the user

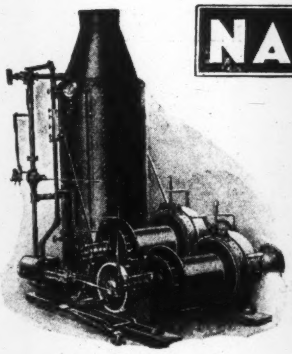
Built in types to suit all contractors' uses

CABLEWAYS DERRICKS

Catalogs upon Request

LIDGERWOOD MFG. COMPANY, 96 Liberty Street, New York, N. Y.

Branch Offices: Chicago, Pittsburgh, Philadelphia, Columbus, O.; Detroit, Los Angeles, Seattle, Portland, Ore.; Birmingham, Ala.; Norman B. Livermore & Co., San Francisco; Woodward-Wight & Co., New Orleans; John D. Westbrook, Inc., Norfolk, Va.; Hubbard-Floyd Co., Boston. **Foreign Offices:** London, England; Sao Paulo, Brazil; Rio de Janeiro, Brazil; Mexico, D.F., Apartado 812; Canadian Allis-Chalmers, Ltd., Toronto, Ont., Canada.



NATIONAL

Hoists
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Pile Hammers

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Office and Works:
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Dependable Wire Rope

HERCULES WIRE ROPE
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Hercules (Red Strand) Wire Rope is wear resisting at every point. Its unusual combination of strength, toughness and elasticity make it economical as well as dependable.

Established 1857

A. Leschen & Sons Rope Co.
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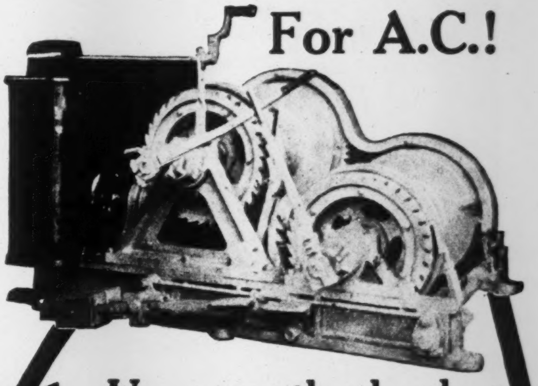
For A.C.!



Up goes the load on the first notch!

Here at last are single and double-drum hoists that operate efficiently on A.C.! *Made specifically for contracting work.* They start the load on the first lever movement and speed is controlled at will. There are no other hoists "just as good" as Fergusons.

Write for details and learn why.

F. FERGUSON & SON
Clinton and Twelfth Streets,
HOBOKEN, N. J.

THOMAS

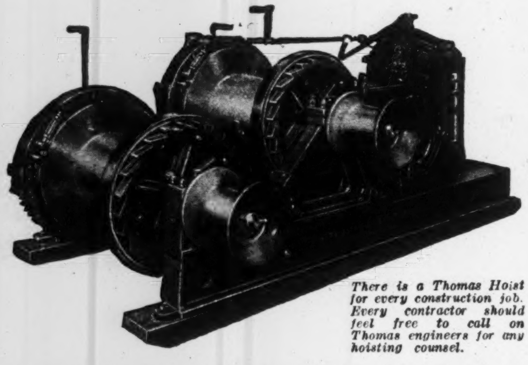
Steam and Electric Building Hoists

This standard double drum Thomas Hoist is the type most universally used for general hoisting. It is a hoist easy to operate and control. Being equipped with the Thomas band frictions, it operates without a thrust bearing. There is no possibility of friction becoming hot. Friction Driven Boom Swinger can be added at any time.

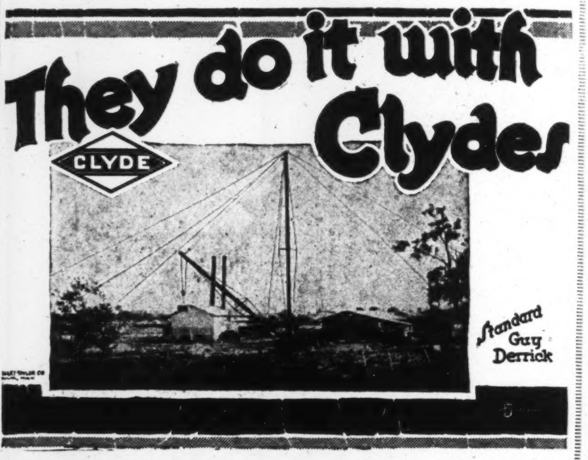
The Thomas automatic motor brake which positively prevents motor from backing down in case of interruption of current, is standard equipment on these hoists.

Ask for Bulletin No. 15

THOMAS ELEVATOR CO.
24 South Hoyne Ave., Chicago



There is a Thomas Hoist for every construction job. Every contractor should feel free to call on Thomas engineers for any hoisting counsel.



"We have never regretted for one minute the purchase of this equipment and will say in our experience with this derrick, we could not afford to be without it for double the initial expense. The saving on our material relative to unloading and handling is far greater than we expected.
INDIANA ASPHALT PAVING CO., W. C. Richter, Sec."

You will find durability as well as economy in every machine of Clyde make. Complete information on request.

You'll take pride in your CLYDE!

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Sole Distributors for Clyde Iron Works

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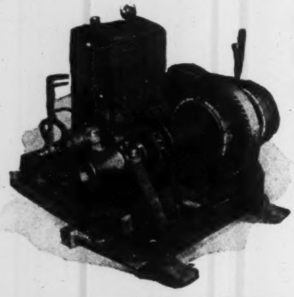
Stroudsburg Reversible Gasoline Hoists
Available from Stock



Builders of Steam, Electric and Gasoline Hoists.

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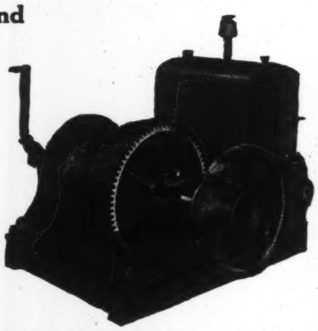
Stroudsburg, Pa.

"O & S" HOISTS

Are DURABLE and DEPENDABLE

Electric
Gasoline
or
Steam

Manufactured by
Orr & Sembower, Inc.
Reading, Pa.



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Stocks of Fittings, Blocks, Sheaves, Winches, etc., carried by our agents:
G. S. Green Co., New York.
Beckwith Machinery Co., Pittsburgh, Philadelphia, Cleveland, Charleston, W. Va.
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DOBBIE Foundry & Machine Co.
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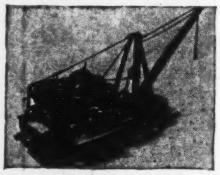

FLORY HOISTS
for every requirement
STEAM—ELECTRIC
GASOLINE
S. Flory Manufacturing Co.
95 Liberty St., New York. Bangor, Pa.

TERRY STEEL ERECTOR'S DERRICKS

Terry Derrick Fittings for general construction work

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Locomotive—Crawler—Traction

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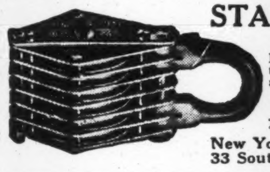

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Are Standard

For any lift or difficult working condition they are safest, strongest and most durable.

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Trustworthy **POWER**

Be Sure Your Machines are Equipped with

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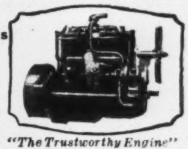

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CLIMAX ENGINEERING CO., 3 W. 18th Ave., CLINTON, IOWA.

CRANES
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WHITING CORPORATION
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Foundry
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"TOLEDO CRANES"

Fulfill Every Requirement
Save Time, Labor and Space

THE TOLEDO CRANE CO.
BUCYRUS, OHIO

TRAVELING CRANES

Hand power—Electric

ANY CAPACITY, ANY SPAN

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NORTHERN ENGINEERING WORKS.
DETROIT. MICH. U.S.A.

"Temperature Always Under Control"

Think of the cooling an engine needs that operates the powerful machines used to excavate drainage and irrigation canals, clean waterways and build levees and railroad embankments! This work certainly puts a cooling job on the Radiator.

That is why Modine Radiators are used as standard equipment on the engines operating Monighan Walking Dragline Excavators. The Monighan Machine Company says "Temperature is Always Under Control."

Modine Radiators have greater cooling capacity per pound of core material than any other construction.

Write for the Modine Booklet.

MODINE MANUFACTURING COMPANY,
Racine, Wisconsin

MODINE
SPIREX and TUBULAR
RADIATORS

Monighan Walking Dragline Excavator on Drainage work in Missouri.

TAYLOR-WHARTON IRON & STEEL CO.

TIOGA STEEL & IRON CO. | W^m WHARTON Jr. & CO. INC. | PHILADELPHIA ROLL & MACH CO.

Allow us to send you this book. You will find it interesting and helpful.

PUTTING THE RIGHT STEEL ON THE JOB
TISCO

Putting the Right Steel On the Job

"Profits are based on uninterrupted operations"

There are many kinds of steel; some are tough, some glass hard, some resistant to pressure, some to shock, some to abrasion. Efficiency comes in selecting the particular steel suited to the work which it shall be called upon to perform. A machine is not apt to break down if the parts subject to the greatest wear are made of the proper steel; the proper steel is available and economy demands its use. Scarcely a day passes that some of our engineers do not make specific applications which prove to be money-saving.

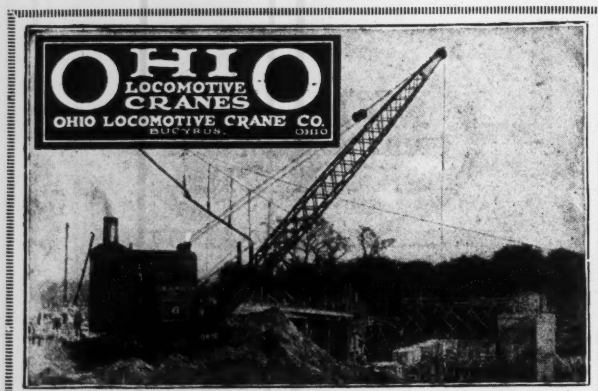
The booklet, "Putting the Right Steel on the Job," sets forth a number of these applications. Send for it.

Taylor-Wharton Iron & Steel Co.
High Bridge, N. J.

Sole owner of the Hibbard-Howe patents covering basic processes for the electric manufacture of manganese steel.

Taylor-Wharton Iron & Steel Co.	Wm. Wharton Jr. & Co.	Tioga Steel & Iron Co.	Phila. Roll & Machine Co.
Plant at High Bridge, N. J.	Plant at Easton, Pa.	Plant at Philadelphia, Pa.	Plant at Philadelphia, Pa.
Manganese Steel Wearing Parts	Special Trackwork Cylinders for Gases	Hammered and Pressed Forgings	Rolls and Rolling Mill Machinery

OHIO LOCOMOTIVE CRANES
OHIO LOCOMOTIVE CRANE CO.
BUCYRUS, OHIO



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VULCAN
CLAMSHELLS
ORANGEPEELS

Quick Acting
Easy Operating
Few Parts
Long Service

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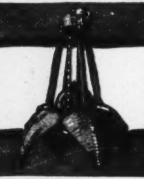
Estab. 1884

INDUSTRIAL CRANES
17 Locomotive Types—5 to 200 Tons
INDUSTRIAL WORKS
BAY CITY MICHIGAN

HAYWARD



Orange Peel, Clam Shell, Electric Motor, and Drag Scraper Buckets for all excavating, dredging, and rehandling purposes. Ask for Catalog 43, or consult our engineers gratis.

The Hayward Co., 48-50 Church St., N. Y.

BUCKETS

OWEN *Clam Shell* BUCKETS INSURE A BIGGER DAYS WORK

OWEN BUCKETS

Famous for digging power. Send for literature describing complete line of Owen Buckets.

The Owen Bucket Co.
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DEPENDABLE
O-S
CRANES—BUCKETS
Convertable Gear Driven Shovels
All Types—All Sizes
ORTON & STEINBRENNER CO.
Main Office: 608 S. Dearborn St., Chicago, Ill.
Works: HUNTINGTON, IND.

Trident Water Meters

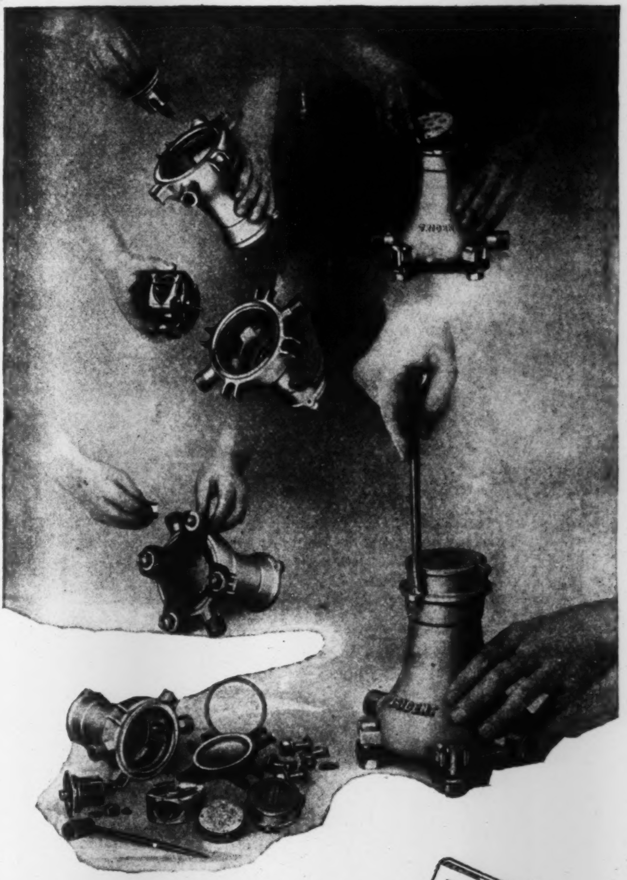
Interchangeable Unit Construction

"Each essential member of the complete Trident assembly is a self-contained unit and this is true regardless of the type. In beginning the assembly of the Trident Frost-proof Meter, the first member to be inserted in the main casing is the Trident Oil-Enclosed Gear Train. Next the piston with the patent Trident thrust roller bearing is inserted in the disk chamber and the two halves of this chamber snapped together by hand. Then the measuring chamber is placed in the main casing.

The breakable bottom is then put in place, the nuts of the four T-head bolts holding it turned on by hand and then tightened with the special Trident socket wrench. The assembly is then completed from the other end by placing the improved interlocking Trident register at the top and fastening it in place by means of the register box and sealing screws. These operations are carried out with a specially designed tool provided with Trident water meters.

This great ease of assembly is due, first, to the fact that there is only one correct way of putting Trident parts together; second, because all are made to such high standards of precision that every Trident part can be used with any other part without the necessity of hand fitting.

The complete meter has been reduced to three main units, making it easy for an inexperienced person to take the meter apart and put it together again, either with the old parts or with replacement parts. Maintenance charges consist largely of labor costs and these have been reduced to a minimum in the Trident."



Ease and Simplicity of Trident Assembly
The Assembly Is Progressive and Parts Can Go Together in But One Way. Each Part Is a Unit and Interchangeable.

TRIDENT
WATER METERS

Send for the New Trident Book

The text matter in this advertisement is an excerpt from page 15 of our new 96-page booklet illustrating and describing all types and sizes of Neptune Trident Meters. A copy with pleasure upon request.

Neptune Meter Company

Pioneers in Meter Progress

50 East 42nd Street, New York City

NEPTUNE METER CO., LTD., 1197 King St., West, Toronto, Ont.

Boston Chicago San Francisco Atlanta Los Angeles Seattle Portland St. Louis, Mo.

Frost-protected or frost-*proof*?

In considering water meters it pays to know the difference

'Most any modern water-meter is frost-protected. It has some part which breaks under extreme pressure and thereby saves the main casing and mechanism from serious damage.

But breakable parts mean expense for renewals and the inconvenience or even loss of having the meter temporarily out of service.

That's where the Lambert Frost-Proof Meter is different. Slitted brass collars used in clamping the top and bottom casings together, open under excessive pressure and allow the casing to part to any necessary extent. After freezing, the collars can be reclosed and the meter bolted anew.

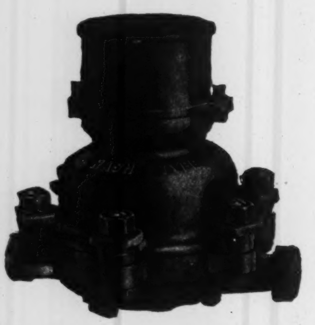
No new parts are necessary, no service interruption is caused and the job can be done in a few minutes. That's real meter economy!

Write now for the Lambert Booklet N.R., chock full of sensible meter ideas. Just a postal brings your copy.

LAMBERT
F. P.
DISC METER

Thomson Meter Co.
Factory and Main Offices
98 Bridge Street, Brooklyn, N. Y.

NASH
TYPE K
WATER METERS



All bronze disc model. Extra large slow moving disc. Real frost protection. Easy to take apart—no "jamming." Substantial enclosed intermediate.

For every service where a disc meter is specified, Type K will be found up to the most exacting requirements.

Send for descriptive circular No. 200

National Meter Company
Established 1870
299 Broadway, New York
Chicago Boston Cincinnati Atlanta San Francisco Los Angeles

"WATCH DOG"

WATER METERS

Accurate
Durable
Efficient

GAMON METER COMPANY

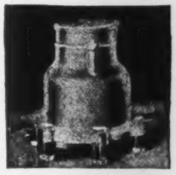
Main Office and Works:
Newark, New Jersey

Chicago Office:
360 No. Michigan Avenue

Judge for Yourself
The Quality of Hersey Water Meters

Here are the results of the last eight tests made on Hersey Disc Type Water Meters by the water commissioner of a medium sized eastern city during March 1924.

These meters had been protested by property owners and were taken from their settings and placed directly on a Mueller Meter Tester without examination.



METER No. 714,240 DATE SET, JUNE 19, 1919
1 cubic foot 5/8 inch stream weighed 63.00 pounds or 99.2% accurate
1 cubic foot 1/16 inch stream weighed 63.00 pounds or 99.2% accurate

METER No. 671,038 DATE SET, JANUARY 30, 1921
1 cubic foot 5/8 inch stream weighed 62.75 pounds or 99.6% accurate
1 cubic foot 1/16 inch stream weighed 62.50 pounds or 100% accurate

METER No. 693,007 DATE SET, NOVEMBER 27, 1916
1 cubic foot 5/8 inch stream weighed 62.50 pounds or 100% accurate
1 cubic foot 1/16 inch stream weighed 62.50 pounds or 100% accurate

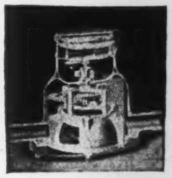
METER No. 763,210 DATE SET, JUNE 2, 1916
1 cubic foot 5/8 inch stream weighed 62.50 pounds or 100% accurate
1 cubic foot 1/16 inch stream weighed 62.50 pounds or 100% accurate

METER No. 714,343 DATE SET, AUGUST 10, 1917
1 cubic foot 5/8 inch stream weighed 62.00 pounds or 100.8% accurate
1 cubic foot 1/16 inch stream weighed 62.00 pounds or 100.8% accurate

METER No. 389,704 DATE SET, DECEMBER 28, 1918
1 cubic foot 5/8 inch stream weighed 63.00 pounds or 99.2% accurate
1 cubic foot 1/16 inch stream weighed 63.00 pounds or 99.2% accurate

METER No. 347,247 DATE SET, SEPTEMBER 17, 1917
1 cubic foot 5/8 inch stream weighed 62.00 pounds or 100.8% accurate
1 cubic foot 1/16 inch stream weighed 62.00 pounds or 100.8% accurate

METER No. 880,602 DATE SET, SEPTEMBER 15, 1921
1 cubic foot 5/8 inch stream weighed 62.50 pounds or 100% accurate
1 cubic foot 1/16 inch stream weighed 62.50 pounds or 100% accurate



These meters have been in service from 3 to 8 years under water pressure ranging from 85 to 95 pounds per square inch and show no falling off of registration accuracy.

Tests such as these prove the superiority of the Hersey Water Meter as an automatic revenue computer. Have you received our latest catalog?

6703

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WATER METERS
HWM

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Manufacturing Company

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COLUMBUS, OHIO .... 211 Schultz Bldg.
LOS ANGELES, CAL. .... 218 East Third Street
CHICAGO, ILL. .... 10 So. La Salle Street
ATLANTA, GA. .... 610 Citizens & Southern Bank Bldg.
SAN FRANCISCO, CAL. .... 742 Market Street
DALLAS, TEX. .... 2301 Griffin Street

WATER METERS

ARCTIC
Frost Bottom

KEYSTONE
COMPOUND

EUREKA
Current

KEYSTONE
All-Bronze

PITTSBURGH METER COMPANY
7800 Susquehanna Street, Pittsburgh, Pa.

NEW YORK—50 Church St.
CHICAGO—5 So. Wabash Ave.
KANSAS CITY—Mutual Bldg.
COLUMBIA—1433 Main St.
SEATTLE—4038 Arcade Bldg.
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At far below market prices

LARGEST STOCK
IN THE WORLD

BRASS
Valves
BRASS
Pipe Fittings

Steam Pressure, Vacuum
and Compound GAUGES

Our stock is of standard manufacture—the highest grade that is made. Their copper content is eighty to eighty-eight per cent.

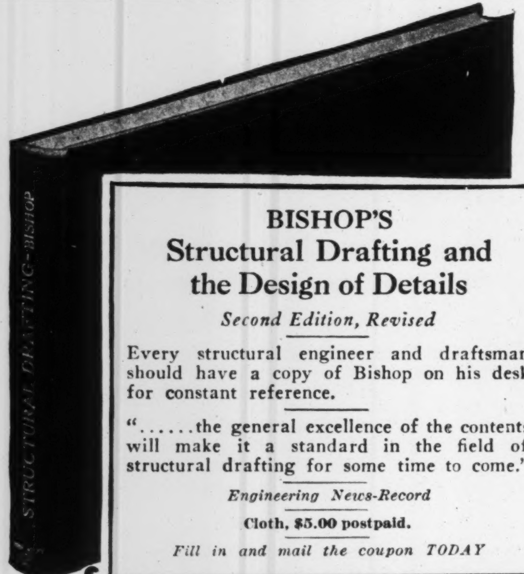
If you are not satisfied with the goods, or you can duplicate any part of the shipment at a lower price, you may return the entire lot—at our expense.

Our large stock on hand makes it possible for immediate deliveries.

Send for our latest revised Catalogue No. 5

JONES McKEE, Inc.
170 B'way New York City

Warehouses, Stores: **29-36 Bush Terminal, Brooklyn, N.Y.**



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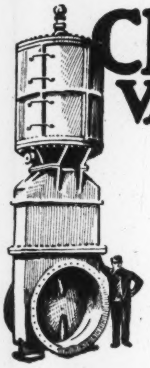
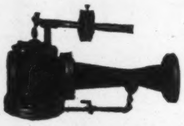


CHAPMAN VALVES Sluice Gates and Floor Stands
are backed by over 50 years' experience

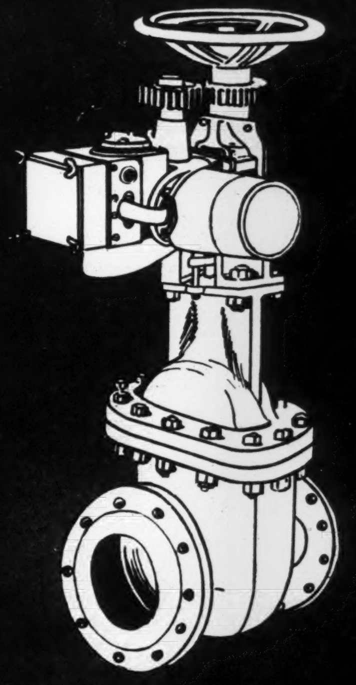
See our full page ads
Write for Catalog No. 38

The
CHAPMAN VALVE MFG. CO.
Indian Orchard, Mass.
Branches in Principal Cities

THE VENTURI METER
"VENTURI" Registered Trade Mark
For Water, Sewage, Gas, Air, Steam—in fact everything that flows.
Bulletins on Request.
BUILDERS IRON FOUNDRY, Providence, R. I.



SIMPLEX
Rate of Flow Controller
Simplicity Service Satisfaction
Bulletin 28 Tells the Story
SIMPLEX VALVE & METER CO., 300 Fidelity Bldg., Philadelphia, Pa.



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FOR THE ELECTRICAL OPERATION OF ALL VALVES REGARDLESS OF SIZE, SERVICE OR LOCATION FROM LOCAL OR DISTANT STATIONS. MAY BE APPLIED TO EXISTING VALVES.

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STAMFORD CONNECTICUT
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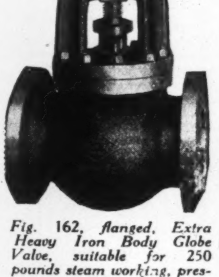

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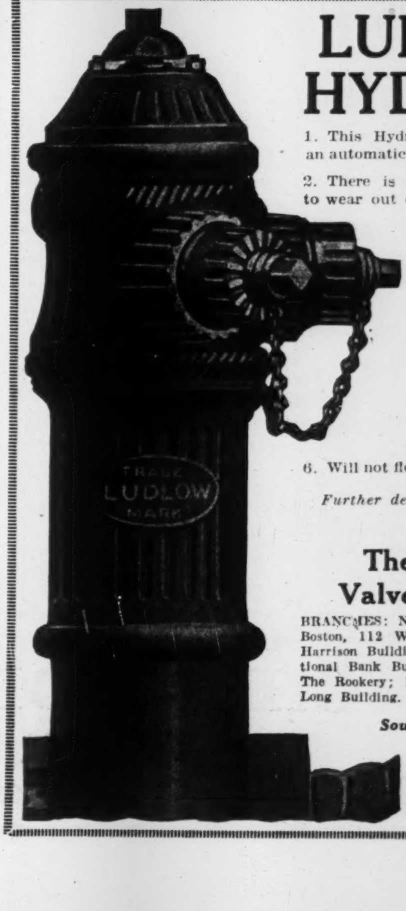

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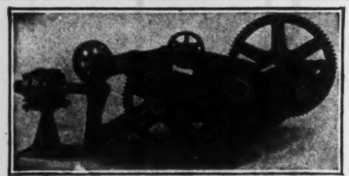

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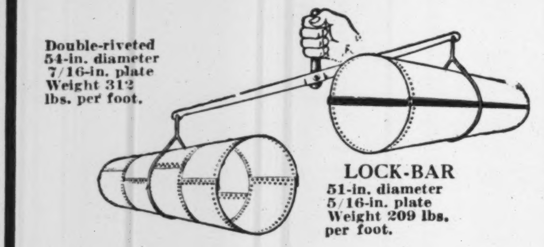

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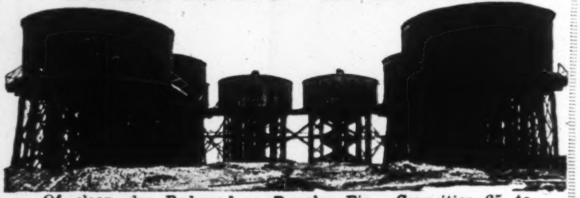

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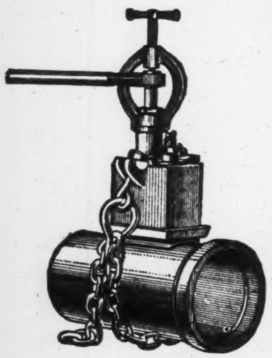

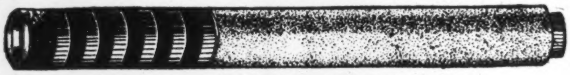

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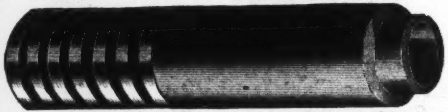

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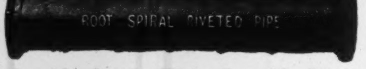

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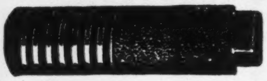

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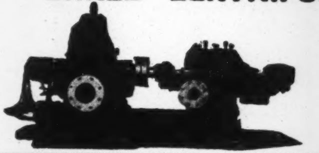

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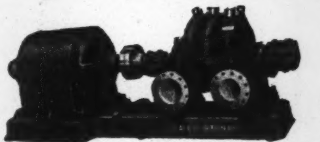

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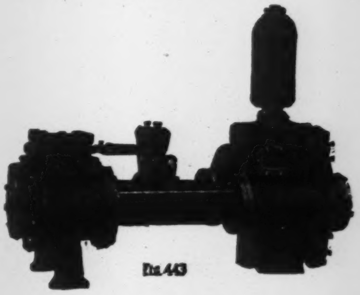

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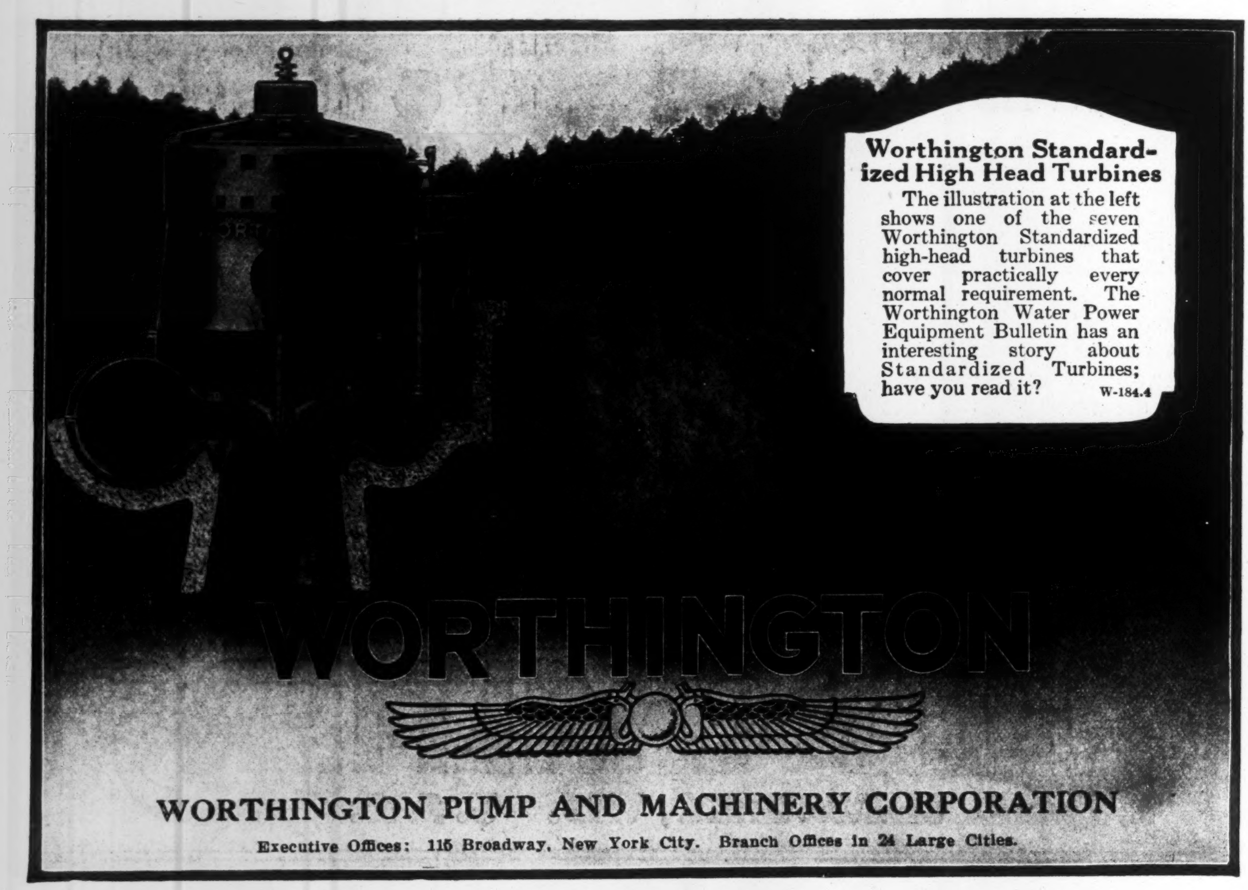

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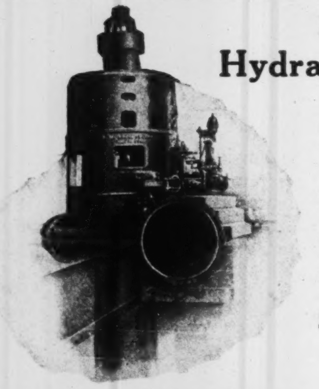

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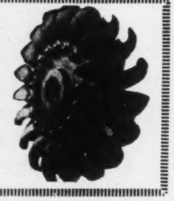

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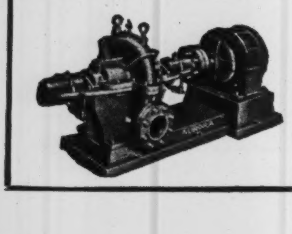

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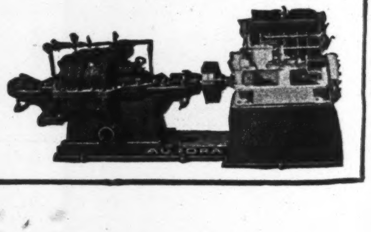

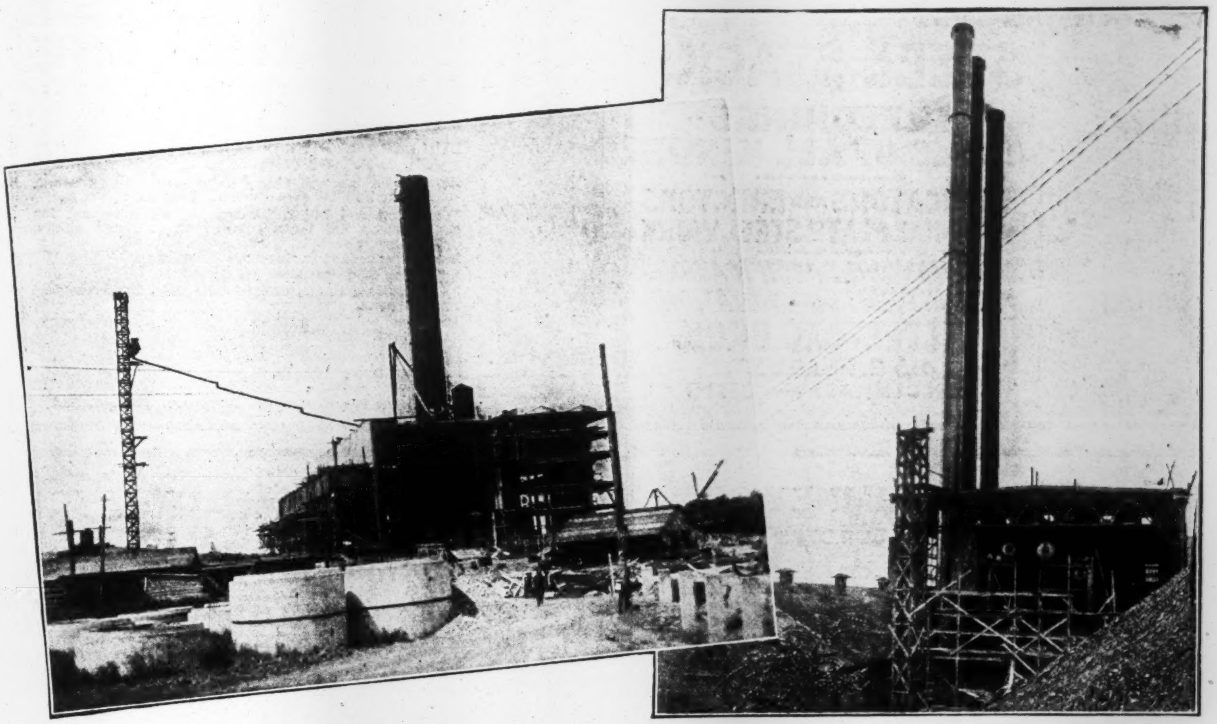

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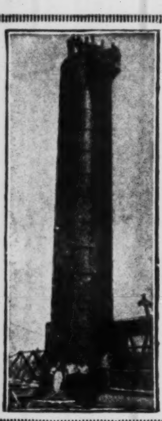

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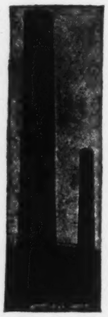

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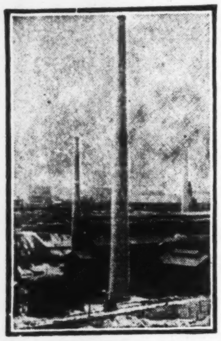

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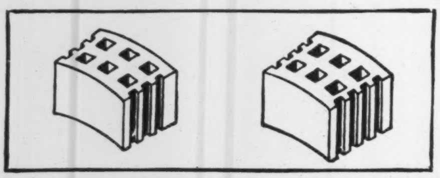

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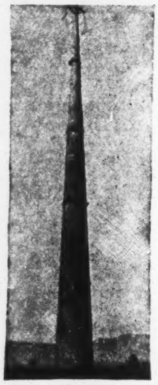

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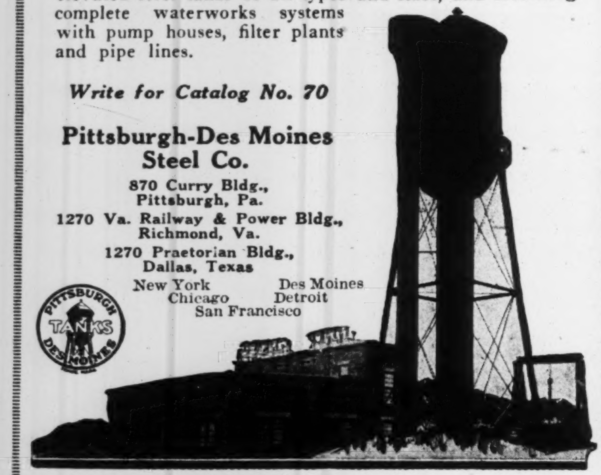

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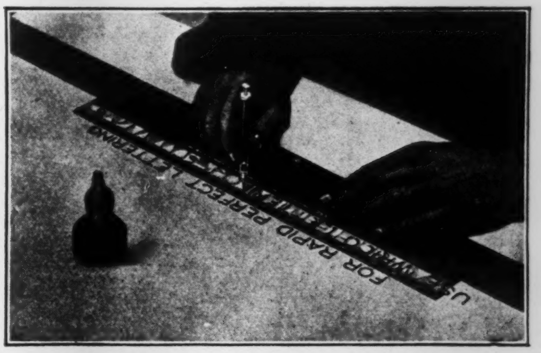

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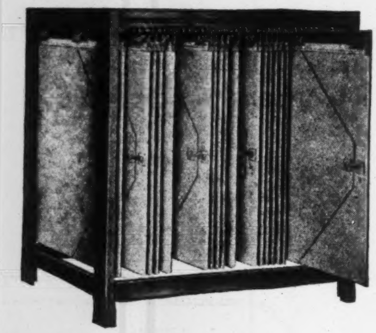

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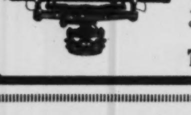

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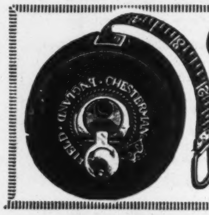

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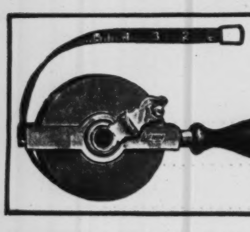

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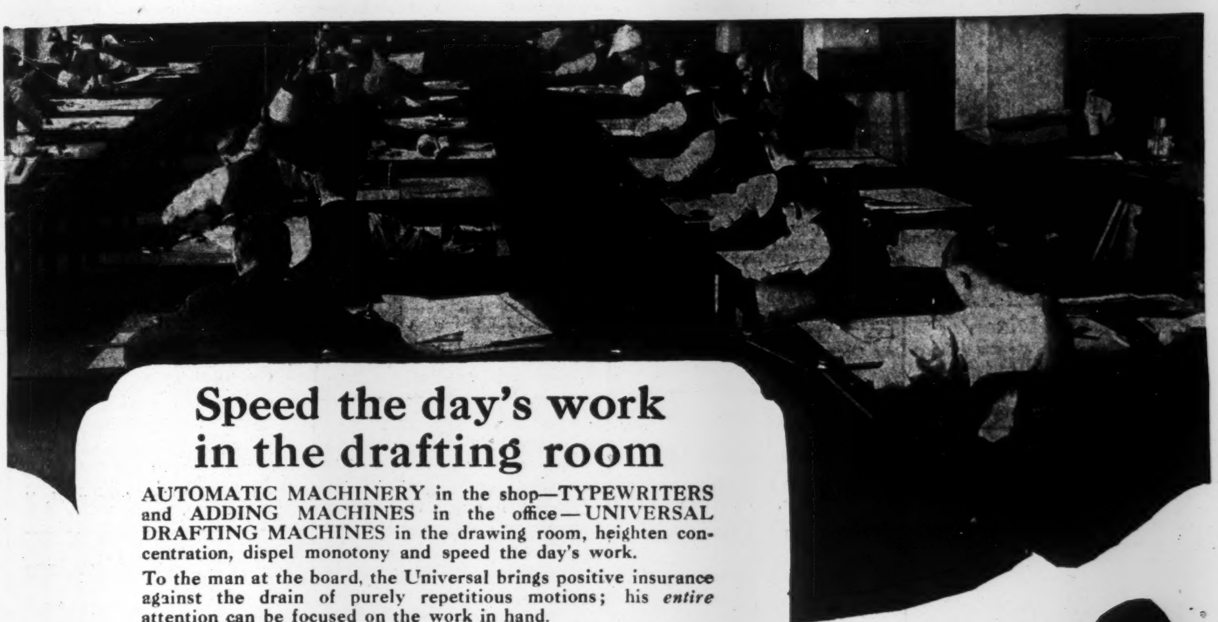

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Specialty Engr. Co.

Coal, Specialized
Wilson, Jr., C. W. S.

Coal-Storage Systems
Haiss Mfg. Co., Geo.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.

Cofferdams, Steel
Bethlehem Steel Co.

Column Clamps
Concrete Steel Co.
Pyle-Rogers Corp.
Universal Form Clamp Co.

Column Forms
Blaw-Knox Co.
Concrete Steel Co.
Heltzel Steel Form & Ir. Co.

Compressors, Air, Heavy Duty
Allis-Chalmers Mfg. Co.
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
McKiernan-Terry Drill Co.
Rix Compressed Air & Drill Co.
Sullivan Mchy. Co.
Worthington Pump & Mchy. Corp.

Compressors, Air, Portable
Cement-Gun Co.
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Rix Compressed Air & Drill Co.
Schramm, Inc.
Sullivan Mchy. Co.

Concrete Floor Hardener
Anti-Hydro Waterpr'f'g Co.
General Chemical Co.
Truscon Laborat.

Concrete Making Machinery
Ransome Concrete Mchy. Co

Concrete Reinforcement
American Steel & Wire Co.
Berger Mfg. Co.
Bethlehem Steel Co.
Brown Hoisting Mchy. Co.
Carnegie Steel Co.
Concrete Steel Co
Consolidated Expanded Metal Cos.
Kalman Steel Co.
Keystone Gypsum Fireproofing Co.
Laclede Steel Co.
Mitchell-Tappen Co.
National Steel Fabric Co.
Northwestern Expanded Metal Co.
Rail Steel Products Assn.
Ryerson & Son, Joseph T.
Truscon Steel Co.
U. S. Gypsum Co.

Condensers
Ingersoll-Rand Co.
Worthington Pump & Mchy. Corp.

Contractors
Cement-Gun Construction Co.
Gunite Concrete & Const. Co.
Indiana Gunite Constr. Co.
MacArthur Conc. Pile & Foundation Co.
Spencer, White & Prentis
Stone & Webster, Inc.
Terry & Tench Co., Inc.

Conveyors, Belt
Austin Manuf. Co.
Austin Western Rd. Mch. Co.
Barber-Greene Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Inc., Geo.
Smith Engineering Works
Specialty Engr. Co.

Conveyors, Bucket
Barber-Greene Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Inc., Geo.
Nelson Iron Works, N. P.
Specialty Engr. Co.

Corner Bead Metal
Consolidated Expanded Metal Cos.
Northwestern Expanded Metal Co.
Truscon Steel Co.

Cranes, Crawling Tractor
Industrial Works
Universal Crane Co.

Cranes, Electric
Industrial Works
Universal Crane Co.

Cranes, Locomotive
Bay City Dredge Works
Brown Hoisting Mchy. Co.
Clyde Iron Works Sales Co.
Erie Steam Shovel Co.
Industrial Works
McMyler Interstate Co.
Marion Steam Shovel Co.
Northwest Engr. Co.
Ohio Locomotive Crane Co.
Orton & Steinbrenner Co.
Pawling & Harnischfeger Co.
Universal Crane Co.
Thew Shovel Co.

Cranes, Motor-Truck
Universal Crane Co.

Cranes, Traveling
Brown Hoisting Mchy. Co.
N. J. Foundry & Mach. Co.
Northern Engineering Wks.
Pawling & Harnischfeger Co.
Toledo Crane Co.
Whiting Corporation

Creosoted Blocks, Timber Poles, Cross-Arms Lumber,
Amer. Creosoting Co. (Ky.)
Colonial Creosoting Co.
Eppinger & Russell Co.
Georgia Creosoting Co.
Jennison-Wright Co.
Republic Creosoting Co.
South. Wood Preserv. Co.
Wyckoff Pipe & Creo. Co.

Creosoting
Amer. Creosoting Co. (Ky.)
American Creosote Works
Colonial Creosoting Co.
Eppinger & Russell Co.
Georgia Creosoting Co.
Jennison-Wright Co.
Wyckoff Pipe & Creo. Co.

Creosoting Oils
Protexol Corp.

Crushers and Pulverizers
Allis-Chalmers Mfg. Co.
Austin Manuf. Co.
Austin-Western Rd. Mch.Co.
Brown Hoisting Mchy. Co.
Good Roads Machy. Co.
Smith Engineering Works
United Iron Works, Inc.
Universal Road Mchy. Co.

Culverts, Corrugated
Armco Culvert & Flume Mfrs. Assn.
Austin-Western Rd. Mch.Co.
Hardesty Mfg. Co., The R.
Canton Culvert & Silo Co.

Culverts, Metal
Amer. Sheet & Tin Plate Co.
Armco Culvert & Flume Mfrs. Assn.
Austin-Western Rd. Mch.Co.
Hardesty Mfg. Co., The R.
U.S. Cast Ir. Pipe & Fdy. Co.

Culverts, Nestable & Riveted Corrugated
Armco Culvert & Flume Mfrs. Assn.
Canton Culvert & Silo Co.

Curb Guards, Steel
Godwin Co., Inc., W. S.

Curbs, Steel Protected
Concrete Steel Co.
Truscon Steel Co.

Dams
Ambursen Construction Co.
Ambursen, N. F.

Dealers, Equipment
See Searchlight Section

Derricks and Derrick Fittings
Amer. Terry Derrick Co.
Clyde Iron Works Sales Co.
Dobbie Fdry. & Mach. Co.
Haiss Mfg. Co., Geo.
Hayward Co.
Horton Co., John T.
Insley Mfg. Co.
Lidgerwood Mfg. Co.
McMyler Interstate Co.
Mundy Hoist. Eng. Co., J. S.

Distributors, Pressure Oil
(See Road Oilers, Pressure)

Ditching Machinery
(See Excavators)

Docks and Harbor Work
Parsons, Klapp, Brinkerhoff & Douglass
Raymond Concrete Pile Co.
Snare Corp., Frederick

Doors & Shutters, Steel Rolling
Peelle Company, The

Drafting Machines
Universal Drafting Mch. Co.

Drafting Room Furniture and Supplies
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Pease Co., C. F.

Draglines
Bucyrus Company
Northwest Engr. Co.
Universal Crane Co.

Drawing Instruments
Pease Co., The C. F.

Drawing Materials
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Keuffel & Esser Co.
Pease Co., The C. F.
Wood-Regan Instr. Co.

Drawing Tables
(See Tables and Bds. Drg.)

Dredges
Bay City Dredge Works
Bucyrus Company
Hayward Co.
Lidgerwood Mfg. Co.
Marion Steam Shovel Co.
Vulcan Iron Works, N. J.

Dredges, Dipper
Austin Mchy. Corp.
Bucyrus Company
Erie Steam Shovel Co.

Dredges, Hydraulic
Atlantic Gulf & Pacific Co.
Bucyrus Company
Marion Steam Shovel Co.

Drills, Core
Ingersoll-Rand Co.
Keystone Driller Co.
McKiernan-Terry Drill Co.
Sullivan Mchy. Co.

Drills, Rock
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
McKiernan-Terry Drill Co.
Rix Compressed Air & Drill Co.
Sullivan Mchy. Co.

Drums, Holding
Blaw-Knox Co.
Haiss Mfg. Co., Inc., Geo.
Hayward Co.

Dryers
Blaw-Knox Co.

Dryers, Sand and Gravel
Vulcan Iron Works of Pa.

Dump Bodies
N. Y. Central Iron Works Co.

Economizers
Power Specialty Co.

Elevators, Bucket
Austin Manuf. Co.
Austin-Western Rd. Mch.Co.
Brown Hoisting Mchy. Co.
Haiss Mfg. Co., Inc., Geo.
Hendrick Mfg. Co.
Monighan Mach. Co.
Nelson Iron Works, N. P.
Ohio Locomotive Crane Co.
Smith Engineering Works
Webster Mfg. Co.

Elevators; Contractors' Material
Archer Iron Works
Austin Manuf. Co.
Austin-Western Rd. Mch.Co.

Columbia Dry Batteries

—they last longer

COLUMBIA
HOT SHOT
BATTERY
NUMBER 1461 M
4 CELLPOWER 6 VOLTS
FOR MOTOR IGNITION
NATIONAL CARBON CO. INC.
PATENTS APPLIED FOR
FOR ALL RADIO DRY CELL TUBES
COLUMBIA
TRADE MARK REGISTERED
IGNITOR
DRY CELL
FOR
IGNITION, RADIO
AND ALL
GENERAL PURPOSES
INSPECTED
TESTED
RELIABLE
NATIONAL CARBON CO. Inc.
DISTRICT OFFICES
ATLANTA, CHICAGO, CLEVELAND, KANSAS CITY, LONG ISLAND CITY, SAN FRANCISCO
MADE IN U.S.A.

Columbia Hot Shot Batteries contain 4, 5 or 6 Columbia Ignitors in series in a neat, waterproof steel case.

Fahnestock Spring Clip Binding Posts on Columbia Ignitor at no extra cost to you.

Ignition Service Everywhere

for

- —Gas engine ignition
- —Tractor ignition
- —Starting Fords
- —Firing blasts
- —Heat regulators
- —Doorbells
- —Buzzers
- —Ringing burglar alarms
- —Protecting bank vaults
- —Calling Pullman porters
- —Motor boat ignition
- —Telephone and telegraph
- —Lighting tents and outbuildings
- —Electric clocks
- —Running toys
- —Radio "A"

CRACKLING hot sparks in the cylinder—putt-putt-putt says the engine as it turns the concrete mixer or air compressor.

Columbia Hot Shot hits hard in all weathers. This very minute in every State it is helping dig ditches, run roads, build buildings. Its power gives new push to pistons. Construction thrives where Columbias run engines, fire blasts, operate telephones, ring bells and buzz buzzers.

No matter where the job, there is a Columbia dealer nearby. Any hardware, electrical shop or general store can fix you up with new strong-arm Columbias.

Columbia Dry Batteries are sold by electrical, hardware, radio and auto accessory shops, marine supply dealers, implement dealers, garages, general stores. Insist upon Columbias.

NATIONAL CARBON COMPANY, INC.
New York San Francisco
Canadian National Carbon Co., Limited
Factory and Offices: Toronto, Ontario

Barber-Greene Co.
Clyde Iron Works Sales Co.
Haiss Mfg. Co., Inc., Geo.
Insley Mfg. Co.
Leach Company
Ransome Concrete Mchy. Co
Smith Engineering Works
Thomas Elevator Co.

Elevators, Factory
N. J. Foundry & Mch. Co.
Ridgway & Son Co., Craige

Engineers, Roofing
Federal Cement Tile Co.
Marks Corp., The H. E.
U. S. Gypsum Co.

Engineers
(See also Directory of Engineers)
Atlantic Gulf & Pacific Co.
MacArthur Conc. Pile & Foundation Co
Parsons, Klapp, Brinckerhoff & Douglas
Raymond Concrete Pile Co.
Spencer, White & Prentis
Stone & Webster, Inc.
Terry & Tench Co., Inc.

Engineers' and Draftsmen's Instruments and Supplies
Beckmann Co., L.
Dietzgen Co., Eugene
Hamilton Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lufkin Rule Co.
Weber Co., The F.
Wiebush & Hilger, Ltd.
Wood-Regan Instr. Co.

Engines, Gas, Gasoline & Oil
Allis-Chalmers Mfg. Co.
Buda Company
Chicago Pneumatic Tool Co.
Climax Engr. Co.
Hercules Motors Corp.
Ingersoll-Rand Co.
National Meter Co.
Otis Engine Corp.
Schramm, Inc.
Standard Scale & Supply Co
Worthington Pump & Mchy. Corp.

Engines, Hoisting
(See Hoists)

Engines, Portable
Climax Engr. Co.

Engines, Steam
Chicago Pneumatic Tool Co.

Engines, Traction
Best Tractor Co., C. L.

Excavator, Cableway
Clyde Iron Works Sales Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
Sauerman Bros.

Excavators, Ditch & Trench
Austin Mchy. Corp.
Bay City Dredge Works
Buckeye Tract. Ditcher Co.
Erie Steam Shovel Co.
Keystone Driller Co.
Marion Steam Shovel Co.
Moore Trench Mch. Co.
Northwest Engr. Co.
Parsons Co.
Pawling & Harnischfeger Co.
Thew Shovel Co.

Excavators, Dragline
Austin Machinery Corp.
Bay City Dredge Works
Bucyrus Company
Erie Steam Shovel Co.
Hayward Co.
Marion Steam Shovel Co.
McMyler-Interstate Co.
Mead-Morrison Mfg. Co.
Northwest Engr. Co.
Pawling & Harnischfeger Co.
Sauerman Bros.

Expanded Metal
Berger Mfg. Co.
Consolidated Expanded Metal Cos.
Northwestern Expanded Metal Co.
Truscon Steel Co.

Expansion Bolts
National Lead Co.

Filters, Water, Municipal and Industrial
Amer. Water Softener Co.
California Filter Co.
Leopold Co., F. B.
Norwood Engr. Co.
Roberts Filter Mfg. Co.

Fireproofing Material & Construction
Berger Mfg. Co.
Marks Corp., H. E.
Northwestern Expanded Metal Co.
Peelle Company, The
Truscon Steel Co.

Floor, Asphalt Mastic
Standard Oil Co. of N. Y.
Texas Co., The

Floor Hardener, Concrete
(See Conc. Floor Hardener)

Floor, Wood Block
Jennison-Wright Co.
Republic Creosoting Co.

Flooring, Fireproof
Alan Wood, Iron & Steel Co.
Irving Iron Works
Kerlow Steel Flooring Co.
Marks Corp., H. E.
Universal Safety Tread Co.

Flumes
Continental Pipe Mfg. Co.

Flumes, Iron & Steel
Armco Culvert & Flume Mfrs. Assn.
Blaw-Knox Co.
Hardesty Mfg. Co., R.

Forgings
Bethlehem Steel Co.
Carnegie Steel Co.

Form Clamps
Concrete Steel Co.
Insley Mfg. Co.
Pyle-Rogers Corp.
Universal Form Clamp Co.

Form Tighteners
Concrete Steel Co.
Marion Malleable Iron Wks.

Forms, Culvert, Road, Sewer, Tunnel, etc.
Blaw-Knox Co.
Heltzel Steel Form & Ir. Co
Lakewood Engr. Co.

Forms for Curb and Gutter
Blaw-Knox Co
Heltzel Steel Form & Ir. Co.

Forms for Walls, Building Construction, etc.
Berger Mfg. Co.
Blaw-Knox Co.
Concrete Steel Co.
Heltzel Steel Form & Ir. Co.

Foundations
MacArthur Concrete Pile & Foundation Co.
Raymond Concrete Pile Co.
Simplex Concrete Pile Assn.
Spencer, White & Prentis.
Underpinning & Found. Co.

Frogs and Switches, Railway
Bethlehem Steel Co.
Foster Co., L. B.
Ramapo Ajax Corp.

Furnaces, Annealing & Tempering
American Bridge Co.

Gas Holders
Chicago Bridge & Iron Wks.

Gas Producers
Blaw-Knox Co.

Gates, Sluice
Chapman Valve Mfg. Co.
Coffin Valve Co.
Coldwell-Wilcox Co.
Hardesty Mfg. Co., R.

Gauges, Loss of Head
Simplex Valve & Meter Co

Gauges, Pressure
Jones, McKee, Inc.

Gauges, Rates of Flow
Simplex Valve & Meter Co.

Gears
Earle Gear & Mach. Co.

Generators, Electric
Allis-Chalmers Mfg. Co.

Glass, Fireproof
(See Wire Glass)

Governors, Waterwheel
Woodward Governor Co.
Worthington Pump & Machy. Corp.

Graders, Road
Adams & Co., J. D.
Austin Manuf. Co.
Austin-Western Rd. Mchy. Co.
Erie Steam Shovel Co.
Good Roads Mchy. Co.
Hadfield-Penfield Steel Co.
Western Wheeled Scraper Co.

Granite
Granite Paving Block Mfrs.' Assn. of U. S.

Gratings, Safety
Irving Iron Works
Kerlow Steel Flooring Co.
Mitchell-Tappen Co.
Universal Safety Tread Co.

Gravel Washing Plants
Sauerman Bros.

Grouting
Weber Engineering Co.

Gypsum
Keystone Gypsum Fireproofing Co.
Marks Corp., H. E.
U. S. Gypsum Co.

Hammers, Pneumatic
Chicago Pneumatic Tool Co.

Hammers, Steam Pile
(See Pile Hammers, Steam)

Heaters, Oil
Power Specialty Co.

Heaters, Tar & Asphalt
Honhorst Co., The Jos.
Littleford Bros.

Hoists, Concrete Tower
Archer Iron Works
Clyde Iron Works Sales Co.
Insley Manufacturing Co.
Lakewood Engr. Co.
Mead-Morrison Mfg. Co.
National Hoisting Eng. Co.
Thomas Elevator Co.

Hoists, Contractors' Electric
Allis-Chalmers Mfg. Co.
Bay City Dredge Works
Clyde Iron Works Sales Co.
Dobbie Foundry & Mach. Co.
Flory Mfg. Co., S.
Ferguson & Son, F.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
National Hoisting Eng. Co.
Northern Engineering Wks.
Orr & Sembower, Inc.
Porter Co., H. K.
Ransome Con. Mchy. Co.
Stroudsburg Engine Works
Thomas Elevator Co.
United Iron Works, Inc.
Van Dorn Iron Works Co.
Vulcan Iron Works of Pa.

Hoists, Contractors' Gasoline
Clyde Iron Works Sales Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist. Eng. Co., J. S.
National Hoisting Eng. Co.
Otis Engine Corp.
Schramm, Inc.
Stroudsburg Engine Works
Thomas Elevator Co.

Hoists, Contractors' Steam
Allis-Chalmers Mfg. Co.
Clyde Iron Works Sales Co.
Ingersoll-Rand Co.
Lidgerwood Mfg. Co.
Mead-Morrison Mfg. Co.
Mundy Hoist Eng. Co., J. S.
National Hoisting Eng. Co.
Orr & Sembower, Inc.
Stroudsburg Engine Works
Thomas Elevator Co.
Vulcan Iron Works of Pa.

Hoists, Hydraulic Head Gates
Dilts Machine Wks., Inc.

Hoists, Motor, Truck
Mead-Morrison Mfg. Co.

Hoists, Pneumatic
Chicago Pneumatic Tool Co.
Ingersoll-Rand Co.
Stroudsburg Engine Works
Sullivan Machinery Co.
Whiting Corporation

Hoists, Skip
Mead-Morrison Mfg. Co.
Thomas Elevator Co.
Nelson Iron Works, N. P.

Hoppers, Concrete
Insley Manufacturing Co.
Ransome Concrete Mchy. Co.

Hoppers, Steel
Archer Iron Works
Heltzel Steel Form & Ir. Co.
Honhorst Co., The Jos.
Littleford Bros.

Hose, Steam, Air & Water
Chicago Pneumatic Tool Co.
Goodall Rubber Co.

Hydrants
Chapman Valve Mfg. Co.
Ludlow Valve Mfg. Co.
Smith Mfg. Co., A. P.
Wood & Co., R. D.

Inserts, Concrete
Concrete Steel Co.
Truscon Steel Co.

Inspecting Laboratories
(See Directory of Engineers)

Instruments, Drawing
Keuffel & Esser Co.

Instruments, Surveying
Brandis & Sons
Ainsworth & Sons, Wm.
Berger & Sons, C. L.
Buff & Buff Mfg. Co.
Gurley, W. & L. E.
Keuffel & Esser Co.
Lietz Co., A
Weber Co., The F.

Insulation, Misc.
Texas Co., The

Iron Work, Structural and Ornamental
Hendrick Mfg. Co.
Irving Iron Works Co.
Kerlow Steel Flooring Co.
Ryerson & Son, Jos. T.
Snead Architect. Iron Wks
Universal Safety Tread Co.

Jacks, Lifting
McKiernan-Terry Drill Co.
Norton, Inc., A. O.
Roos Company, H. W.

Joints, Expansion Paving
Carey Co., The Philip

Joints, Filler Paving
Standard Oil Co. of N. Y.
Texas Co., The

Joints, Flexible Pipe
Central Foundry Co.
U. S. Cast Ir. Pipe & Fdy. Co.

Kilns, Rotary
Vulcan Iron Works of Pa.

Ladder Steps, Steel
Irving Iron Wks. Co.

Lath, Expanded Metal
Armco Culvert & Flume Mfrs. Assn.
Berger Mfg. Co.
Mitchell-Tappen Co.
Northwest'n Exp. Metal Co.
Truscon Steel Co.

Leadite
Leadite Co., Inc., The

Lights, Contractors'
Carbic Manufacturing Co.
Pyle-National Co.

Loaders, Car & Wagon
Austin Machinery Corp.
Austin Manuf. Co.
Austin Western Rd Mch. Co.
Barber-Greene Co.
Erie Steam Shovel Co.
Haiss Mfg. Co., Inc., Geo.
Nelson Iron Works, N. P.
Specialty Engr. Co.

Locomotives, Compressed Air
Baldwin Locomotive Co.
Porter Co., H. K.

Locomotives, Electric
Baldwin Locomotive Co.

Locomotives, Fireless Steam
Porter Co., H. K.

Locomotives, Gasoline
Baldwin Locomotive Co.
Fate Root Heath Co.
Hadfield-Penfield Steel Co.
Milwaukee Loco. Mfg. Co.
Vulcan Iron Works of Pa.

Locomotives, Steam
Baldwin Locomotive Co.
Davenport Locomotive Wks.
Koppel Indust. Car & Equip. Co.
Porter Co., H. K.
Vulcan Iron Works of Pa.

Lubricants
Texas Co., The

Lumber
Eppinger & Russell Co.
Lawson & MacMurray

Manhole Covers
Central Foundry Co.

Manometers
Simplex Valve & Meter Co.

Meter Boxes
Pittsburgh Meter Co.

Meter Provers
Hersey Manuf. Co.
Pittsburgh Meter Co.

Meters, Boiler Feed Water
Builders Iron Foundry

Meters, Current
Gurley, W. & L. E.

Meters, Gas and Steam
Builders Iron Foundry
National Meter Co.
Wallace & Tiernan Co., Inc.

Meters, Venturi
Builders Iron Foundry

Meters, Water, Oil, etc.
Builders Iron Foundry
Gamon Meter Co.
Hersey Manuf. Co.
National Meter Co.
Neptune Meter Co.
Pittsburgh Meter Co.
Simplex Valve & Meter Co.
Thomson Meter Co.
Worthington Pump & Machy. Corp.

Mixers, Asphalt
(See Mixers, Hot)

Mixers, Concrete
Archer Iron Works
Austin Machinery Corp.
Cement-Gun Co.
Lakewood Engineering Co.
Leach Company
Orr-Sembower, Inc.
Ransome Concrete Mchy. Co.
Schramm, Inc.
Standard Scale & Supply Co.

Mixers, Grout
Austin Machinery Corp.
Leach Company
Ransome Concrete Mchy. Co.
Union Iron Works

Mixers, Hot
Austin Machinery Corp.

Mixers, Mortar
Austin Machinery Corp.
Leach Company
Ransome Concrete Mchy. Co.

Mixers, Paving
Austin Machinery Corp.
Ransome Concrete Mchy. Co

Mixers, Pneumatic
Ransome Concrete Mchy Co.

Mortar
Carney Company

Motors, Electric
Allis-Chalmers Mfg. Co.

Motors, Gasoline
Buda Company
Hercules Motors Corp.

Motor-Truck Bodies
N. Y. Central Iron Wks. Co.
Van Dorn Iron Works Co.

Motor Trucks
(See Trucks, Motor)

Nitrogen Gas
Linde Air Prods. Co.

Oil Clothing
Goodall Rubber Co.

Oil Lubricating
Texas Co., The

Oxy-Acetylene Apparatus
Blaw-Knox Co.

Oxygen Gas
Linde Air Prods. Co.

Packing.
Goodall Rubber Co.
Jenkins Bros.

Paints, Graphite
Truscon Laboratories

Paints, Light Reflecting
Truscon Laboratories

Paints, Metal Protective
Carey Co., The Philip
National Lead Co.
Protexol Corp.
Truscon Laboratories

Partitions
U. S. Gypsum Co.

Pavement Breakers
Buckeye Tract. Ditcher Co.

Paving, Asphalt
Carey Co., Philip
Standard Oil Co. of N. Y.
Texas Co., The

Paving Blocks, Creosoted Wood
(See Creosoted Block Timber, Poles, Cross-Arms, Lumber)

Paving Blocks, Granite
Granite Paving Block Mfrs.

Paving Breakers
Ingersoll-Rand Co.

Paving, Cold Patching
Standard Oil Co. of N. Y.
Texas Co., The

Paving Guards, Steel
Godwin Co., Inc., W. S.

Penstocks
Blaw-Knox Co.
Chicago Bridge & Iron Wks.

Pile Drivers
Industrial Works
McKiernan-Terry Drill Co.
McMyler Interstate Co.
Union Iron Works

Pile Hammers, Steam
Industrial Works
McKiernan-Terry Drill Co.
National Hoisting Eng. Co.
Union Iron Works
Vulcan Iron Works of Chic.

Piles, Concrete
MacArthur Concrete Pile & Foundation Co.
Raymond Concrete Pile Co.
Simplex Concrete Pile Co.
Spencer, White & Prentis

Piles, Creosoted Wood
Jennison-Wright Co.

Piling, Interlocking Steel
Bethlehem Steel Co.
Carnegie Steel Co.

Pipe, Bends
East Jersey Pipe Co.
National Valve Mfg. Co.

Pipe, Cast Iron
Amer. Cast Iron Pipe Co.
Central Foundry Co.
Fox & Co., John
Glamergan Pipe & Fdry. Co.
McWane Cast Iron Pipe Co.
Nat'l Cast Iron Pipe Co.
U. S. Cast Ir. Pipe & Fdry. Co.
Warren Fdry. & Pipe Co.
Wood & Co., R. D.

Pipe, Concrete
Lock Joint Pipe Co.
Newark Concrete Pipe Co.

Pipe, Corrugated
Austin-Western Rd. Mch. Co.
Canton Culvert & Silo Co.
Hardesty Mfg. Co., The R.

Pipe Covering, Asbestos
Carey Co., The Philip

Pipe Covering, Wood
Michigan Pipe Co.
Standard Wood Pipe Co.
Wyckoff & Son Co., A.

Pipe Fittings
Builders Iron Foundry
Central Foundry Co.
U.S. Cast Ir. Pipe & Fdy. Co.

Pipe Joint Compounds
Leadite Co., Inc., The

Pipe, Lock Bar
East Jersey Pipe Co.

Pipe, Lock Joint
Lock Joint Pipe Co.

Pipe, Reinforced Concrete
Newark Concrete Pipe Co

Pipe, Riveted Steel
American Spiral Pipe Wks
Blaw-Knox Co.
East Jersey Pipe Co.
Hardesty Mfg. Co., The R
Petroleum Iron Works Co
Tippett & Wood

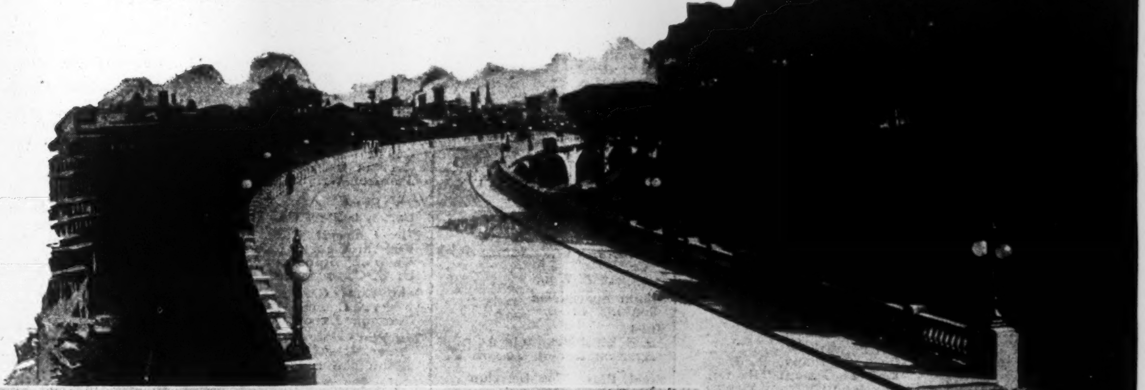
Pipe, Sewer
Dickey Clay Mfg. Co.

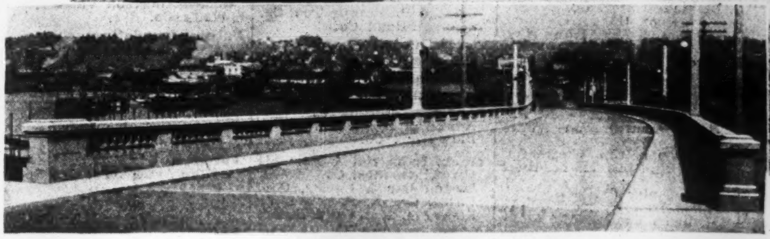
Pipe Shoes
Marion Malleable Iron Wks.

Pipe, Spiral
Abendroth & Root Mfg. Co.
American Spiral Pipe Wks.
Blaw-Knox Co.

Pipe, Tap Welded
American Spiral Pipe Wks.

Bingamon Street Bridge, Reading, Pa., crossing the Schuylkill.
Designed by C. F. Sanders, County Engineer, Berks County, Pa.





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Bethlehem, Pa.	Hill-to-Hill Bridge
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Fort Wayne, Ind.	Harrison Street Bridge
Galveston, Texas	Galveston Causeway
Hawkinsville, Ga.	Ocmulgee River Bridge
Kansas City, Mo.	Benton Boulevard Viaduct
Little Rock, Ark.	Broadway Bridge
Oahu, Hawaii	Heeia Viaduct
Pulaski, New York	Salmon River Bridge
Reading, Pa.	Bingamon Street Bridge
St. Louis, Mo.	Chauteau Avenue Viaduct
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12-23

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- Standard Wood Pipe Co.
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- Colonial Creosoting Co.
- Georgia Creosoting Co.

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- Aurora Pump & Mfg. Co.
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- Worthington Pump & Machy. Corp.

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- McGowan Co., John H.

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- Foster Co., L. B.
- Rail Joint Co.
- Sweets Steel Co.

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- Marion Steam Shovel Co.

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- Marion Malleable Iron Wks.

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- (See Conc. Reinforcement)

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- Northwestern Expanded Metal Co.
- Truscon Steel Co.

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- Standard Oil Co. of N. Y.
- Texas Co., The
- Universal Road Machy. Co.

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- Austin-Western Rd. Mch.Co.
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- Good Roads Mchy. Co.

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- Allis-Chalmers Mfg. Co.

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- Dorn Company, R. J.

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- Marks Corp., The H. E.
- U. S. Gypsum Co.

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- Amer. Sheet & Tin Plate Co.
- Berger Mfg. Co.

Roofing, Prepared
- Carey Co., The Philip
- Texas Co., The

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- Truscon Laboratories
- U. S. Gypsum Co.

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- Leschen & Sons Rope Co.
- Roeblings Sons Co., J. A.

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- (See Window Sash)

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- Leach Company

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- Toledo Scale Co.

Schools & Colleges
- (See Directory of Engineers)

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- Austin Manuf. Co.
- Austin-Western Rd. Mch.Co.
- Western Wheeled Scraper Co.

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- Austin Western Rd. Mch. Co.
- Good Roads Mchy. Co.

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- Austin-Western Rd. Mch.Co.
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- Hendrick Mfg. Co.
- Smith Engineering Works

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- (See Searchlight Section)

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- Wallace & Tiernan Co., Inc.

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- Ryerson & Son, Joseph T.

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- Ingersoll-Rand Co.

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- Ryerson & Son, Joseph T.

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- Illinois Zinc Co.

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- Roos-Meyer-Hecht Co.

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- Keystone Driller Co.
- Marion Steam Shovel Co.
- Pawling & Harnischfeger Co.
- Thew Shovel Co.

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- Northwest Engr. Co.
- Pawling & Harnischfeger Co.
- Thew Shovel Co.

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- Bucyrus Company
- Erie Steam Shovel Co.
- Keystone Driller Co.
- Marion Steam Shovel Co.
- Thew Shovel Co.

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- Austin-Western Rd. Mch.Co.

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- Pittsburgh-Des Moines Steel Co.
- Tippett & Wood

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- Ryerson & Son, Joseph T.

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- Blaw-Knox Co
- Chicago Bridge Iron Wks.
- East Jersey Pipe Co.
- Heltzel Steel Form & Tr. Co.
- Honhorst Co., The Jos.
- Littleford Bros.
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- Nelson Iron Works, N. P.
- N. Y. Central Iron Works Co.
- Petroleum Iron Works Co.
- Pittsburgh-Des Moines Steel Co.
- Riter-Conley Co.
- Union Iron Works
- Williams Co., G. H.

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- Ingersoll-Rand Co.

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- Berlin Construction Co.
- Bethlehem Steel Co.
- Blaw-Knox Co.
- Boston Bridge Works
- Carnegie Steel Co.
- Eastern Bridge & Struc. Co.
- Fort Pitt Bridge Works
- Kenwood Bridge Co.
- McClintic Marshall Co.
- Milwaukee Bridge Co.
- Minneapolis Steel & Mch. Co.
- Morava Construction Co.
- Mount Vernon Bridge Co.
- National Steel Constr. Co.
- Phoenix Bridge Co.
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- Shoemaker Bridge Co.
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- Virginia Bridge & Iron Co.
- Wisconsin Bridge & Iron Co.

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- Ryerson & Son Co., Jos. T.

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- Cook, A. D.

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- Lakewood Engr. Co.

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- East Jersey Pipe Co.

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- Blaw-Knox Co.
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- N. Y. Central Iron Works Co.
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- Dickey Clay Mfg. Co.

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- Littleford Bros.

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- Hamilton Mfg. Co.
- Keuffel & Esser Co.
- Lufkin Rule Co.
- Wiebush & Hilger, Ltd.

Testing Laboratories
- (See Engineers' Directory)
- Pittsburg Testing Lab.

Thermometers
- Taylor Instruments Cos.

Ties, Creosoted Wood
- Amer. Creosoting Co. (Ky.)
- Colonial Creosoting Co.
- Georgia Creosoting Co.
- Jennison-Wright Co.

Ties, Steel
- Carnegie Steel Co.

Tile, Concrete Bldg.
- Federal Cement Tile Co.
- Truscon Laboratories
- U. S. Gypsum Co.

Tile, Roof Cement
- Federal Cement Tile Co
- Truscon Laboratories

Tin Plate
- Amer. Sheet & Tin Plate Co.
- Bethlehem Steel Co.

Tools, Pneumatic
- Chicago Pneumatic Tool Co.
- Ingersoll-Rand Co.

Towers, Concrete
- (See Hoists, Conc. Tower)

Towers, Radio
- Blaw-Knox Co.

Towers, Transmission
- American Bridge Co.
- Blaw-Knox Co.

Track, Industrial & Portable
- Bethlehem Steel Co.
- Easton Car & Constr. Co.
- Foster Co., L. B.
- Koppel Indust. Car & Equip. Co.
- Lakewood Engr. Co.
- Sweets Steel Co.

Traction, Alligator
- Buckeye Tract. Ditcher Co.

Tractors
- Best Tractor Co., C. L.
- Eagle Wagon Works
- Ford Motor Co.
- Minne. Steel & Mchy. Co.

Trailers
- Eagle Wagon Works
- Watson Truck Corp.

Transits and Levels
- Ainsworth & Sons, Wm.
- Beckmann Co., L.
- Berger & Sons Co., C. L.
- Brandis & Sons
- Buff & Buff Mfg. Co.
- Gurley, W. & L. E.
- Lietz Co., A.

Treads, Safety
- Concrete Steel Co.
- Irving Iron Works
- Kerlow Steel Flooring Co.
- Truscon Steel Co.
- Universal Safety Tread Co.

Treads, Traffic Steel
- Alan Wood, Iron & Steel Co.

Trolleys, I-Beam
- Brown Hoisting Machy. Co.

Trucks, Motor
- Eagle Wagon Works
- Ford Motor Co.
- Watson Truck Corp.

Tunnel Liner Plates
- Blaw-Knox Co.

Turbines, Hydraulic Impulse and Reaction
- Allis-Chalmers Mfg. Co.
- Pelton Water Wheel Co.
- Smith Co., S. Morgan
- Worthington Pump & Machy. Corp.

Turbines, Steam
- Allis-Chalmers Mfg. Co.
- De Laval Steam Turbine Co.

Turbo-Generators, Steam
- Pyle-National Co.

Turntables
- American Bridge Co.
- Blaw-Knox Co.
- Easton Car & Constr. Co.
- Foster Co., L. B.

Underpinning
- Spencer White & Prentis Underpinning & Found. Co.

Unloaders, Car & Wagon
- Erie Steam Shovel Co.
- Haiss Mfg. Co., Geo.
- Heltzel Steel Form &Ir. Co.
- Nelson Iron Works, N. P.

Valves, Air, Water, Steam and Gas
- Chapman Valve Mfg. Co
- Coffin Valve Co
- Golden-Anderson Valve Specialty Co.
- Jones, McKee, Inc.
- Ludlow Valve Mfg. Co.
- National Valve Mfg. Co.
- Norwood Engr. Co.
- Simplex Valve & Meter Co.
- Smith Mfg. Co., A. P.

Valves, Altitude
- Golden-Anderson Valve Specialty Co.
- Ludlow Valve Mfg. Co

Valves, Angle, Check, Gate and Globe
- Chapman Valve Mfg. Co.
- Coffin Valve Co.
- Golden-Anderson Valve Specialty Co.
- Jenkins Bros.
- Ludlow Valve Mfg. Co.
- National Valve Mfg. Co.
- Simplex Valve & Meter Co.

Valves, Automatic
- Golden-Anderson Valve Specialty Co.
- Ludlow Valve Mfg. Co.

Valves, Control Electric
- Chapman Valve Mfg. Co.

Valves, Control Hydraulic
- Dean, Ltd., Payne
- Chapman Valve Mfg. Co.

Valves, Float
- Golden-Anderson Valve Specialty Co.

Valves, Regulating
- Golden-Anderson Valve Specialty Co.
- Ludlow Valve Mfg. Co.
- Simplex Valve & Meter Co.

Valves, Return
- Golden-Anderson Valve Specialty Co.

Valves, Safety
- Golden-Anderson Valve Specialty Co.

Valves, Sewage
- Chapman Valve Mfg. Co.

Valves, Sluice
- Chapman Valve Mfg. Co.
- Coffin Valve Co.
- Coldwell Wilcox Co.

Wagons, Asphalt
- Eagle Wagon Works
- Watson Truck Corp.

Wagons, Dump, Auto
- Austin Manuf. Co.
- Austin-Western Rd. Mch.Co
- Eagle Wagon Works

Wagons, Dump
- Austin Manuf. Co.
- Austin-Western Rd. Mch.Co.
- Watson Truck Corp.

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- Smith Engineering Works

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- Nat'l Water Main Clean. Co.

Waterproofing Compounds and Materials
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- Carey Co., The Philip
- General Chemical Co.
- Texas Co., The
- Truscon Laboratories

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- Wallace & Tiernan Co., Inc.

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- Amer. Water Softener Co.
- California Filter Co.
- Graver Corporation
- Roberts Filter Mfg. Co.

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- Pelton Water Wheel Co.
- Smith Co., S. Morgan

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- Mead-Morrison Mfg. Co.

Winches, Ship, Hand, Steam and Electric
- Brown Hoisting Mchy Co.
- Dobbie Frdy. & Mach. Co.
- Lidgerwood Mfg. Co.
- Mead-Morrison Mfg. Co.
- Mundy Hoisting Eng. Co.J.S.

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- Truscon Laboratories

Window Sash Steel
- Allison Steel Products Co.
- Truscon Steel Co.

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- Mississippi Wire Glass Co.

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- (See Rope, Wire)

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- Roeblings Son Co., J. A.

Wire and Cable, Electrical
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Wood Preservatives
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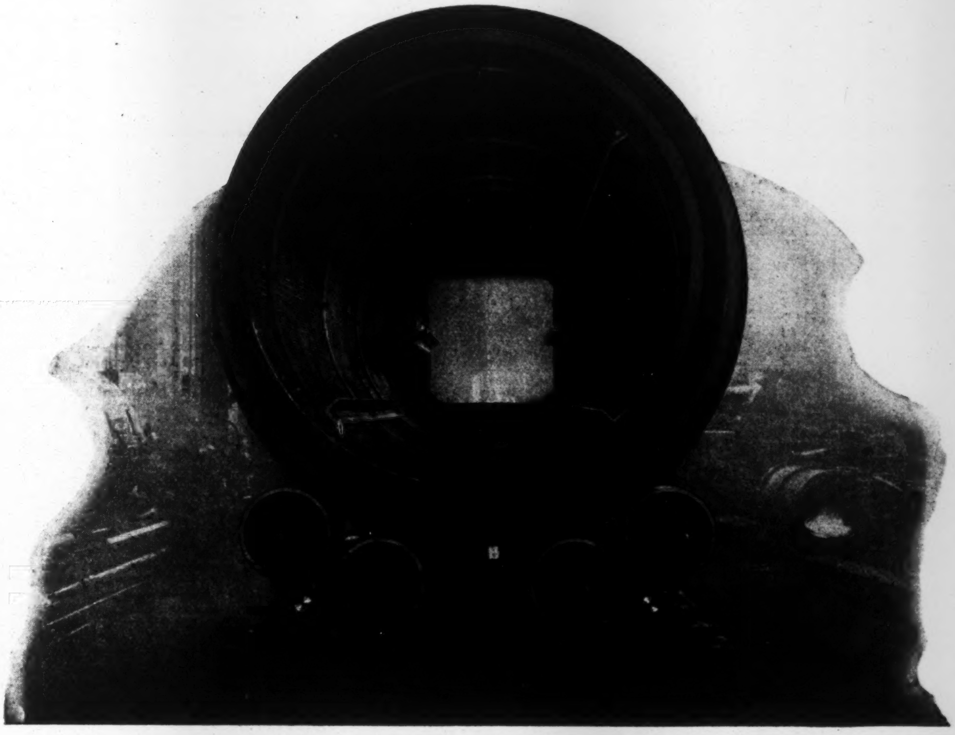
- Truscon Laboratories



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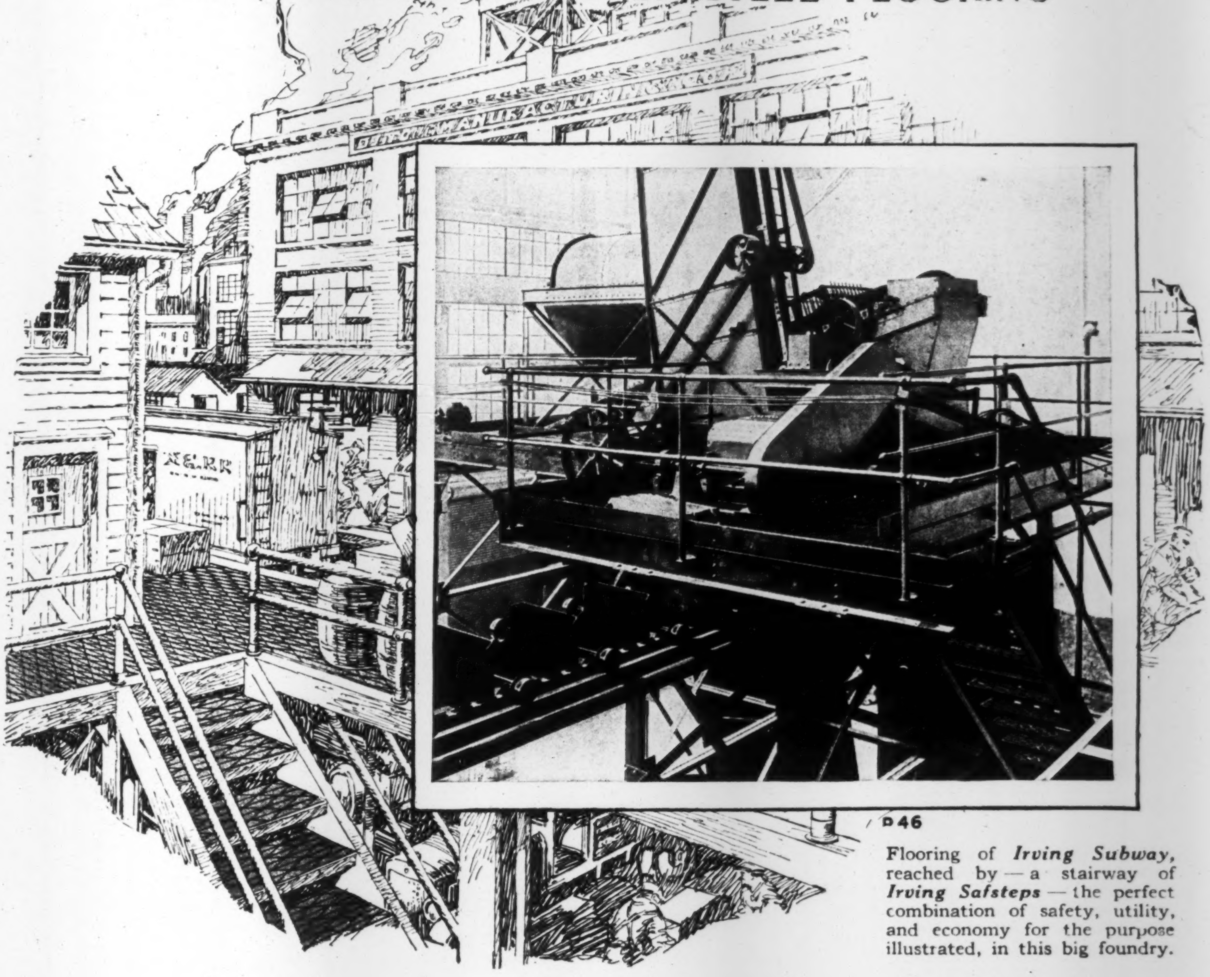

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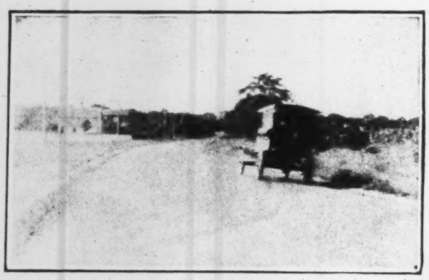

View of the well-known Merrick Road on Long Island. Note the smoothness of the TEXACO oiled surface.

American Road Builders in all sections are talking of the marvelous TEXACO oiled roads of Long Island, N. Y.

Federal, State, County and City engineers are discussing the results which Long Island has obtained. Many highway officials and administrators are planning to follow the methods so successfully pursued by Long Island for the past several years.

We are proud that TEXACO Asphaltic Road Oil has rendered such service to Long Island.

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